UNIVERSITY OF YORK
Social Policy Research Unit

THE MEASUREMENT OF ABSOLUTE POVERTY (E2/SEP/14/2000)

FINAL REPORT FOR EUROSTAT

Social Policy Research Unit, University of York, Heslington, York, YO10 5DD, UK. Phone: ++ 44 1904 433480, Fax ++ 44 1904 433477, email jrb1@york.ac

SECTION 1

INTRODUCTION

At the Statistical Programme Committee in November 1998, when they discussed the subject of poverty statistics, delegates requested that the subject of absolute poverty should be investigated. As a consequence Eurostat issued an invitation to tender **(AC 15/99/OSCE/E2/EN)**. The objectives of the tender were "to assess and qualify calculations of absolute poverty based on two approaches: one taking into account minimum income schemes as existing in the Member States; the other by adapting the basket of goods approach as followed principally by the United States. The general purpose will be to provide Eurostat with a framework for carrying out future work on absolute poverty, in particular by assessing methods in place in more Member States and the USA (based on minimum income schemes and the basket of goods approach)." The Invitation to Tender divided the activities into two

Activity 1. Includes reviewing the theory of absolute poverty lines based on minimum income schemes; calculating poverty lines for the 15 EU Member States based on minimum incomes; applying those minimum to the ECHP and make recommendations for further work.

Activity 2. Includes reviewing the theory of absolute poverty lines following the "basket of goods" approach. Propose how to calculate these absolute poverty lines for 15 EU Member States; apply it using the Household Budget Survey (HBS) and make recommendations for further work .

As a result of the tendering process we) were commissioned to undertake the work. This is the final report on the project. It is divided into three section.

- Section 1 presents the results of the empirical analysis of the European Community Household Panel (ECHP) which explores income definitions of (absolute) poverty.
- Section 2 presents the results of the empirical analysis of the Household Budget Survey (HBS) which explores expenditure based thresholds of (absolute) poverty.
- Section 3 contains a discussion of the work undertaken, summary of the findings and conclusions and recommendations.

BACKGROUND

Before the Second World War most poverty standards were based on notions of absolute needs/ minimum subsistence/ basic necessities and were generally derived using budget standards, in which the food budget was commonly based on ideas of nutritional adequacy. In the post-war period poverty emerged in social scientific debates with a new conceptualisation - as relative deprivation. A variety of methods have been developed to measure relative poverty but the one most commonly employed by national governments (see *Reconciliation of Sources and Dissemination of data*, Statistics Netherlands, September 1999 - for a review of national poverty lines), and in comparative studies, has been the use of an income (and sometimes expenditure) threshold. Thus for example Eurostat in its first analysis of poverty derived from the European Community Household Panel (ECHP) estimated the proportion of households, individuals and children living below a threshold of half national average income (Eurostat 1997). More recently Eurostat has adopted 60 per cent of the median as the threshold (Eurostat 1999).

There have been a number of criticisms of this standard of poverty

- that it is a measure of inequality not poverty
- that it is essentially arbitrary
- that in some countries with dispersed income distributions it produces unreasonably large poverty rates
- that income is anyway a poor indicator of command over resources
- and, for these and other reasons, the measure lacks the kind of moral and political clout which had been associated with the findings of the studies based on more absolute notions of poverty.

In response a number of efforts have been made to develop other poverty standards some of which have been based on a more absolutist notion of poverty. These have included

- Budget standards: they involve drawing up a list of commodities, employing normative judgements, supported by a combination of scientific and behavioural evidence. The budget is then priced and used as an income standard - anyone living at or below that standard is in poverty. In Britain budget standards have been derived to represent a *minimum adequate standard* and a *modest but adequate standard* (Bradshaw 1993).

- The US poverty standard was originally based on a budget standard but employed expenditure data to estimate the income at which a family with two children spend more than 30 per cent of their income on food (Orshansky 1965). Bradbury and Jantti (1999) applied the US poverty standard to (circa 1995) Luxembourg Income Survey data using purchasing power parities. A variety of poverty standards can be derived from expenditure data. So for example the point of the income distribution where households spend more than a given proportion on necessities can be used (Bradshaw, Mitchell and Morgan 1987). Or the point on the income distribution where all income is spent and/or nothing spent on non necessities (Saunders, Bradshaw and Hirst 1999).

- Some countries have employed a benefit linked income standard to define poverty. The official social assistance scales can be used to define a threshold. A standard of this type became the official definition in the UK in a series of *Low Income Statistics (LIS)* based on the Family Expenditure Survey produced by the government until 1985. Heikkila and McCausland (1997) tried this technique using OECD data. Another technique combining expenditure and benefits has been to estimate the budget shares spent on necessities (food, fuel and clothing) of those on Income Support and fix an income poverty line based on that budget standard (Bradshaw and Morgan 1987).

- The main way that relative poverty has been operationalised has been using social indicators but there is no reason why these indicators should not also be used to measure poverty at a point in time and unchanged over time. Townsend (1979) was the first to seek to operationalise this approach. For a national survey of poverty carried out in 1968/69 he built up a list of 60 indicators of styles of living. He then reduced these to 12 items to form a deprivation index, and, for each respondent, he counted the numbers lacking items on the index. Townsend's work was subject to criticisms. In the light of these criticisms Mack and Lansley developed the social indicator methodology in the Breadline Britain Surveys in 1983 (Mack and Lansley 1985) and 1990 (Gordon and Pantazis 1997). Mack

and Lansley drew up a list of items and then asked a sample of the population whether they considered them to be necessities. If over 50 per cent of the population considered an item to be a necessity then it was included as a socially perceived necessity (a "consensual" indicator of poverty). The sample were then asked whether they possessed the item and if they did not whether they lacked it because they could not afford it. Only those items which were lacking because they could not be afforded were included in the count of items lacking. Nolan and Whelan (1996) developed the technique by using social indicators in combination with income thresholds. At present there is a *Survey of Poverty and Social Exclusion* underway in Britain which seeks to extend the range of indicators to encompass social exclusion as well as poverty. The ECHP includes a range of questions which could form the basis of an index of deprivation based on a lack of items representing (absolute) necessities and some work of that type has already been completed by Dutch researchers using the ECHP (Dirven et al 2000).

- Subjective measures where the population determine a poverty income threshold can also be used to measure absolute poverty. Thus for example after the World Summit on Social Development in Copenhagen in 1995, 117 countries adopted a declaration and programme of action which included commitments to eradicate *absolute* and reduce *overall* poverty, drawing up national poverty alleviation plans as a priority (UN, 1995). *Absolute* poverty was defined by the UN as a "condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to services". (UN, 1995, p. 57).

SECTION 2

MINIMUM INCOME STANDARDS AS POVERTY THRESHOLDS

Jonathan Bradshaw, Brian Nolan and Bertrand Maitre[1]

INTRODUCTION

In this section we employ three different types of income standard to establish poverty thresholds:

- Standards related to mean or median national income for each country. These standards are by definition relative and will be used to compare with the results obtained using more absolute measures.
- Social assistance or minimum income standards. These are the major "absolute" measures presented.
- Results based on the US poverty standard – both the existing standard and the experimental standard being investigated following the National Academy of Sciences work (Citro and Michael 1995).
- The self defined income standard used in the ECHP.

POVERTY RATES USING THE CONVENTIONAL RELATIVE INCOME STANDARDS

The tables in Appendix 1 present the full results using the conventional poverty thresholds of 40, 50 and 60 per cent of the mean and median equivalent income – both before and after housing costs (using the modified OECD equivalence scales). In Table 2.1 we present the poverty rates – the proportion of the households included in this analysis who are poor by each of the thresholds. As will be explained below only selected types of household have been included in this analysis and so these poverty rates will be different to those published in Eurostat (1999), for example, which are based on all households. It can be seen that there are substantial variations in the poverty rates between countries and according the relative threshold employed. Poverty rates based on the median tend to be lower than the mean and poverty rates before housing costs are invariably lower than those after housing costs.

Table 2.2 then selects one threshold - the Eurostat conventional threshold of 60 per cent of the median (before housing costs) and gives the poverty rates for our household type. Again the poverty rates vary by household type between countries – Portugal has the highest poverty rates for singles, couples, retired singles, Greece for retired couples, Ireland for lone parents with one child, UK for lone parents with two children, Spain couples plus one child, Germany and Spain for couples plus two children and Luxembourg for couples plus three children.

Table 2.3 gives the poverty proportion/profiles at this threshold. In the Netherlands 43 percent of the poor are singles, Germany and Portugal have the highest proportions of couples who are poor, Italy the highest proportion of retired singles, Greece retired couples, Ireland

[1] Professor Brian Nolan and Bertrand Maitre are from the Economic and Social Research Institute, Dublin, Ireland

lone parents with one child, the UK the highest proportion of lone parents with two children, Spain the highest proportion of one and two child families and Ireland the highest proportion of three child families.

These results are of limited interest by themselves, given that they are based on a selection of household types, which covers more households in the northern EU countries than in the southern EU countries. They are presented here as the comparator against which the absolute measures considered in the next section can be assessed.

TABLE 2.1: OVERALL POVERTY RATES

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Before housing costs													
<40%mean	8	4	9	17	8	7	5	6	6	7	7	19	9
<50%mean	14	10	14	25	17	14	20	12	12	10	13	29	18
<60%mean	24	17	21	34	27	22	34	21	21	20	23	38	30
<40%median	6	3	7	14	6	5	3	5	4	5	6	11	5
<50%median	11	7	11	19	9	10	5	7	8	8	10	20	12
<60%median	18	14	17	26	18	16	17	15	13	12	17	27	20
After housing costs													
<40%mean	12	14	18	20	11	15	10	10	12	15	12	23	22
<50%mean	22	24	25	28	21	24	26	17	22	25	21	33	33
<60%mean	31	36	34	37	32	34	39	27	30	36	31	42	41
<40%median	10	12	15	16	8	11	5	8	8	11	10	15	14
<50%median	18	19	21	22	13	19	10	12	14	18	16	24	25
<60%median	26	31	28	29	22	27	24	20	23	28	25	33	34

TABLE 2.2: POVERTY RATES: 60% MEDIAN BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	18	23	20	21	19	24	25	14	11	24	20	37	19
Couple	13	7	11	17	13	10	8	8	7	4	9	27	8
Retired single	24	28	23	43	13	24	27	28	19	8	26	57	32
Retired couple	25	15	14	46	24	16	8	10	13	11	16	42	26
Lone parent+1	25	10	36	39	29	25	46	18	25	14	29	20	38
Lone parent + 2	42	8	42	37	32	26	66	19	31	44	53	27	52
Couple + 1	11	5	11	8	15	8	6	11	10	9	13	9	8
Couple + 2	14	4	18	12	18	10	10	14	13	9	12	16	15
Couple + 3	20	7	25	15	27	15	21	31	32	11	25	28	25
Total	18	14	17	26	18	16	17	15	13	12	17	27	20

TABLE 2.3: POVERTY PROPORTION 60 PER CENT OF MEDIAN BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	15	38	24	8	9	27	22	11	17	43	24	7	13
Couple	11	11	13	9	9	12	6	8	11	8	11	13	8
Retired single	18	26	24	26	10	21	27	29	14	8	28	25	27
Retired couple	21	12	10	36	22	13	5	10	12	10	10	28	18
Lone parent+1	3	3	5	3	1	4	7	2	5	2	4	1	6
Lone parent + 2	5	1	2	2	2	2	6	2	2	5	3	2	7
Couple + 1	9	4	7	5	14	7	4	12	12	7	8	8	4
Couple + 2	12	3	11	10	25	9	11	17	14	12	8	13	11
Couple + 3	6	2	4	2	9	5	13	9	14	5	5	4	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

USING SOCIAL ASSISTANCE RATES TO FIX POVERTY THRESHOLDS

In his book *Setting Adequacy Standards* Veit-Wilson (1998) forcefully emphasises the difference between scientific measures of poverty, the political nature of Minimum Income Standards (MIS) and social assistance scales - "Scientific poverty lines are not MIS, and even political standards of assumed adequacy are not by that token the same as the social assistance benefit scales. They are each and all distinct in concept and practice and *there is no excuse* (emphasis added) for not distinguishing them"(p. 111). In this project one would like to have maintained this important distinction and have used Minimum Income Standards rather than social assistance scales to fix poverty thresholds. But Veit Wilson discovered only ten countries with Minimum Income Standards and of these four countries - Finland, Norway and Sweden and Germany had MIS standards, which were related to benefit levels (in the other countries they were related to earnings standards or budget standards). Many of these countries had developed their MIS in the, often, ancient past from a combination of budget standards research, minimum earnings levels, social assistance scales or a combination of the above. The rationale for a MIS had often been lost in the passage of time or as a result of adjustments made to it[2]. The authority of MIS seems to relate to whether Government accept them. Thus for example SMIC retains its authority because of Government acceptance of it. The key is official recognition - however bizarre the scientific origins[3].

As for modern scientific measures of poverty, in the study undertaken for Eurostat by Statistics Netherlands ("Reconciliation of Sources and Dissemination of the Data", September

[2] For example the French MIS (SMIC) was the statutory minimum hourly pay rate based in 1950, on a compromise between six minimum budget standards, the food share may have been influenced by Rowntree's 1937 *Human Needs of Labour* standard. Until 1970 it was uprated in line with prices, then with earnings and prices and the "base appears to have become irrelevant". Nevertheless we learn (Veit Wilson 1998) that SMIC is the cornerstone of economic and social policy in France and used in both wage setting and poverty measurement!

[3] So what does it take to achieve official recognition? Take Belgium for example - in Belgium a Christian Democrat Senator, Professor Herman Deleeck, chaired a committee for a like-minded Government and persuaded them to adopt a MIS based on an attitudinal poverty line produced by his own research unit.

1999), only the Netherlands had a poverty or low income standard which was not some proportion of mean or median income[4]. It is not said how this threshold was or is derived but it gives a higher poverty rate (16.1 per cent) for the Netherlands compared with 10.3 per cent for 60 per cent of the median.

So given that

1. most MIS schemes are related to social assistance scales
2. the rationale for many are lost in the mists of time
3. that government acceptability must be an important quality of an absolute poverty threshold
4. that official income poverty standards which are not relative do not exist

it seems to make sense to use standards that are related to social assistance norms. MIS in most EU countries means the package of social assistance and other benefits in cash and kind which provide a floor or safety net which, *inter alia*, aims to prevent people falling below it[5]. This floor may be related to notions of minimum adequacy, minimum income guarantee or social protection. So in this section one of the techniques that will be tried will be to apply social assistance scales to income data derived from the ECHP.

In order to undertake this work we need a source of social assistance scales for each country. The obvious source is MISSOC who publishes the details of social security benefits for each member of the EU on an annual basis. However the problem with the MISSOC tables is that they do not allow us to use the package of benefits and services which make up the living standards of those living on social assistance. So, for example, from the details published in the MISSOC tables we cannot tell whether income tax is paid on social assistance, nor whether child benefits should be added to social assistance, nor whether the family would be

[4] *Beleidsmatig Mimimum* which in 1994 was 18,149 guilders for a single person and 17,920 multiplied by an equivalence scale for multi person households.

[5] For example in Britain the social assistance scales have their origins in the absolute poverty standard that Rowntree developed, especially for his 1936 survey of poverty in York. Rowntree was an adviser to the Beveridge Committee and Beveridge's 1942 estimates of the minimum subsistence income which defined the social assistance scales was derived from Rowntree's standard. The 1942 social assistance recommendations were uprated for movements in prices and began operating in 1948 as National Assistance. Over the years since then they have been uprated, more or less doubling in real terms, and renamed Supplementary benefits in 1966 and Income Support in 1988. But the structure of the scales, the equivalence scale and even their relationship with average earnings are remarkably similar to what they were in 1942. No doubt this link with a standard of absolute poverty was one reason why Abel Smith and Townsend (1965) in their seminal "rediscovery of poverty" study *The Poor and the Poorest* applied the then national assistance scales to income data derived from the Family Expenditure Survey. They not only used 100% of the NAB scales but also 120% and 140% on the grounds that the actual level of living of people dependent on national assistance was rather higher than the scales, due to the fact that some earnings and capital was disregarded in assessing social assistance, and claimants were also receiving additional payments to cover the costs of heating and special diets. Following their study a standard of this type was used by the British government in what became the *Low Income Statistics (LIS)* based on the Family Expenditure Survey and produced until 1985. Note, it never became an official poverty or MIS standard, though it was used for that purpose. The LIS series was abandoned by the Conservative Government after 1995 on the grounds that the thresholds of 120 and 140 per cent incorporated too many people and that increasing the real level of social assistance (in order to help the poor) had the consequence of increasing the number of people defined as poor.

expected to pay any health charges out of their income, and/or whether there are any charges or benefits in respect of education to take into account. MISSOC also does not provide enough information on the scales of social assistance to calculate entitlement for the range of households that we sought to include in this analysis.

Another source is the OECD's *Database on Taxation, Benefits and Incentives*. Heikkila and McCausland (1997) used this source to examine the Guaranteed Minimum Income Packages in EU member countries. This source has the advantages that it takes into account taxation, child benefits and housing benefits but they were only able to produce estimates of GMIs for three family types - a single person and couple with two children and a single parent with two children. Also the GMIs covered by the OECD are in some countries not the minimum social assistance benefits but the means-tested benefit paid to the long term unemployed who have exhausted their entitlements to income related insurance benefits - and in some cases this long term unemployment assistance may be higher than general social assistance. They thought that this was the case in Austria, Belgium, Finland, Ireland and Portugal. They used these estimates to relate the GMI package to average or minimum earnings to examine the unemployment trap and the poverty thresholds in the 1994 ECHP to assess the adequacy of the GMIs. This latter comparison is a rather curious reversal of what we are intending to do - they sought to assess the adequacy of GMIs by relating them to poverty threshold derived from the ECHP. We are using the GMIs as a poverty standard and estimating the proportion of the population below that standard using the GMIs. Nevertheless it is interesting that for all countries except the Netherlands (for singles, lone parents and couples) they found that GMI was substantially below the 1993 poverty thresholds.

Because of the weaknesses of MISSOC and the OECD sources of data on social assistance, in this study we are going to use two alternative sources of information: first the Eardley et al (1996) study of social assistance in OECD countries will be the main source of information on the structure of the social assistance packages. In the Eardley et al (1996) comparative study of social assistance, data on the level of the social assistance payable in 1992 was collected for a number of model families, including young singles (17), single adults (35) and childless couples (35), retired singles (68) and couples (68) and single parents with one child and couples with children one or two children. However for the analytical work using the ECHP it is proposed to use a different source. As part of the work of the European Observatory on National Family Policies, the same data on social assistance packages was collected for all EU countries for single people, childless couples and lone parents and couples with children for 1994, 1995 and 1996 (Ditch et al 1997, 1998 and 1999). The raw data was available to use at SPRU, where we were responsible for co-ordinating the Observatory work during that period. The data for both sources was collected using the same methods. National informants were asked to provide details on the social assistance that certain model families in their countries would receive.

Table 2.4 illustrates for one family type (a couple plus three children) how the package is made up. We start with the social assistance scales and then deduct any income tax payable and social security contributions. Only Denmark, Luxembourg and Finland charge income tax on social assistance and only Finland has a social security contribution deducted. Then added are the child benefits payable to this family. All the countries have a non means-tested child benefit, except Belgium, Spain and Italy. Belgium has a generous income tested child benefit as do Germany, Spain, France, Ireland and Portugal.

Table 2.4 then shows the gross rent and net rent payable. Housing costs are a particularly difficult problem to deal with in this study for reasons discussed below.

Then account is taken of health costs - the base line assumption was that health care was free at the point of demand, available to all regardless of means and of a similar quality in each country. National informants were asked to estimate the costs of a standard package of health care, which consisted of three visits to a general practitioner per person per year, three prescriptions for a standard antibiotic per person per year and one visit to a dentist for one filling per person per year. The costs were estimated for both adults and children annualised and then turned into a monthly charge. It can be seen that in all countries except Germany and the UK there are some health charges to be paid by families on social assistance, but they are in most countries small and only in Spain and Austria do they exceed 5 per cent of final social assistance income.

In this exercise no account was taken of the value of pre-school provision - on the grounds that parents on social assistance, not in the labour market would free to care for pre-school children at home. It was assumed as a base line that school education of an equivalent standard, including basic books, was available free of charge for all children of school age. It was assumed that the parents would have to pay for a midday meal, and that children lived near enough the school not to require public transport. Account was then taken of any charges that the parents were expected to pay for education and any other benefits (including the value of free or subsidised school meals) that they might receive. It can be seen in the table that Belgium, Luxembourg, the Netherlands and Portugal all had deductions for school costs. France, Finland and the UK all have free school meals systems for children on social assistance and the value of these meals was added.

Finally four countries Ireland, Italy, Luxembourg and Finland all had “other” miscellaneous benefits added to their social assistance (for example in Ireland it was the electricity supplement and in Italy it was the household allowance). For the lone parent families where it was guaranteed and under-written by the state, we also added guaranteed maintenance allowance. This increased lone parent’s income in Austria, France, Germany, Finland and Sweden.

Table 2.4: Composition of the social assistance package for a couple plus three school age children 1994 in Purchasing Power Parities

	Bel	Den	Ger	Gre	Spa	Fra	Ire	Ita	Lux	Net	Aus	Por	Fin	Swe	UK
Social assistance	631	1834	948		428	317	812	675	1436	820	844	360	1033	868	676
Income tax		-603							-36				-331		
Social security contributions													-33		
Child benefit		163	194	83		233	85		565	248	299	34	330	245	162
Income tested child benefit	473		90		68	132	15					26			
Gross rent	322	361	313	246	413	498	704	235	577	246	233	89	492	493	233
Net rent	-322	-237	-313	-246	-413	-108	-50	-235	-450	-148	-120	-89	-133	0	0
Gross local taxes				8	17	90		10		16					62
Net local taxes				-8	-17	0		0		0					0
Health costs	-16	-5		-2	-37	-19	14	-26	-8	-36	-107	-39	-26	-36	
School costs	-28				11	142			-31	-51		-11	99		73
Other							30	183	163				82		
Total	1059	1389	1232	81	470	806	956	807	2089	980	1036	370	1153	1077	916

The model family method is designed to enable consistent comparisons to be made between countries and the model family method provides a good deal more detail than other sources. However the method inevitably produces a description of the way the system should work rather than how it necessarily does work. This is not so serious when we are using the social assistance scales as a standard. The standard also looks at families at one point in time and obscures the more complex life-cycle effects of the tax/benefit system. In particular we do not take account of the future benefits that may accrue from social security contributions.

The more assumptions that we make about the model families, the less representative they are of families in the real population. This problem is an inevitable cost of achieving comparability. In order to make comparisons the families are specified quite carefully - including the adult's ages (35 for working age adults and 67 for retired adults), the children's ages (between aged 7 and 14), the size of their dwelling (and that they are tenants), and, as we have seen, what school costs are and are not included, and what health charges are and are not included. Furthermore in most countries social assistance schemes are administered at a local level and with a good deal of local discretion albeit often influenced by national guidelines. In countries like the UK and Ireland there are national scale rates, or Germany where there slight regional variations this is not a problem. However in countries like Sweden and Italy the social assistance received depends not only on individual circumstances but also on the discretion of social workers operating within local guidelines. For these countries the national informants have given the best estimate they can of what benefit would be received by each family in a specific place/municipality and that estimate it may not be representative of the nation as a whole. Table 2.5 (derived from Eardley et al 1996) gives the location chosen and also indicates the degree of local discretion/national regulation.

The table also gives the name of the main general social assistance scheme. It can be seen in the table that this is not the benefit that is taken as the standard for all claimant groups. In some of the countries there is a special minimum scheme for pensioners, another scheme for lone parents and still another for unemployed claimants.

Table 2.6 (derived from Eardley et al 1996) provides some detail on how often the scales of social assistance are uprated and on the origins of the scales

Table 2.5: Selected characteristics of social assistance schemes (in 1992).

	Selected commune/local area	Main general social assistance scheme	Level of local discretion	Pensioners benefit	Lone parents	Unemployed	Minimum age
Belgium	Antwerp	Minimex	national regulated	Revenu Garanti pour personnes Agees			18 (unless pregnant or parent)
Denmark	Copenhagen	Social bistand	Local regulated	Minimum pension guarantee			25 (youth allowance for 18-24
Greece	Peristeri, Athens	No generalised social assistance		Non insured older person scheme			-
Spain	Barcelona					Unemployment assistance	25
Germany	Bremen	Socialhilfe	National/regional regulated				None
France	Bar le duc, Meuse	Revenu Minimum d'insertion	National regulated		Allocation pour parent isolee		25 unless parent or pregnant
Ireland	Dublin	Supplementary welfare allowance	National regulated	Old age non contributory pension	Lone parent allowance	Unemployment and pre retirement allowance	18
Italy	Turin	Minimo vitale	Local, discretionary	Pensione sociale			18
Luxembourg	Luxembourg City	Revenu Minimum Garanti	National, regulated				30
Netherlands	Njimegen	Algemene bistand	National regulated	ABW	ABW or RWW	RWW/WWW	18
Austria	Salzburg	socialhilfe	provincial discretion	Supplementary pensions		Unemployment assistance	19
Portugal	Lisbon	Guaranteed Minimum Income	National regulated	Old age social pension			14 or 25 if in full-time education
Finland	Helsinki	Living allowance	Local discretionary				18
Sweden	Stockholm	Social Welfare Allowance	Local, discretionary				Normally 18
UK	York	Income Support	National regulated				18

Source: Eardley et al 1996 tables 3.1 and 3.2

Table 2.6: Uprating and the origins of the social assistance scales used in this analysis.

	Uprating	Origins of scales
Belgium	Annually in line with RPI (health index) but increased in real terms since 1980	Minimex rates (from 1975) were taken from the already existing guaranteed income for older people
Denmark	Annually. Since 1994, cash assistance has been linked to the level of Unemployment Benefit which related to average earnings	For parents, social assistance is 80% of maximum unemployment benefit for others it is 60%
Germany	Generally every six months in line with price inflation but varies with political judgement	Originally set in relation to a basket of goods. Now set using expenditure patterns of households in the lower third of the income distribution
Greece	No statutory period or basis	No information
Spain	No information	No information
France	RMI can be uprated twice a year in line with prices but not automatic	No information
Ireland	Uprating within six months of a change in reference insurance benefits	Minimum rates set in line with those of disability insurance, indexed to wages.
Italy	Urated every six months in line with the costs of living index	Social pensions are about half the Italian poverty threshold and a quarter of the minimum salary. Minimo vitale set locally
Luxembourg	Annually, by decision of Parliament, in line with the costs of living according to an index used for the wages of civil servants. Indexation can vary by 25% each way by statutory order	Rates for RMG originally set in relation to the structure of existing social security benefits and minimum wages
Netherlands	Uprating takes place twice a year in line with changes in the minimum wage. However benefits have been frozen for periods	The basic rate of benefit is set according to the social minimum, which is a % of the net minimum wage. Benefit rates as a proportion of the social minimum vary between 60% for single people sharing dwellings and 100% for couples. The minimum wage was originally determined in relation to household expenditure surveys and the costs of a prescribed basket of goods, and then uprated by improvements in the national price index. However since 1984 the minimum wage has periodically been frozen
Austria	Annually. Increased usually in line with changes in pensions, which are linked, to earnings. However, in recent years the pension has increased faster than earnings and social assistance has fallen behind pensions.	The standard rate for single people vary between 45% and 60%of the lowest net earnings and 60%-80% of the minimum pensions.
Portugal	Annually by movements in prices index	No information obtained on how rates originally determined
Finland	Annually in line with flat rate pension which is linked to the consumption patterns of the lowest quintile.	There are two rates depending on the cost of living in the municipality. The basic rate is set in relation to minimum flat-rate old age pensions. In the 1980s this was 80% for a single person. During the recession pensions were not indexed to the cost of living.
Sweden	Standards uprated annually in line with prices and consumer patterns	Since 1985 the monetary standard was based on items included ion the household budget drawn up by the National Board for Consumer Policies. The index used for assistance produces lower uprating than that for insurance.
UK	Annually in November for April payments. Linked to prices since 1980 and linked to the Rossi index (RPI less housing costs)	Historically based on the former Supplementary Benefit rates, which in turn were linked to the National assistance rates recommended by Beveridge on the basis of a budget standard. Rates have not been rebased since 1948 though the structure of payments was changed substantially in 1948.

Sources: Eardley et al 1996 table 5.1.
Guibentif and Bouget 1997

Housing costs

Housing costs are a particular problem in comparative research and in this project. Housing costs vary within and between countries according to tenure, and the size, age and location of a dwelling. In some countries rents may be controlled for those persons occupying a dwelling before a certain date. For owner occupiers loan structures and interest rates vary between countries, often according to the stage of the economic cycle, while the level of a mortgage will depend by the stage in the purchaser's life cycle. There are also significant differences between countries in the tenure distribution at different income levels.

However housing costs cannot be ignored partly because housing costs make up a substantial element in the out-goings of families, but particularly for this project, because housing benefits are an important element of social assistance in many countries. In the model families' method, national informants are asked to nominate a typical rent for the most common rental tenure in their country in the local area nominated. The size of dwellings is specified - and varies with the number of people in the family[6]. Informants provide the gross rent and the net rent - that is after the deduction of housing benefits. It can be seen in Table 2.4 that the nominated rents vary a good deal between countries (this for a three-bedroom dwelling). It can also be seen that Denmark, France, Ireland, Luxembourg, the Netherlands, Austria, Finland, Sweden and the UK all have systems of housing benefit that reduce the actual rent paid. Indeed in Sweden and the UK reasonable rents are completely covered for families on social assistance.

Now, the particular problem for this project is that we are seeking to apply a social assistance threshold to income data derived from the ECHP. Should it be income data before or after the deduction of net housing costs? An important argument against deducting any housing costs from social assistance is that our assumed housing costs are not at all typical of actual housing costs. Yet if we do not deduct net housing costs we are not comparing like with like - some countries without housing benefit schemes will be providing an element for housing in the basic scales. Other countries do not include housing in their scales but reduce them using a housing benefit scheme, and, in Sweden and the UK, the scales exclude an allowance for housing costs but tenants on social assistance are not expected to pay for their housing.

The solution that we have come up with for this project is that we will use as our social assistance standard the income received in the social assistance package before net housing costs and we will compare this with incomes in the ECHP before and after housing costs. This is a far from perfect solution: it has the advantage of taking into account the actual housing costs paid by each family instead of the model families housing costs; it also gives us a poverty rate before and after housing costs. However

1. It ignores the fact that some countries social assistance allowance is higher because it includes an element for housing
2. It assumes that in reporting net housing costs the respondents will take into account the subsidies they receive and will deduct them to establish net rent.

[6] It is assumed that one and two adult households have a one bedroom dwelling, lone parents and couples with one child a two bedroom dwelling , and lone parents and couples with two or three children a three bedroom dwelling.

3. It ignores the fact that in some countries, for example the UK, social assistance rates are increased to take account of the housing costs (mortgage interest paid) of owner occupiers.

Family types

For this project it would have been ideal to have had the social assistance payable to all types of families. However the earlier studies of social assistance had collected details for only a standard range of families. The European Observatory had collected data for 1994 on the social assistance paid to

Single people
Couples
Couples with one, two and three children
Lone parents with one and two children

In addition the OECD study had collected for 1992 social assistance paid to

single and couple pensioners

While these family types represent common forms throughout the countries of the EU, they are more common in some countries than others. Further we do not have information on the social assistance scales that would be received by all households in all countries. Table 2.7 provides an estimate of the proportion of households for each country included and excluded in our selected household types. It can be seen that the proportion excluded varies from only 13 per cent in Denmark to 41 per cent in Spain. The characteristics of those excluded varied from country to country but they included families with children over 16, couples with more than three children and lone parents with more than two children, households with three generations and other multi-unit households. The problem is that almost all the countries in the EU use the family unit as the unit of assessment for social assistance. Eardley et al (1996) found that only Austria and Luxembourg (with exceptions) among the EU countries assessed social assistance on the income of the household - all the other countries based it on the family unit albeit with variations in the age of a dependant child. We made efforts to increase the proportion included by altering the age definition of a child from 16 to 18 but it did not add substantially to the proportion of households included. It also ran the risk of beginning to include into a single household, members who were in fact separate benefit (and/or assessment) units.

Table 2.7: Household structure: European Community Household Panel 1995

	B	DK	D	El	E	F	IRL	I	L	NL	A	P	UK
Single working age	11.6	20.1	17.7	7.0	5.0	14.7	9.1	7.7	14.6	16.5	15.5	3.2	10.2
Couple working age	12.2	18.5	17.0	9.1	7.3	14.5	7.8	9.0	14.8	19.6	15.3	7.8	16.3
Single pensioner	10.7	11.5	14.5	10.5	7.9	11.5	10.5	9.7	7.3	10.0	13.5	7.0	12.6
Couple pensioner	12.0	9.9	10.3	13.5	9.7	10.6	5.7	10.3	8.6	8.6	7.4	11.1	10.5
couple + one child	11.2	10.4	8.5	9.4	10.1	10.2	6.5	10.9	11.0	7.1	7.5	13.5	7.3
Couple + two children	11.9	9.5	8.5	14.3	14.3	11.0	10.8	11.7	10.6	11.6	8.8	12.7	10.5
Couple + three children	4.1	3.1	2.4	2.1	3.4	4.2	6.6	2.8	4.2	3.8	2.4	2.2	3.7
lone parent + one child	1.7	3.0	1.8	1.2	.5	2.3	1.6	1.0	1.8	1.5	1.6	1.0	2.4
lone parent + two children	1.8	1.3	.7	.8	.5	1.1	.9	.8	.5	1.1	.8	1.1	2.0
Total	77.2	87.4	81.3	68.0	58.6	80.1	59.5	63.9	73.4	79.8	72.8	59.5	75.4
Other household types	22.8	12.6	18.7	32.0	41.4	19.9	40.5	36.1	26.6	20.2	27.2	40.5	24.6
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	3367	3223	4688	5220	6522	6722	3584	7128	707	5110	3380	4916	4548

The next step was to produce social assistance standards for each of these households for 1994 which is the income year for the 1995 ECHP. This was straightforward for all but the pensioner households, because the information had been collected for the 1994 report of the Observatory of National Family Policies (Ditch et al 1996). For the pensioner households we used the data collected for 1992 for the Eardley et al (1996) study. These amounts were uprated to 1994 using movements in the retail price index for each country (this assumes that actual social assistance benefit has been uprated in line with the retail price index and by not more than that over the period and that there were no changes to the structure of the benefit for other reasons). So we ended up with social assistance entitlements for nine family types (Table 2.8).

Table 2.8: Social Assistance package in ECU PPPs 1994

	Single	Couple	Retired single	Retired couple	Lone parent+1	Lone parent +2	Couple+1	Couple+2	Couple+3
Belgium	470	624	471	626	743	885	723	862	1059
Denmark	497	887	485	1001	793	958	1256	1310	1389
Germany	504	758	267	510	794	986	913	1076	1232
Greece			71	119	27	54	27	54	81
Spain	271	308	211	341	334	391	365	421	470
France	276	393	424	737	445	570	519	662	806
Ireland	361	578	430	607	530	653	703	844	956
Italy	177	353	391	651	345	488	496	651	807
Luxembourg	752	1147	632	939	994	1301	1387	1687	2129
Netherlands	558	796	556	812	782	861	852	930	980
Austria	299	430	333	469	658	848	699	759	916
Portugal	244	309	129	238	323	330	315	358	370
Finland	366	568	285	682	630	987	694	945	1154
Sweden	313	516	408	718	491	669	694	872	1077
United Kingdom	283	444	380	572	497	617	626	746	916
	5371	8111	5473	9022	8386	10598	10269	12177	14342
Unweighted average	384	579	365	601	559	707	685	812	956

Sources: the data for all family types except the retired are taken from the matrix data provided by national informants for the 1994 Observatory on National Family Policy (Ditch et al 1996). PPPs were converted from £ to ECUs The data for the retired was computed from Eardley et al (1996) Table 6.5a uprating from 1992-1994 using the General Index of Prices provided by Eurostat and adjusting from £PPPs to ECUS PPPs using OECD (1996) for Sweden and Finland.

Results

The tables in Appendix 1 give the full results. Table 2.9 provides a summary and presents the overall poverty rates before housing costs using the social assistance standards and a number of variations from that standard.

- Thus one possible problem with the social assistance threshold is that it represents a level of income at which a substantial minority of the population might be at or about (because they are receiving social assistance). The danger of this is that a small variation in the social assistance standard may include or exclude large numbers of households. In order to test the sensitivity of the social assistance standard we have presented poverty rates at 10 per cent below and 10 per cent above the threshold. Ireland and Italy appear to have particularly sensitive thresholds – for example the poverty rate in Ireland increases more than four fold between social assistance minus 10% and social assistance plus 10%. However for most countries the social assistance rates and its variants produces poverty rates which are considerably lower than 50 and 60 per cent of the median. The two exceptions to this are Ireland where the poverty rate is higher by some margin for social assistance plus 10% than 60% of the median and the Netherlands where it is quite similar.

- The table also takes two national social assistance scales and applies them to the income of households in each country. We have chosen Portugal to represent a social assistance

threshold at the lower end of the range and Denmark to represent a social assistance scale at the upper end of the range. The Portuguese threshold produces very low poverty rates for all countries except Greece and Portugal. In contrast Denmark's social assistance threshold produces some very high poverty rates especially in Greece (53%), Spain (47%) and Portugal (63%). Only Luxembourg still has a poverty rate much lower than 60 per cent of the median.

- The table also produces the same results after housing costs. In general after housing costs social assistance threshold poverty rates are much higher than for before housing costs – especially in Denmark, Germany, Luxembourg and the Netherlands. In Belgium and Ireland the poverty rates is sensitive to whether the threshold is plus or minus 10% of the social assistance threshold.

Table 2.9: OVERALL POVERTY RATES USING SOCIAL ASSISTANCE (SA) STANDARDS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Before housing costs													
<SA-10%	6	5	8	0	3	3	5	5	5	8	3	6	4
<SA	7	8	9	0	4	4	14	7	7	10	4	8	5
<SA+10%	10	11	11	0	5	6	23	11	9	14	4	9	7
Portugal SA standard	2	1	2	8	3	1	2	3	1	2	2	8	2
Denmark SA standard	16	8	14	53	47	15	40	33	4	14	10	63	22
50% median	11	7	11	19	9	10	5	7	8	8	10	20	12
60% median	18	14	17	26	18	16	17	15	13	12	17	27	20
After housing costs													
<SA-10%	9	17	15	1	5	7	12	8	10	19	6	8	11
<SA	12	22	17	1	6	9	20	10	13	24	7	10	14
<SA+10%	16	27	20	1	7	11	29	14	17	28	8	11	18
Portugal SA standard	4	3	6	9	5	3	3	4	2	5	3	10	5
Denmark SA standard	23	22	26	57	52	25	44	38	7	30	16	66	36
50% median	18	19	21	22	13	19	10	12	14	18	16	24	25
60% median	26	31	28	29	22	27	24	20	23	28	25	33	34

Tables 2.10a and 2.10b give the poverty rates for each of our household types at the social assistance threshold before and after housing costs. The rates are higher for all family types after housing costs but the extent of the difference varies between countries and by family type within countries. So for example the poverty rates in Denmark more than double after housing costs and for retired singles there is a fivefold increase. Whereas, for example, in Portugal there is very little difference in the poverty rates before and after housing costs. Nevertheless the results demonstrate that housing costs count – the poverty rate changes depending on whether housing costs are or are not taken into account. Perhaps a better way at looking at the impact of the definition on compositional changes is to look at the poverty proportions in tables 2.11a and 2.11b.

TABLE 2.10a: SOCIAL ASSISTANCE POVERTY RATES BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	10	12	12		9	5	3	3	5	24	5	31	6
Couple	5	6	8		3	1	4	4	6	3	2	16	3

Retired single	8	7	4	0	3	8	39	14	6	8	4	2	10
Retired couple	7	17	5	1	1	10	7	10	3	9	2	5	5
Lone parent+1	19	4	31		8	5	42	8	25	18	13	20	7
Lone parent + 2	16	3	39	6	10	7	43	13	31	24	30	3	10
Couple + 1	4	6	7		5	1	4	5	6	6	4	4	2
Couple + 2	5	3	13		4	1	8	5	8	5	3	6	4
Couple + 3	8	3	17		6	1	17	13	26	5	8	9	8
Total	7	8	9	0	4	4	14	7	7	10	4	8	5

TABLE 2.10b: SOCIAL ASSISTANCE POVERTY RATES AFTER HOUSING COSTS

	B	**DK**	**D**	**EL**	**E**	**F**	**IRE**	**I**	**L**	**NL**	**A**	**P**	**UK**
Single	18	28	27		14	13	13	5	18	41	9	33	16
Couple	6	13	14		5	3	8	5	9	9	4	17	6
Retired single	16	34	6	1	4	18	46	21	6	44	5	5	22
Retired couple	8	28	7	1	1	13	9	13	3	25	3	8	11
Lone parent+1	44	31	57		21	18	55	11	25	53	30	28	45
Lone parent + 2	47	42	67	6	11	22	59	21	31	59	40	9	43
Couple + 1	6	18	13	1	7	3	10	6	12	12	6	6	7
Couple + 2	8	9	21	1	6	3	13	8	13	9	3	6	10
Couple + 3	14	9	30	1	11	5	23	20	43	11	10	9	16
Total	12	22	17	1	6	9	20	10	13	24	7	10	14

On the whole the composition of the poor before and after housing costs is with exceptions fairly stable. Among the exceptions are the proportion of singles in Denmark and Netherlands which falls sharply after housing costs and France and Germany where it increases. The proportion of the poor who are retired single increases after housing costs in Denmark and Netherlands and falls in Ireland and the UK. The proportion who are retired couples falls after housing costs in Belgium and France. The proportion of families with children who are poor remains more consistent.

As well as the variation before and after housing costs the composition of the poor varies with the threshold being employed this is seen most clearly on Table 2.11a.

Table 2.11a: PROPORTION OF POOR BY FAMILY TYPES WITH SOCIAL ASSISTANCE LEVEL THRESHOLD BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	22	44	28	15	20	21	3	5	12	51	26	21	15
Couple	11	20	18	58	11	5	4	8	16	9	9	27	10
Retired single	22	15	7		10	29	49	30	8	10	17	3	32
Retired couple	16	2	7		4	31	5	21	6	9	6	12	12
Lone parent+1	6	1	8		2	4	8	2	8	4	7	4	4
Lone parent + 2	5	11	4	27	2	2	5	2	3	4	9	1	5
Couple + 1	8	5	8		20	3	3	11	12	6	11	12	4
Couple + 2	10	2	15		24	3	10	13	15	7	8	16	11
Couple + 3	6	100	5		9	2	14	8	20	2	6	4	8
Total	100		100	100	100	100	100	100	100	100	100	100	100

Table 2.11b: PROPORTION OF POORS BY FAMILY TYPES WITH SOCIAL ASSISTANCE LEVEL THRESHOLD AFTER HOUSING COSTS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	23	34	34		19	27	10	5	28	36	30	18	16
Couple	8	15	17		11	5	5	7	13	10	13	23	10
Retired single	18	24	7	12	9	28	40	31	4	23	15	6	26
Retired couple	10	0	5	28	3	20	4	20	3	12	5	16	10
Lone parent+1	8	6	8		3	6	7	2	5	4	10	5	10
Lone parent + 2	9	3	4	10	2	4	4	3	2	4	7	2	8
Couple + 1	7	11	8	19	19	4	5	10	13	4	10	14	5
Couple + 2	10	5	13	28	24	4	12	14	14	5	6	13	10
Couple + 3	6	2	5	3	10	3	13	9	19	2	5	3	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 2.12 reduces the complexity of the analysis of the proportion who are poor and compares the proportion of the poor in four household types and using two thresholds for each country – 60 per cent of the median and the social assistance threshold. We see, for some countries, some very substantial changes in the composition of the poor using this relative measure and this absolute measure of poverty. For example in Denmark retirement pensioners make up a much larger proportion of the poor on the relative measure. This is true of Germany and Spain, Luxembourg, Austria and Portugal. However the opposite is the case in France and Ireland where pensioners are a larger proportion of the poor on the social assistance measure. For couples with children there is generally more consistency in the proportion in poverty between the measures - but not in France which has lower proportions on the social assistance threshold, and Portugal which has a higher proportion. Some countries are more consistent in their poverty profiles than others – for example the UK is the most consistent followed by Belgium.

There are a variety of factors producing these results. Certainly the relative income distribution is an important factor. However probably more important is the difference between the modified OECD equivalence scale used in the 60 per cent threshold and the implied equivalence scale in social assistance scales. Germany for example has a much lower proportion of its poor made up of the retired using the social assistance threshold because if you look back at table 3.5 it will be seen that *Socialhilfe* for a single retired person is half the amount paid to a single person.

Table 2.13 presents the implied equivalence scales in the social assistance thresholds and

compares them with the modified OECD equivalence scales. The latter makes no allowance (more or less) for a single retired person compared with a single person but it can be seen that, for social assistance, a number of countries do. For example in Italy the implied equivalence scale in social assistance for a single retired person is 2.2 (single person=1.0), though this is mainly because the amount paid to a single person is so low. In general social assistance scales are more generous to lone parents than the modified OECD scale (assuming all children are less than 14) – Austria is comparatively the most generous country to lone parents with a scale of 2.8 compared with only 1.6 for the modified OECD scale. Only Spain, Portugal and the Netherlands are less generous than the OECD scale to lone parents. For couples with children there is a similar picture – for couples with two children the implied equivalence scale is more generous than the OECD scale for all countries except Belgium, Spain, the Netherlands and Portugal.

Table 2.12: Proportion of the poor by household type using 60% median compared with the Social Assistance thresholds

	B		DK		D		EL		E		F		IRE		I		L		NL		A		P		UK	
	60	SA	60	SA	60	SA	60	SA	60	SA	60	SA	60	SA	60	SA	60	SA	60	SA	60	SA	60	SA	60	SA
Single and couples	26	33	49	64	37	49	17	73	18	31	39	26	28	7	19	13	28	28	51	60	35	35	20	48	21	25
Retired	39	38	38	17	34	14	62		32	14	34	60	32	54	39	51	26	14	18	19	38	23	53	15	45	44
Lone parents	8	11	4	12	7	12	5	27	3	4	6	6	13	13	4	4	7	11	7	8	7	16	3	5	13	9
Couple parents	27	24	9	7	22	28	17		48	53	21	8	28	27	38	32	40	47	24	15	21	25	21	32	21	23
All	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 2.13: Implied equivalence scale in the Social assistance thresholds compared with the modified OECD scale.

	Single	Couple	Single retired	Couple retired	Lone Parent+1	Lone Parent +2	Couple + 1	Couple +2	Couple +3
Belgium	1.0	1.3	1.0	1.3	1.6	1.9	1.5	1.8	2.3
Denmark	1.0	1.8	1.0	2.0	1.6	1.9	2.5	2.6	2.8
Germany	1.0	1.5	0.5	1.0	1.6	2.0	1.8	2.1	2.4
Greece	1.0								
Spain	1.0	1.1	0.8	1.3	1.2	1.4	1.3	1.6	1.7
France	1.0	1.4	1.5	2.7	1.6	2.1	1.9	2.4	2.9
Ireland	1.0	1.6	1.2	1.7	1.5	1.8	1.9	2.3	2.6
Italy	1.0	2.0	2.2	3.7	1.9	2.8	2.8	3.7	4.6
Luxembourg	1.0	1.5	0.8	1.2	1.3	1.7	1.8	2.2	2.8
Netherlands	1.0	1.4	1.0	1.5	1.4	1.5	1.5	1.7	1.8
Austria	1.0	1.4	1.1	1.6	2.2	2.8	2.3	2.5	3.1
Portugal	1.0	1.3	0.5	1.0	1.3	1.4	1.3	1.5	1.5
Finland	10.	1.6	0.8	1.9	1.7	2.7	1.9	2.6	3.2
Sweden	1.0	1.6	1.3	2.3	1.6	2.1	2.2	2.8	3.4
United Kingdom	1.0	1.6	1.3	2.0	1.8	2.2	2.2	2.6	3.2
Modified OECD scale	1	1.5	1.0	1.5	1.3	1.6	1.8	2.1	2.4

THE US POVERTY THRESHOLD

It may seem curious to be using the official US poverty threshold in an analysis of absolute poverty in EU countries. However there are two justifications for it.

First, the thresholds are 'official' – they are the US federal government's official statistical definition of poverty, and the US government[7], uses them extensively in a number of ways, including to tabulate figures on the poverty populations and its composition that are issued annually by the US Census Bureau. Poverty population statistics (based on the thresholds) from the Deccenial Census are used by certain federal programmes to allocate programme funds among states. A simplified version of the poverty thresholds (called poverty guidelines) is also produced each year (Fisher 1992b). These guidelines are used for administrative purposes – for instance, in determining eligibility for certain federal programmes such as the Low-Income Home Energy Assistance Programme, Head Start, the National School Lunch Programme, The Food Stamp Programme and the portions of Medicaid (the medical assistance programme for the needy). Note that the guidelines are generally not used to determine eligibility for cash assistance programmes or for the Earned Income Tax Credit; they are also not used to determine benefit levels for any (cash) assistance programme.

Second, the US poverty threshold has its origins in an absolute approach. It was developed by what Fisher calls a 'component-and-multiplier' approach. Mollie Orshansky (1965; 1969) took the costs of a minimal food budget for different family sizes and derived poverty thresholds by multiplying these costs by three – that being the inverse of the share of money income spent on food by the average family. Orshansky based her poverty thresholds on the economy food plan – the cheapest of four food plans developed by the Department of Agriculture. Orshansky knew from the Department of Agriculture's 1955 Household Food Consumption Survey (the latest available at the time) that families of three or more persons spent about one third of their after tax money income on food in 1955. Accordingly she calculated poverty thresholds for families of three or more persons by taking the dollar costs of the economy food plan for families of those sizes and multiplying the costs by a factor of three – the multiplier. In effect she took a hypothetical average family spending one third of its income on food, and assumed that it had to cut back on its expenditure sharply. She assumed that expenditure for food and non food would be cut back at the same rate. When the food expenditure of the hypothetical family reached the costs of the economy food plan, she assumed that the amount the family would then be spending on non-food items would also be minimal but adequate. Her procedure did not assume specific dollar amounts for any budget category besides food. She followed somewhat different procedures for deriving thresholds for one and two person units (see Fisher (1997)).

The poverty threshold is up-rated every year by indexation to the Consumer Price Index but has otherwise not been changed in any major way. This means that the threshold has increasingly diverged from the living standards of the average American household. Although the poverty line is adjusted with price changes, it is not adjusted for changes in the general standard of living. As the real standard of living has increased, the proportion of income that the average American family spends on food has decreased, indicating that the use of three as

[7] In this discussion I have drawn on the contents of an extensive correspondence with Gordon Fisher, US Department of Health and Human Services. He cannot be blamed for what I have said here. But only he will recognise the extent to which I have plagiarised him.

the multiplier of the food budget is inadequate (Harrington 1985, Citro and Michael 1995, Nolan and Whelan 1996).

The US Poverty threshold has been used before as a more absolute benchmark in comparative research. Bradbury and Jantii (1999) used it in their analysis of child poverty based on the Luxembourg Income Survey.

In this project we have used the US Poverty standard for 1994. This was derived by taking the poverty thresholds published by the US Bureau of the Census (http://www.census.gov/hhes/poverty/threshld/thresh94.html), converting these from $ to Purchasing Power Parities using 1994 OECD PPPs (OECD 1996) and standardising them using ECU PPPs (Eurostat 1999). The resulting thresholds are summarised in Table 4.1.

The US Poverty Standard was subject to a thorough review by a panel of experts appointed by the National Academy of Sciences (Citro and Michael 1995). The NAS panel identified several major weaknesses of the current poverty measure. These included

- The current income measure does not reflect the effects of key government policies that alter the disposable income available to families and hence their poverty status. These include income taxes and certain non cash benefits.
- The current poverty thresholds have not been adjusted to reflect rising income levels and standards of living that have occurred since 1963.
- The current income measure does not take account of variations in expenses that are necessary to hold a job and earn an income – expenses that reduce disposable income.
- The current income measure does not take into account variations in medical costs.
- The current poverty thresholds use family size adjustments that are anomalous – a problem underscored by important changes in family composition since the 1960s.
- The current poverty thresholds are not adjusted for geographic differences in the costs of living across the nation.

The Panel proposed a new approach for developing an official poverty measure for the US. Their recommendations included

- A new poverty threshold for a reference family type should be developed using actual Consumer Expenditure Survey data on expenditure for food, clothing and shelter (including utilities) FCSU. The new threshold should be based on a single dollar amount for FCSU which would be scaled down from median actual expenditures for FCSU; the FCSU dollar amount would be increased by a small proportion to allow for other needs (e.g. household supplies, personal care, non-work-related transportation).
- The threshold would be updated annually to reflect changes in median actual expenditures for FCSU. To moderate business cycles a three year average of expenditures would be used.
- The reference family threshold should be adjusted to reflect the needs of different family types, and to reflect geographic differences in housing costs.
- Family resources (income) should be redefined – consistent with the threshold concept – as the sum of money income from all sources plus the value of near-money benefits (e.g. food stamps) that are available to buy goods and services included in the threshold concept, minus expenses that cannot be used to by these goods and services

- Such expenses would include income and payroll taxes, child care expenses and other work-related expenses, child support payments to another household, and out of pocket medical care costs, including health insurance premiums.

In response to these recommendations the US Census Bureau developed an Experimental US Poverty line (Short et al 1999). In Table 4.2 we have derived the Experimental Poverty Line for EU countries using the (recommended) three parameter equivalence scale to estimate a threshold for each of our family types. These $ amounts were then converted to ECU PPPs using the same methods as for Table 2.14.

TABLE 2.14 US CENSUS BUREAU OFFICIAL POVERTY THRESHOLDS: 1994. Per annum

	US$ PPPs (2)	ECU PPPs (3)	Single person	Couple	Single pensioner	Couple pensioner	Lone parent +1	Lone Parent+2	Couple+1	Couple+2	Couple+3
USA (1)	1		7710	9924	7108	8958	10215	11940	11929	15029	17686
B	37.3	41.65	6905	8888	6366	8022	9148	10693	10683	13459	15839
DK	8.72	9.79	6867	8839	6331	7979	9099	10635	10625	13386	15753
D	2.07	2.16	7389	9510	6812	8585	9789	11442	11432	14403	16949
EL	196	223.8	6752	8691	6225	7845	8946	10457	10447	13162	15489
E	121	133.1	7009	9022	6462	8144	9286	10855	10845	13663	16078
F	6.63	7.23	7070	9100	6518	8215	9367	10949	10939	13782	16218
IRE	0.639	0.71	6939	8932	6397	8062	9194	10746	10736	13526	15917
I	1535	1640	7216	9289	6653	8384	9561	11176	11165	14067	16554
L	40	39.79	7751	9976	7146	9005	10269	12003	11992	15108	17779
NL	2.13	2.28	7203	9271	6640	8369	9543	11154	11144	14040	16522
A	13.9	14.9	7193	9258	6631	8357	9529	11139	11128	14020	16499
P	118	136.8	6650	8560	6131	7727	8811	10299	10290	12964	15255
FIN	6.15	6.66	7120	9164	6564	8272	9433	11026	11016	13878	16332
SWE	9.91	10.7	7141	9191	6583	8297	9461	11058	11048	13919	16380
UK	0.646	0.7	7115	9158	6560	8267	9427	11019	11009	13870	16322
Total			106320	136851	98018	123530	140863	164651	164499	207248	243887
Average			7088	9123	6535	8235	9391	10977	10967	13817	16259

Sources: 1. US Bureau of the Census (http://www.census.gov/hhes/poverty/threshld/thresh94.html)
2. OECD (1996)
3. Eurostat (1999)

TABLE 2.15: US CENSUS BUREAU EXPERIMENTAL POVERTY THRESHOLDS 1994: Per annum

	US$ PPPs (2)	ECU PPPs (3)	Single person	Couple	Single pensioner	Couple pensioner	Lone parent +1	Lone Parent+2	Couple+1	Couple+2	Couple+3
USA (1)	1		7022	9903	7022	9903	10601	12588	13346	15166	17289
B	37.3	41.65	6289	8869	6289	8869	9494	11273	11952	13582	15483
DK	8.72	9.79	6255	8821	6255	8821	9442	11212	11887	13508	15399
D	2.07	2.16	6729	9490	6729	9490	10159	12064	12790	14534	16569
EL	196	223.8	6150	8673	6150	8673	9284	11024	11688	13282	15141
E	121	133.1	6384	9003	6384	9003	9637	11444	12133	13787	15717
F	6.63	7.23	6439	9081	6439	9081	9721	11543	12238	13907	15854
IRE	0.639	0.71	6320	8913	6320	8913	9541	11329	12011	13649	15560
I	1535	1640	6572	9269	6572	9269	9922	11782	12492	14195	16182
L	40	39.79	7059	9955	7059	9955	10657	12654	13416	15246	17380
NL	2.13	2.28	6560	9251	6560	9251	9904	11760	12468	14168	16152
A	13.9	14.9	6551	9238	6551	9238	9890	11743	12450	14148	16129
P	118	136.8	6057	8542	6057	8542	9144	10858	11512	13082	14913
FIN	6.15	6.66	6484	9145	6484	9145	9789	11624	12324	14005	15965
SWE	9.91	10.7	6504	9172	6504	9172	9818	11659	12361	14046	16013
UK	0.646	0.7	6480	9139	6480	9139	9783	11617	12316	13996	15955
Average			96832	136561	96832	136561	146186	173587	184039	209137	238413
			6455	9104	6455	9104	9746	11572	12269	13942	15894

Sources: 1. Short, K. et al (1999) Experimental Poverty measures 1990-1997 US Census Bureau, Current Population reports, Consumer Income, P60-205, US Government Printing Office, Washington DC (especially Tables C1 and C2)
2. OECD (1996)
3. Eurostat (1999)

It can be seen in comparing Table 2.14 and 2.15 that the Official Poverty Threshold and the Experimental Poverty Threshold are very similar particularly for the base case – two adults and two children $15029 per annum compared with $15166 per annum. They diverge somewhat more for other household types because the equivalence scales used are not identical (see Table 2.16) and in particular the Experimental US poverty threshold does not have a separate equivalence for the elderly.

Table 2.16: US Poverty Line Equivalence scales.

	Official US poverty threshold	**Experimental US poverty threshold (three parameter scale)**
Single	0.513	0.463
Couple	0.660	0.653
Elderly single	0.473	0.463
Elderly couple	0.596	0.653
Lone parent + 1	0.680	0.699
Lone parent +2	0.794	0.830
Couple +1	0.794	0.880
Couple +2	1.000	1.000
Couple +3	1.177	1.114

In comparing the standardised poverty rates obtained using the US Official and the Experimental Poverty lines Short et al (1999) found that

- The standardised measure results in lower standardised poverty rates for children and higher rates for the elderly compared with the official measure.
- Standardised poverty rates are lower for Blacks under the experimental measures than under the official measure.
- The experimental measures show lower standardised poverty rates for people in families with a female householder than the official measure.
- The experimental measures that take account of geographical variations in the costs of housing show higher standardised rates in certain areas.
- People with disabilities are considerable less likely to be counted as poor under the experimental measures that they are under the official measures.

As we have seen the differences between the official poverty threshold and the experimental poverty threshold are not just about the income threshold but also about the definition of income. This means that the experimental threshold are really only meaningful in connection with the Panel's specific definition of income. Thus although the experimental threshold appears to be lower than the official threshold if one only looks at the dollar figures themselves, the experimental threshold is effectively higher (in fact 14 to 33 per cent higher in 1992) than the official threshold if one takes into account the different income definitions.

In the analysis of ECHP data this presents us with a problem – we do not have the data that enables us to get at the income definition adopted for the experimental threshold. On the income side we have data on income tax but we do not have data on child care costs, work related expenses, child support payments, medical costs and health insurance premiums (unless they are statutory social insurance contributions). On the benefit side the income definition the ECHP definition should include all cash benefits but does not include the value

of food stamps like provision (for example free school meals, Common Agriculture Policy payments) which perhaps ought to be taken into account.

As for the official US poverty thresholds, the income definition conventionally used with them is before tax money income. However, the original thresholds were calculated on the basis of after-tax money income, so there is some justification for us using net income in our analysis (see http://aspe.hhs.gov/poverty/papers/hptgssiv.htm). When we come to the part of this project that uses the Household Budget Survey we shall endeavour to establish an income definition closer to the US Experimental Poverty measure.

It can be seen in Table 2.17 that the overall poverty rates before housing costs are very slightly higher using the experimental rate than using the official rates. Both the US poverty thresholds produce lower poverty rates than the 60 per cent median before housing costs for all countries except Greece, Spain, Ireland, Italy and Portugal. For Germany, the Netherlands and the UK the rates are very similar. The US poverty thresholds both before and after housing give higher poverty rates for all countries than the social assistance threshold poverty rates - with the exception of Denmark before housing costs.

Table 2.17: Overall poverty rates obtained using the US Official and Experimental Poverty Rates

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
US official before housing	11	6	15	41	36	12	33	23	3	11	10	48	18
US official after housing	17	18	25	45	41	22	38	29	7	26	16	52	32
US experimental	11	6	14	43	38	12	34	25	4	11	9	50	19
Before housing													
60% median before housing	18	14	17	26	18	16	17	15	13	12	17	27	20
Social assistance before housing	7	8	9	0	4	4	14	7	7	10	4	8	5
Social assistance after housing	12	22	17	1	6	9	20	10	13	24	7	10	14

Appendix 1 presents all the Tables but in addition tables 2.18 and 2.19 compare the poverty rates by family type before housing costs for the official and experimental poverty rates. As would be expected, comparing the thresholds there is little difference in the poverty rates for couples with two children but the experimental threshold gives higher poverty rates for lone parents and elderly couples and lower rates for the single childless in most countries.

TABLE 2.18: POVERTY RATES BEFORE HOUSING COST OFFICIAL US POVERTY LINE

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	16	16	20	42	35	23	42	21	3	28	15	58	25
Couple	7	3	9	25	21	6	13	11	3	3	6	43	6
Retired single	17	10	18	71	69	18	74	46	6	8	10	83	32
Retired couple	10	2	9	57	33	7	11	11	2	5	6	61	13
Lone parent+1	19	4	35	55	37	23	56	21	5	19	27	43	44
Lone parent + 2	16		36	39	41	23	71	25	18	30	34	62	54
Couple + 1	6	1	8	21	26	5	15	14	3	7	6	26	6
Couple + 2	8	2	16	28	34	6	18	25	2	8	5	42	15
Couple + 3	13	2	24	36	41	9	34	46	8	11	19	50	25
Total	11	6	15	41	36	12	33	23	3	11	10	48	18

TABLE 2.19: POVERTY RATES BEFORE HOUSING COSTS USING THE EXPERIMENTAL US POVERTY THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	13	13	17	35	30	20	37	20	3	23	12	54	18
Couple	7	3	9	25	20	6	13	11	3	3	6	43	6
Retired single	15	10	18	70	68	17	74	44	6	7	9	82	30
Retired couple	13	3	10	62	40	11	19	21	3	7	7	65	20
Lone parent+1	22	4	37	62	38	26	59	21	5	22	27	49	51
Lone parent + 2	27		39	46	42	23	76	34	18	46	34	62	57
Couple + 1	7	3	10	26	33	6	19	19	4	9	10	32	8
Couple + 2	8	2	16	29	34	6	19	27	2	8	5	42	15
Couple + 3	12	2	21	34	39	8	33	44	5	10	19	50	25
Total	11	6	14	43	38	12	34	25	4	11	9	50	19

These patterns are seen more clearly in Tables 2.20 and 2.21 which compare the poverty profiles. The Official US poverty line produces a larger proportion of the poor who are singles and a smaller proportion who are couples. But there is rather little variation between these measures. There is much more variation between them and the profile of poor using the social assistance threshold. However there is little pattern in the differences observed. For example for Ireland and the UK the proportions are quite similar except for a higher proportion of single elderly among the poor on the social assistance measure. In contrast for Denmark there is a lower proportion of the single elderly and a higher proportion of childless couples.

TABLE 2.20: POVERTY PROFILE BEFORE HOUSING COSTS USING OFFICIAL US POVERTY LINE

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	22	58	30	11	8	36	19	11	16	51	32	7	18
Couple	10	9	12	8	7	10	5	7	17	7	14	12	8
Retired single	21	21	22	26	26	22	39	31	17	8	19	20	29
Retired couple	14	3	7	27	15	8	3	8	6	5	6	24	10
Lone parent+1	4	2	5	2	1	6	5	2	4	3	6	2	8
Lone parent + 2	3		2	1	1	3	3	1	4	4	4	2	8
Couple + 1	8	2	5	7	13	5	5	11	13	6	7	12	3
Couple + 2	11	4	11	15	23	7	10	20	10	11	6	18	11
Couple + 3	6	1	5	3	7	4	11	9	13	5	6	4	7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

TABLE 2.21: PROPORTION OF THE POOR BEFORE HOUSING COSTS EXPERIMENTAL US POVERTY THRESHOLDS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	17	50	25	9	7	31	17	10	16	45	27	6	13
Couple	10	10	13	8	7	10	5	6	17	8	15	11	7
Retired single	19	22	22	26	24	21	38	27	16	8	17	19	27
Retired couple	18	5	9	29	18	12	5	14	9	7	8	24	15
Lone parent+1	4	2	6	3	1	6	5	1	4	4	6	2	9
Lone parent + 2	6		2	1	1	3	3	2	4	6	4	2	8
Couple + 1	9	6	8	8	15	6	6	13	17	8	11	14	4
Couple + 2	11	4	12	15	22	7	10	20	10	11	7	18	11
Couple + 3	6	1	4	3	6	4	11	8	8	4	6	4	7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

SUBJECTIVE POVERTY THRESHOLD

It is arguable whether a subjective poverty threshold can genuinely be described as an absolute measure. However the ECHP question establishes the threshold with the question "*In your opinion what is the very lowest net monthly income that your household would have to have in order to make ends meet*". *Very lowest* implies something fairly absolute though *to make ends meet* may be more relative. Eurostat publish poverty rates based on this threshold plus 5 per cent and higher (Eurostat 1999). In this analysis we have not allowed the extra 5 per cent and taken the proportion with net incomes not reaching their own specified threshold. The full results are given in the appendix. In addition Table 2.22 compares the overall poverty rate obtained using this threshold with the relative 50 per cent of median rate and the social assistance rate. It can be seen that the poverty rate using this measure is for the southern EU countries, Ireland and France higher than the 60 per cent of the median relative measure. For the other countries the poverty rate is lower, much lower in Denmark and Luxembourg and (curiously) the UK. In all countries except Denmark, Luxembourg and the Netherlands the social assistance threshold poverty rate is lower than the subjective threshold poverty rates. It is interesting that in the Netherlands the subjective poverty rate, the relative poverty rate and the social assistance poverty rate are very similar. No other country shares that distinction.

TABLE 2.22: SUBJECTIVE THRESHOLD POVERTY RATES COMPARED

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Subjective threshold poverty rates Before housing	15	5	16	43	26	19	21	35	8	10	13	41	13
60% median before housing	18	14	17	26	18	16	17	15	13	12	17	27	20
Social assistance before housing	7	8	9	0	4	4	14	7	7	10	4	8	5

Table 2.23 shows the poverty rates by family type. In all countries there are high rates of poverty among singles, much higher for all countries than found using the social assistance threshold in Table 2.10. There are also some high poverty rates among retired singles – Belgium, Germany, Italy and Portugal for example all have much higher poverty rates than for the social assistance threshold.

TABLE 2.23: SUBJECTIVE POVERTY RATES BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	35	15	26	84	67	52	38	74	21	24	26	81	29
Couple	7	2	10	33	22	9	11	27	5	3	6	45	7
Retired single	42	6	28	87	72	36	52	79	19	20	24	90	28
Retired couple	7	1	10	52	13	8	12	28	3	5	6	54	8
Lone parent+1	22	2	22	71	46	26	41	56	10	8	27	58	15
Lone parent + 2	9	0	11	48	29	8	21	43	31	22	18	27	6
Couple + 1	4	0	7	18	12	3	7	13	2	2	4	23	3
Couple + 2	3	1	7	10	9	2	3	10	2	4	2	16	4
Couple + 3	2	0	12	8	7	1	5	13	0	3	3	9	3
Total	15	5	16	43	26	19	21	35	8	10	13	41	13

It is perhaps easier to see this by examining the poverty profile in Table 2.24. Again singles and retired singles are more prevalent among the poor than they were, for example, using the social assistance standard in Table 2.10. In contrast for all countries, using the subjective

threshold, lone parents and couples with children are much less prevalent among the poor. These changes in the composition of the poor between the social assistance threshold and the subjective threshold are striking. They indicate that in making judgements about the needs of their households individuals in families with children are less generous than the state is in its judgement and that singles and retired singles are much more generous than the state is.

TABLE 2.24: POVERTY PROFILE BEFORE HOUSING COSTS USING SUBJECTIVE POVERTY THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	34	70	35	20	22	50	28	25	49	48	42	10	30
Couple	7	10	12	10	11	9	7	11	12	8	9	14	12
Retired single	39	15	31	31	38	27	44	34	22	25	34	26	36
Retired couple	8	1	7	24	9	6	6	13	4	6	5	25	8
Lone parent+1	3	1	3	3	1	4	5	2	3	1	4	2	4
Lone parent + 2	1	0	1	1	1	1	2	2	3	3	2	1	1
Couple + 1	4	1	4	6	8	2	4	6	3	2	3	13	2
Couple + 2	3	2	5	5	8	1	2	5	4	5	2	8	5
Couple + 3	1	0	2	1	2	0	3	2	0	1	1	1	1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

SECTION 3

USING HOUSEHOLD EXPENDITURE TO ESTABLISH POVERTY THRESHOLDS

Jonathan Bradshaw and Naomi Finch

INTRODUCTION

This section aims to identify the expenditure poor using the Household Budget Survey (HBS). Economists tend to argue that expenditure is a better representation of permanent command over resources than income. The advantages of expenditure measures of poverty are described by Travers and Richardson: "Expenditure generates the flow of services from which material well-being is derived…Generally income is valued not for its own sake but for the ability it provides to buy goods and services. It is thus more satisfactory to measure directly the level of goods and services bought" (as cited in Saunders, 1998). In particular, when comparing poverty rates between countries, one problem with income is that it fails to take into account comparisons in patterns of consumption which are the result not of command over resources but reflect differences in relative prices due to national, cultural or other factors. In comparing income, we are not comparing what the income has to be spent on and therefore we are not comparing like with like (Saunders et al, 1999). On the other hand, it is the level of consumption rather than of expenditure per se that is actually meaningful. Expenditure often represents a choice by consumers: wealthy misers may spend little but this does not mean they are poor. Poverty, however, is characterised by constraint rather than by choice (Saunders, 1998). However unlike income, expenditure reveals the direct consumption of goods and services, including not just those purchased out of current income but those made available from borrowing or dissaving. Also, unlike income, expenditure can be broken down by commodity and sub commodity and thus make it possible to make judgements about the different kinds of consumption – whether it is on "necessities" or "luxuries" for example.

The HBS is a "virtual survey" – a data set derived by Eurostat by collecting together national expenditure surveys and organising them into a common format. Due to the immense amount of work involved in producing the HBS, Eurostat only undertake the work every few years. This analysis is based on the data from the most recent survey available 1994, though Eurostat are already working on a data set covering 1998. There are inevitably problems in making consistent 15 separate expenditure surveys, undertaken for national statistical offices, using somewhat different sampling methods, collecting very different amounts of data and using rather different techniques. The common denominator which makes the HBS useful for this work is that it contains a common core of data organised by Eurostat into a consistent framework, including household expenditure data classified according to a consistent coding framework, and data that makes it possible to analyse expenditure according to the socio-economic circumstances of the household.

However there are a number of problems with the HBS:

- Eurostat has not released the data except in summary form as publications and in a CD. Thus for this project the computing had to be undertaken by Eurostat staff

with us specifying the runs. This manner of analysing primary micro social data is difficult, time consuming and fraught with risks due to the researchers indirect contact with the raw data. Eurostat staff also had to fit this computing into their ordinary research schedule which inevitably set a constraint on the demands that could be made on their time.

- We were advised by Eurostat that the income data in the HBS is not particularly reliable for some countries. This put a constraint on the range of analysis that we were able to undertake.
- As with income, expenditure data has its limitations. Not all expenditure is for current consumption – thus for example contributions to private or public social insurance funds is for future consumption. So also is any capital repayment made in respect of owner occupied housing. Furthermore, expenditure does not represent the total resources that a household consumes – excluded for example are in-kind gifts not purchased or the home consumption of domestically produced goods and services. The HBS actually attempts to record the value of home produced goods such as food but not domestic services (and no attempt is made to take account of the time costs involved in home production).
- A further problem with expenditure data (and income data) is that it is generally collected using expenditure diaries over a given limited period. That period may or may not include (lumpy) items purchased only irregularly, and, with the increased use of freezers, the diary period may even under estimate or over estimate food consumption. At an aggregate household and commodity level these variation may be ironed out but when analysing expenditure data by household type and at sub major commodity level it may be subject to disconcerting variations.
- Finally in using the HBS, especially for these purposes, we are treading on relatively uncharted territory. In the whole literature on living standards, expenditure data has been much less commonly used than income. In the comparative literature there are hardly any studies using expenditure data (no doubt because of the horrendous problems in making the expenditure codes comparable). This, together with the problems of access mentioned above, perhaps explains why the HBS has itself been so under exploited. We are therefore in a number of ways breaking new ground.

The thrust of the analysis of the HBS (as with the ECHP) was to employ a variety of "absolute" poverty thresholds and compare the proportion of households living below these thresholds (the overall poverty rates) as well as the characteristics of those living below the thresholds (the poverty rates by household type and the poverty proportions). In order to do this we had to classify the households on a consistent basis. For the HBS analysis it was decided as far as possible to follow the classification developed in the work on the ECHP. In that work we had experimented with various classifications and decided in the end that it was best to base the analysis around the following classification

Single
Couple
Retired single
Retired couple
Lone parent plus one child under 16

Lone parent plus two children under 16
Couple plus one child under 16
Couple plus two children under 16
Couple plus three children under 16

Thus all other household types were excluded from the analysis – including lone parents with more than two children, couples with more than three children, lone parents and couples with dependent children 16 or older and all complex or multi unit households.

A variety of statistical techniques can be used to fix budget standards using expenditure data. The expenditure-based poverty lines will vary depending on the standard used. We have used the following standards.

1. "Constrained-expenditure" measures.
2. Social assistance scales.
3. The US poverty standard – both the existing standard and the experimental standard being investigated following the National Academy of Sciences work (Citro and Michael 1995).
4. Budget standards. In this case, we use The Family Budget Unit standard to devise a minimum but acceptable food threshold.

In addition, we have used standards related to mean or median national expenditure for each country. Eurostat have come to settle on a relative poverty standard of 60 per cent of median income using the modified OECD equivalence scale. These standards are by definition relative and will be used to compare with the results obtained using more absolute measures.

RELATIVE POVERTY MEASURES

In common with the analysis of income based on the ECHP (in Section 2) we start this analysis by presenting some results based on a variety of expenditure based relative measures of poverty. There are three justifications for this. First the results present a standard against which the more absolute measures of poverty based on expenditure data may be compared and judged. Second the results based on expenditure data can be (and will be in Section 4) compared with the relative poverty results in Section 2 based on income. Third there is the argument that relative expenditure thresholds are actually to be preferred to the more elaborate methods involved in budget standards. Thus in the US the expert committee headed by Professor Harold Watts (1980) argued that it was impossible to derive an authoritative standard from technical specifications of need based on the judgements of experts used in drawing up budget standards. Therefor he argued that fixed lists of commodities should be replaced by family budget standards base on expenditure data. Further, it was argued budget standards based on a basket of goods methodology in practice tend to be based on expenditure data. Therefore, why not rely entirely on the technique of expenditure analysis? The Watts committee proposed that median expenditure should present a 'prevailing family standard' providing 'full opportunity to participate in contemporary society and the basic options it offers... moderate in the sense of lying both well above the

requirements of survival and decency and well below the level of luxury as generally understood" (cited in Bradshaw et al, 1987a:171). Watts defined a 'social minimum standard,' which was half the median expenditure and in the judgement of the committee provided a standard that 'lies in a boundary zone below which social concern has been traditionally and properly directed to potential issues of deficiency and deprivation.' In addition, there was a 'lower living standard' at two-thirds of the median which represents a level 'below which it is increasingly difficult to obtain what Americans regard as an acceptable standard of living' (cited in Bradshaw et al, 1987a: 171).

National governments and international organisations such as EU or OECD have tended to use thresholds based on 40, 50 or 60 per cent of the mean or median. The threshold used now by Eurostat is 60 per cent of the median income. Applying these thresholds to HBS expenditure data gives the overall poverty rates summarised in Table 3.1. The tables in Appendix 2 present the full results using these. It can be seen that there are variations in the poverty rates between countries and according the relative threshold employed. Poverty rates based on the median tend to be lower than the mean. Portugal has the highest poverty rate according to all measures followed by Greece. Sweden has the lowest poverty rates on all the thresholds.

TABLE 3.1: OVERALL POVERTY RATES: 40%, 50% AND 60% OF MEAN AND MEDIAN EXPENDITURE (after housing costs)

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
<40% mean	2	2	3	11	6	4	8	8	4	[1]	9	23	3	1	6
<50% mean	6	6	9	20	12	11	16	17	10	5	17	33	8	3	11
<60% mean	12	13	18	30	18	20	26	27	18	14	25	42	16	10	23
<40% median	1	1	1	6	4	2	4	4	2	[1]	6	14	1	0	1
<50% median	4	3	5	11	8	7	10	9	7	3	12	21	6	2	5
<60% median	9	8	11	19	13	13	18	15	13	8	18	29	11	6	13

[ ] = number less than 30

Table 3.2 then selects one threshold - the Eurostat conventional threshold of 60 per cent of the median expenditure (but after housing costs) and gives the poverty rates for each household type. Again the poverty rates vary by household type between countries – of all the household types retired singles and lone parents have the highest poverty rates in most countries. Ireland and Portugal have the highest poverty rates for singles. Greece and Portugal for retired singles, Portugal for couples and retired couples and Portugal also has the highest poverty rate for couples with one or three children. Luxembourg has the highest poverty rate for couples with two children. Ireland has the highest poverty rate for lone parents.

TABLE 3.2: POVERTY RATES: 60% MEDIAN EXPENDITURE (AFTER HOUSING COSTS)

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	12	14	12	9	[14]	15	18	9	11	10	16	18	14	9	12
Couple	5	3	5	13	[7]	4	8	8	[7]	[2]	14	17	5	2	3
Retired single	12	10	21	39	21	24	32	28	14	19	35	49	27	11	22
Retired couple	9	9	10	35	23	12	17	25	14	[9]	25	40	11	8	14
Lone parent + 1	18	10	17	[7]	0	12	42	0	[13]	[9]	13	19	1	7	23
Lone parent + 2	23	14	26	[4]	0	19	45	0	[16]	0	16	23	0	14	41
Couple + 1	8	2	7	8	[5]	8	10	7	12	[5]	10	14	3	4	9
Couple + 2	6	2	11	11	10	10	11	12	17	[7]	9	11	3	5	10
Couple + 3	9	2	16	[17]	0	16	16	0	[24]	[10]	15	32	6	7	18
Total	9	8	11	19	13	13	18	15	13	8	18	29	11	6	13

[ ] = number less than 30

Table 3.3 gives the poverty proportion/profiles at this threshold. In Sweden 50 per cent of the poor are singles. Finland has the highest proportion of retired singles and Portugal the highest proportions of retired couples who are poor. The UK has the highest proportion of lone parents in its poor population.

TABLE 3.3: POVERTY PROPORTION 60 PER CENT OF MEDIAN EXPENDITURE (AFTER HOUSING COSTS)

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	22	49	25	6	[7]	26	16	10	22	29	15	5	38	50	18
Couple	10	7	9	11	[8]	5	6	9	[9]	[6]	15	8	9	5	6
Retired single	20	21	30	26	24	32	33	35	13	20	29	32	36	10	28
Retired couple	13	12	10	37	35	15	10	26	[10]	[13]	23	38	10	16	14
Lone parent + 1	5	3	3	[0.3]	0	2	5	0	[3]	[1]	2	1	0.3	2	5
Lone parent + 2	5	2	2	[0.1]	0	1	5	0	[1]	0	1	0.4	0	2	9
Couple + 1	11	2	6	5	[8]	5	5	8	14	[5]	6	7	2	5	6
Couple + 2	8	2	10	12	18	8	10	12	20	[11]	6	5	3	7	9
Couple + 3	5	1	4	4	0	5	10	0	[9]	[7]	2	3	2	3	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] = number less than 30

These results are open to a number of criticisms:

- that a threshold based on a proportion of the mean or median is a measure of inequality not poverty
- that the thresholds are essentially arbitrary
- that in some countries with dispersed expenditure distributions it produces unreasonably large poverty rates
- that for these and other reasons, the measures lack the kind of moral and political clout which had been associated with the findings of the studies based on more absolute notions of poverty.

INCOME AND EXPENDITURE POOR

Does the fact that a household is spending less than 60 per cent of the median bare any relationship to need? Those spending below a certain threshold could be doing so for voluntary reasons, rather than as a result of poverty (Saunders, 1998). Previous research using expenditure data has shown, as our results have above, that retirement pensioners tend to show up as poor in thresholds based on proportions of the average expenditure and that they show up despite their income. Pensioners, regardless of their

income tend to spend less – either they are saving for a rainy day, or have low expectations or low needs to spend. In contrast families with children tend to spend more than their income – either because they are borrowing or dissaving and/or their income is inadequate to meet their current needs (Saunders et al 1999, Bradshaw et al, 1987a). One way of dealing with this and perhaps obtaining a better picture of real poverty is to take account of income and expenditure at the same time. There are difficulties involved in this. We have been warned by Eurostat that the income data collected in some countries' expenditure surveys leaves a lot to be desired. Further there are good reasons for income and expenditure not to coincide for any particular household – apart from the impact of borrowing, saving and dissaving. This is because the period over which income is collected does not necessarily coincide with the period over which expenditure data is collected.

However ignoring these problems for the moment, using the threshold 60% of the median expenditure, Table 4 shows overall poverty rates for three measures: those with low expenditure levels (below 60% of the median expenditure) from Table 1 above, those with low expenditure and low income and those with low expenditure and spending all their income

TABLE 3.4: OVERALL INCOME AND EXPENDITURE POVERTY RATES

	<60% median from Table 1	Spending < 60% median + income < 60% median	Spending < 60% median + income < 60% median + spending all income
Belgium	9	5	1
Denmark	8	4	1
Germany	11	7	1
Greece	19	11	3
Spain	13	5	0.4
France	13	6	1
Ireland	18	9	1
Italy	15	9	1
Luxembourg	13	6	2
Netherlands	8	5	1
Austria	18	6	3
Portugal	29	18	1
Finland	11	5	1
Sweden	6	2	1
United Kingdom	13	6	1

In line with other analysis comparing expenditure and income poverty lines (Saunders et al, 1999), there are considerable differences in the poverty rates produced by these measures. The proportion who are income poor and expenditure poor are smaller than the proportion who are only expenditure poor and the proportion who are expenditure poor and spending all their income are even smaller. These results indicate that there is rather little overlap between the income poor and the expenditure poor.

Table 3.5 shows the poverty rate by household type and Table 6 the poverty proportions just for those with incomes and expenditure less than 60 per cent of the median. Looking at table 3.5 there are now lower poverty rates for retired singles than

found in Table 2 for those spending below 60% of the median. This indicates that there are many pensioners spending less than 60 per cent of the median who do not have incomes less than 60 per cent of the median. Also the very small proportions with income and expenditure below 60 per cent of the median and spending all their income indicates that there are low income pensioners (and others) who are saving. This finding that even poor pensioners do not spend all their income is familiar. Are those pensioners spending less than their income then not in (absolute) poverty? Do we decide that families with children who are spending more than their income have resources that are not represented by income - and only those who spend less should be included in poverty definitions? A great deal more analysis of the relationship between income and spending by different groups is required before we answer either of those questions.

TABLE 3.5: POVERTY RATES BY HOUSEHOLD TYPE: 60% MEDIAN EXPENDITURE AND 60% OF MEDIAN INCOME

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	7	8	10	6	[11]	8	10	5	4	[7]	8	11	8	4	6
Couple	2	1	2	5	[2]	2	4	4	4	[2]	4	7	2	0.3	[1]
Retired single	6	5	14	25	[7]	9	13	16	9	[10]	13	35	10	6	14
Retired couple	3	5	4	21	[7]	4	2	12	4	[5]	6	25	0.3	1	7
Lone parent + 1	9	0	15	[3]	0	9	33	0	13	[4]	3	14	1	3	[3]
Lone parent + 2	12	9	22	[4]	0	18	39	0	10	0	12	15	0	2	[14]
Couple + 1	5	1	3	[5]	[3]	4	6	5	8	[3]	4	6	1	1	[3]
Couple + 2	2	0.2	5	4	[6]	4	6	9	10	[5]	3	6	1	1	[3]
Couple + 3	4	1	10	[10]	0	10	9	0	11	[3]	7	22	1	1	[9]
Total	5	4	7	11	5	6	9	9	6	5	6	18	5	2	6

[ ] = number less than 30

TABLE 3.6: POVERTY PROPORTIONS: 60% MEDIAN EXPENDITURE AND 60% OF MEDIAN INCOME

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	29	56	31	7	[13]	32	18	10	[16]	[35]	21	5	52	66	19
Couple	9	3	8	8	[6]	6	6	8	[9]	[7]	13	5	7	2	[4]
Retired single	19	20	32	29	[20]	26	27	23	[17]	[25]	31	37	35	15	38
Retired couple	10	14	7	38	[27]	10	2	23	[5]	[11]	16	39	1	6	15
Lone parent + 1	5	0	5	[0.2]	0	3	9	0	[5]	[1]	2	1	1	2	[1]
Lone parent + 2	5	3	3	[0.2]	0	3	8	0	[1]	0	2	0	0	1	[7]
Couple + 1	13	3	4	[5]	[9]	6	7	9	[17]	[5]	7	5	1	2	[4]
Couple + 2	7	1	7	8	[24]	7	12	16	[22]	[12]	6	4	2	4	[7]
Couple + 3	5	1	4	[4]	0	7	12	0	[8]	[3]	3	3	1	2	[6]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] = number less than 30

"CONSTRAINED-EXPENDITURE" APPROACH

It is arguable that expenditure data per se is of limited use for deriving poverty thresholds because expenditure is the outcome of constrained choices and thus reveals little information about the nature and level of needs or the extent to which needs are being met by expenditure. It is therefore necessary to combine expenditure data with some external measure. The Watts Committee (after Engel) proposed the S-curve approach. The idea behind this is that starting from a very low income, increases in income will at first be concentrated on purchasing an increased *quantity* of necessities. After a while, further increases will be used to improve the *quality* of what is bought. If this is the case then plotting the quantity purchased against income will produce an

S-shaped curve whose slope first rises quickly but then rises more slowly as quality replaces quantity. The point at which the S starts to level out is then defined as the income at which basic needs are met (Saunders et al, 1999).

The main problem with this approach is that data linking the quantities of specific items purchased to the level of expenditure are rarely available. Data that links expenditures on specific commodities to total expenditure (and total income) is more likely to be available. Observing how these vary in relation to each other will only provide an insight into the shape of the S-curve if prices are constant but this is unlikely to be the case (Saunders, 1999).

An alternative method developed by Saunders is similar to the S-curve method. It observes changes in the nature of expenditures and how these change as total expenditure changes. The idea is that where resources are already severely stretched, all (or most) income is spent in meeting basic needs, and none (or very little) is devoted to purchasing non-necessities. Expenditure on non-necessities will be postponed until circumstances improve. Priority will have to be given to meeting basic daily consumption needs. By this standard, those defined as poor have little choice on what they spend their income. If people cannot meet certain basic needs due to lack of resources, they can be legitimately described as poor (Saunders, 1998, Saunders et al, 1999).

In this project, we have examined 'constrained –expenditure' poverty using six different definitions. The first three are related to expenditure on non-necessities. The first looks at the proportions spending less than 10 per cent, 20 per or 25 per cent on non-necessities as a proportion of total consumption expenditure. The other three definitions are related to expenditure on luxuries. We looked at the absence of expenditure on luxuries and the proportions spending less than 5% and 10% on luxuries. This method attempts to use data on the absence, or virtual absence, of expenditure on non-necessities and luxuries as a way of identifying income that is too low to be adequate.

One difficulty with this approach is in defining the meaning of necessities, non-necessities and luxury items. *Absolute* poverty was defined by the UN as a "condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to services". (UN, 1995). By this definition, necessities include education and health in addition to the basic physical necessities. This is the definition we have adopted in this project. The necessities variable therefore is composed of the following:

food and non-alcoholic beverages - by some standards, this would be limited to the bare essentials needed to maintain physical efficiency but we have included all food types.
clothing and footwear - clothes are required to meet physical needs. They are therefore a necessity and should be included in any household budget since they provide warmth, comfort and protection (McCabe et al, 1993:65).
housing, water, electricity, gas and other fuels
health

education

This basic necessity standard defines needs merely as physical and no or little attention is paid towards ensuring that resources are adequate to carry out social as well as economic obligations.

Non-necessities are, by definition, all other commodities. Within the European Household Budget Survey this includes:

Alcoholic beverages, tobacco and narcotics
Furnishings, household equipment and routine maintenance of the house - furniture, furnishings and decorations, carpets and other floor coverings, heating and cooking appliances, refrigerators and washing machines, glassware etc.
Transport - purchase of vehicles, transport services etc.
Communications - postal services, telephone and telefax equipment etc.
Recreation and culture - audio visual, photographic and data processing equipment; games, toys, hobbies, equipment for sport, cultural services etc.
Hotels, cafes and restaurants
Miscellaneous goods and services - personal care, social protection, insurance and financial services.

Table 3.7 identifies the overall proportion of households spending less than 10, 20 or 25 per cent of their overall expenditure on non-necessities. It can be seen that there is great variation between poverty rates for all countries but Greece, Spain Italy and Portugal clearly have the highest poverty rates on all three measures. The Netherlands has the lowest poverty rates for all three measures

TABLE 3.7: OVERALL POVERTY RATES: LESS THAN 10%, 20% and 25% OF EXPENDITURE ON NON-NECESSITIES

	less than 10%	less than 20%	less than 25%
Belgium	0.4	4	9
Denmark	1	5	11
Germany	0.2	3	6
Greece	12	30	41
Spain	5	21	30
France	1	8	14
Ireland	3	10	16
Italy	6	19	29
Luxembourg	[1]	5	9
Netherlands	[0.1]	[1]	4
Austria	2	9	14
Portugal	12	28	37
Finland	1	10	16
Sweden	1	4	8
United Kingdom	1	8	14

[ ]=number less than 30

Table 3.8 presents the poverty rates by household type – using those spending less than 20 per cent of their overall expenditure on non-necessities. The poverty rates and proportions for those spending less than 10 and 25 per cent can be found in Appendix 3. Generally, the poverty rates are highest for retired single people in all countries – 65 per cent of retired singles are poor in Greece and 50 per cent in Portugal. Retired couples, however, also fare badly, particularly in Greece, Spain, Italy and Portugal. In addition, 25 per cent of singles and 20 per cent of couples in Greece are poor by this measure. Despite generally low poverty rates for lone parents by this measure, over a quarter are poor in Portugal. Greece has the highest poverty rate for couples with children. Clearly there is an age factor in this measure older people are less likely to be spending on non necessities. There are three possible reasons for this:

- they are poorer
- they have all the non necessities they need
- they are more cautious/have lower aspirations

More work needs to be done to explore these hypotheses but we suspect that in the end analysis of absolute poverty using this kind of method should be undertaken separately for older people and younger people/households.

TABLE 3.8: POVERTY RATES BY HOUSEHOLD TYPE: LESS THAN 20% OF EXPENDITURE ON NON-NECESSITIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	7	4	2	25	[29]	6	11	16	[6]	[2]	4	23	7	2	8
Couple	1	1	1	20	[9]	2	2	8	[2]	0	3	18	2	1	[1]
Retired single	11	19	11	65	48	24	33	46	18	[5]	22	50	34	21	26
Retired couple	3	4	2	48	39	8	9	30	[9]	[3]	14	42	17	6	7
Lone parent + 1	11	4	2	[24]	0	2	13	0	0	0	5	30	4	10	[15]
Lone parent + 2	5	0	1	[36]	0	3	8	0	0	0	8	26	2	17	[8]
Couple + 1	1	1	0.2	11	[5]	1	2	5	[1]	0	5	8	1	1	[1]
Couple + 2	1	1	0.3	15	[5]	1	1	6	[0.3]	0	3	8	0.4	1	[1]
Couple + 3	2	0	0.3	[18]	0	1	2	0	0	0	6	12	1	1	[2]
Total	4	5	3	30	21	8	10	19	5	[1]	9	28	10	4	8

[ ] =number less than 30

Table 3.9 shows the poverty proportions by household type. Although there is variation between countries, retired singles generally make up the highest proportion of the poor. Despite having comparatively low poverty rates, singles in Belgium, Denmark, Germany, Finland, Sweden and the UK make up a relatively high proportion of the poor.

TABLE 3.9: POVERTY PROPORTIONS: LESS THAN 20% OF EXPENDITURE ON NON-NECESSITIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	29	20	14	11	[9]	19	17	14	[31]	[29]	8	6	22	20	19
Couple	4	2	5	11	[6]	5	3	7	[5]	0	7	9	3	9	[3]
Retired single	40	64	67	27	35	55	60	46	44	[47]	40	33	55	34	53
Retired couple	9	9	9	33	39	17	10	25	[17]	[25]	29	40	17	21	12
Lone parent + 1	6	2	2	[1]	0	1	3	0	0	0	1	1	1	6	[6]
Lone parent + 2	2	0	1	[1]	0	0.4	2	0	0	0	1	0.4	0.2	5	[3]
Couple + 1	4	1	1	5	[5]	1	2	4	[2]	0	7	4	1	1	[1]
Couple + 2	3	1	1	10	[6]	1	1	5	[1]	0	5	4	0.4	4	[2]
Couple + 3	2	0	0.4	[2]	0	1	2	0	0	0	2	1	0.3	1	[1]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] =number less than 30

The other measure of "expenditure-constraint" poverty is defined as the absence of expenditure on luxuries. This is taken to correspond to a low-income cut-off at which all resources are being devoted to meeting the basic on-going consumption needs of the household, with nothing left over to engage in expenditures on what would generally be agreed to be closer to luxuries than to necessities (Saunders, 1998).

In comparison to necessities and non-necessities, luxury items were even more difficult to define for several reasons. First, the concept is arguably more subjective and arbitrary. Second, we were constrained by the variables included in the HBS database. For example, certain items in personal care were grouped together into one variable, some which were necessities, others, which were luxuries – such as toilet paper (necessity) and cosmetics (luxury).

For guidance, we employed the findings of the Breadline Britain surveys (Gordon et al 1999) that used an approach based on the lack of socially perceived necessities. We used a question that asked about the items people considered to be necessities. We employed a 75 per cent rule - we counted an item as a *luxury* if less than 75 per cent of the population specified it as a necessity. It must be emphasised, however, that this was only used as a guide. Certain commodities were included in our luxury variable that were not featured as items in the Breadline Britain surveys. Certain items thought by more than 75 per cent of the population to be necessities had to be included as luxuries because they were grouped with luxury items in the HBS – such as refrigerators being grouped with freezers.

We counted the following as 'luxuries' – and there is room to argue about all of them:

Carpets and other floor coverings
Refrigerators, freezers and fridge-freezers
Clothes washing machines, clothes drying machines and dish washing machines
Purchase of vehicles
Telephone and telefax equipment
Audio-visual, photographic and data processing equipment and accessories, including repairs
Other major durables for recreation and culture
Repair of other major durables for recreation and culture
Equipment for sport, camping and open air recreation
Pets
Newspapers and periodicals
Package holidays
Hotels, Restaurants and Cafes
Hairdressing salons and personal grooming establishments
Electrical appliances for personal care
Jewellery, clocks and watches

Table 3.10 provides an overall summary of the proportion of households with nil, less than 5 per cent or less than 10 per cent expenditure on those items in each country. It can be seen that the poverty rates are very sensitive to the threshold used and give a substantially higher proportion spending less than 10% of their overall expenditure on

luxuries as compared to those spending nothing. Also the poverty rates increase at different rates between the thresholds, with for example an increase from 41 per cent to 56 percent in Portugal between the less than 5 per cent and less than 10 per cent threshold compared with 11 per cent to 33 per cent in the Netherlands. For all the poverty thresholds, the poverty rates vary quite substantially from country to country with Greece having the highest poverty rates (at the less than 5 per cent thresholds) and Luxembourg and Germany/Sweden the lowest.

TABLE 3.10: OVERALL POVERTY RATES: NIL, LESS THAN 5% AND LESS THAN 10% EXPENDITURE ON LUXURIES.

	Nothing	less than 5%	less than 10%
Belgium	1	13	37
Denmark	2	25	48
Germany	0.4	9	29
Greece	17	57	79
Spain	5	30	52
France	5	26	44
Ireland	5	41	63
Italy	10	40	65
Luxembourg	[0.3]	12	28
Netherlands	0	11	33
Austria	4	33	56
Portugal	18	41	56
Finland	1	19	41
Sweden	0	11	28
United Kingdom	1	18	36

[ ]= number less than 30

Table 3.11 presents the data for the poverty rate for each household type for one of the thresholds – the proportion of each household type that are spending 5% on luxury items. The tables for the other two thresholds can be found in the appendix 3. The poverty rates vary between household type and country. For all countries, retired singles have the highest poverty rates, with Greece followed by Ireland having the highest poverty rates for this group. 57 per cent of lone parents with one child living in Ireland are poor by this measure, whereas none are poor by this measure in Spain. Likewise, 60 per cent of lone parents with two children living in Austria are poor, compared to none in Spain, Italy and the Netherlands.

TABLE 3.11: POVERTY RATES: LESS THAN 5% EXPENDITURE ON LUXURIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	16	21	9	41	[30]	22	42	30	10	9	24	28	18	8	18
Couple	8	17	5	53	16	22	28	34	[6]	[5]	22	38	12	7	7
Retired single	24	50	18	86	60	45	65	57	24	31	46	58	37	34	40
Retired couple	16	31	9	71	48	35	54	52	[15]	[15]	45	57	34	19	19
Lone parent + 1	11	17	10	[66]	0	20	57	0	[8]	[18]	35	33	11	14	20
Lone parent + 2	21	26	17	[76]	0	18	54	0	[24]	0	60	22	8	18	31
Couple + 1	8	18	6	43	17	13	27	32	11	[6]	32	17	10	7	10
Couple + 2	4	16	5	50	13	10	27	34	10	[7]	26	19	7	8	6
Couple + 3	7	14	9	53	0	12	31	0	[8]	[7]	35	34	5	8	[11]
Total	13	25	9	57	30	26	41	40	12	11	33	41	19	11	18

[ ]=number less than 30

Table 3.12 presents the data for the poverty proportions by household type. It is clear that in most countries, singles, couples, retired singles and retired couples make up the majority of the poor. Nevertheless, the poverty proportions are under 10 per cent for singles in Greece and Portugal and for couples in Spain, Ireland, Luxembourg and the UK. The poverty proportions are over 10 per cent for couples with one child in Spain, Italy, Luxembourg and Austria and for couples with two children in Greece, Ireland, Italy and Luxembourg.

The same questions arise as with the previous indicator: is this measure appropriate to be used for all age groups at the same time?

TABLE 3.12: POVERTY PROPORTIONS: LESS THAN 5% EXPENDITURE ON LUXURIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	21	23	23	9	[7]	20	16	13	22	20	13	5	29	26	19
Couple	12	15	13	15	8	13	9	14	[9]	[11]	14	14	12	15	8
Retired single	30	33	33	18	30	31	29	27	25	35	22	27	30	18	38
Retired couple	17	13	11	25	33	22	15	21	[12]	[15]	23	39	18	22	14
Lone parent + 1	2	2	3	[1]	0	2	3	0	[2]	[2]	3	1	1	3	4
Lone parent + 2	3	1	2	[1]	0	1	2	0	[2]	0	1	0.3	0.4	1	5
Couple + 1	8	6	7	10	11	4	6	12	14	[4]	11	7	5	5	5
Couple + 2	4	6	6	18	10	5	11	13	13	[8]	10	6	4	8	5
Couple + 3	3	2	3	4	0	2	9	0	[3]	[3]	3	2	1	3	[3]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ]=number less than 30

USING SOCIAL ASSISTANCE SCALES TO FIX POVERTY THRESHOLDS

In this section, we will apply social assistance scales to expenditure data derived from the HBS. We have described in detail how social assistance thresholds are derived in Section 2. There is also a discussion in Section 2 about the problems of housing costs. In addition to these problems there is a particular HBS issue arising out of the imputation of rents.

Imputed rent

The objective of imputation is to compare the standards of living between households having different housing behaviour patterns – owners, tenants, housing free of charge

– which in reality causes unequal effects on monetary expenditure. This difference is corrected by a post facto change. The harmonisation of this concept is important for a sufficient degree of comparability to be obtained. A similar estimation method should therefore be adopted from one country to the next, and the same categories of households should be included when calculating imputed rent.

For household budget surveys, the most usual current practice is to consider an imputed rent for the principal residences occupied by their owner as well as for homes occupied free of charge. Since the objective is to determine the total consumption of housing services, it is also advisable to consider the subsidised share in the case of a reduced rent as well as the imputed rent for the owneroccupier of a holiday residence. It is difficult to identify rents that are artificially below market price and therefore the budget surveys are restricted to recording effective expenditure. In addition, the imputed rents of holiday residences are not generally evaluated.

Although some countries use the method of self assessment by the household, for Household Budget surveys, Eurostat recommends that for housing occupied by their owner or occupied free of charge, the costs should be on the rent which would be paid for similar housing if rented.

For the social assistance standard, we have identified the poverty rates and the poverty proportions before *and* after housing costs, measuring owner occupied housing costs by imputed rent.

Using the social assistance thresholds shown in Table 2.8, we identified the social assistance poverty rates and poverty proportions of each of the household types before and after housing costs. To adjust for housing costs, we deducted rentals, imputed rentals, sewage services and water supply from the total expenditure costs. We then used this variable to identify the expenditure poor before housing costs. Ireland has the highest before housing costs poverty rates using their social assistance threshold and the UK has the highest after housing costs poverty rate (Austria must be wrong!).

TABLE 3.13: OVERALL SOCIAL ASSISTANCE POVERY RATES BEFORE AND AFTER HOUSING COSTS

	Before Housing Costs	After Housing Costs
Belgium	1	10
Denmark	7	30
Germany	4	13
Greece	[0.02]	[1]
Spain	[1]	5
France	2	10
Ireland	10	24
Italy	5	14
Luxembourg	4	15
Netherlands	4	22
Austria	4	10
Portugal	8	12
Finland	4	23
Sweden	1	1
United Kingdom	2	38

[ ] = number less than 30

We can see from table 3.14 the poverty rate of each of the household types at the social assistance thresholds before housing costs. For many household types, no one or nearly none are poor by this measure. However, for certain household types, relatively large proportions are poor. For example, 23 per cent of retired singles, 24 per cent of lone parents with one child and 34 per cent of lone parents with two children all living in Ireland are poor by this measure.

After housing costs, the poverty rates change quite dramatically in certain countries. Table 3.15 presents the results. The poverty rates for Greece, Italy and Sweden remain virtually unchanged, except that in Italy the poverty rates for the retired single and retired couple have increased to 36 per cent and 34 per cent. In other countries there are very much higher poverty rates after housing costs have been taken into account.

TABLE 3.14: SOCIAL ASSISTANCE POVERTY RATES BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	3	9	6	0	[3]	0.4	6	0.1	[3]	8	0.4	10	6	0.1	[0.3]
Couple	0.1	3	2	0	0	0	4	0.3	[2]	[1]	1	6	1	0	[0.2]
Retired single	2	4	1	[0.2]	[3]	6	23	13	0	[12]	12	10	3	5	3
Retired couple	0.4	18	0.4	0	[0.4]	5	7	15	[1]	[4]	4	11	11	2	[2]
Lone parent + 1	6	12	17	0	0	0	24	0	[3]	[9]	8	9	6	0	[4]
Lone parent + 2	6	10	24	0	0	2	34	0	[10]	0	6	11	15	0	[8]
Couple + 1	1	9	2	0	0	0.1	4	0	[5]	0	3	2	1	0	[1]
Couple + 2	0.2	4	5	0	[0.4]	0.1	5	0.4	[5]	[1]	1	1	2	1	[1]
Couple + 3	3	2	8	0	0	2	8	1	[16]	0	1	4	7	1	[4]
Total	1	7	4	[0.02]	[1]	2	10	5	4	4	4	8	4	1	2

[ ] =number less than 30

TABLE 3.15: SOCIAL ASSISTANCE POVERTY RATES AFTER HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	16	26	21	0	[14]	6	24	1	13	30	5	15	27	0.3	45
Couple	4	15	9	0	[2]	1	9	1	[7]	8	3	11	11	0	16
Retired single	18	44	6	[3]	[11]	30	57	36	21	58	22	18	30	5	62
Retired couple	5	57	4	[1]	[9]	17	23	34	[11]	26	12	17	42	4	36
Lone parent + 1	29	47	43	0	0	6	39	0	[20]	[34]	21	17	39	2	77
Lone parent + 2	42	57	51	0	0	13	50	0	[16]	[39]	23	18	59	0	71
Couple + 1	6	26	12	0	0	1	9	0	15	[8]	8	4	8	1	27
Couple + 2	5	18	17	0	[0.2]	2	10	2	19	[9]	4	3	14	1	21
Couple + 3	11	17	25	0	[1]	8	16	4	[29]	[9]	8	6	24	1	32
Total	10	30	13	[1]	5	10	24	14	15	22	10	12	23	1	38

[ ] =number less than 30

Tables 3.16 and 3.17 show the poverty proportions before and after housing costs. Broadly speaking, the retired singles and retired couples make up the largest proportions of the poor both before and after housing costs. However, especially before housing costs, the profile varies between countries and changes quite dramatically after housing costs. For example, non-retired singles make up 43 per cent of the poor in the Netherlands before housing costs but 33 per cent after housing costs. This and the above analysis demonstrates the extent to which housing costs can effect poverty rates and proportions.

TABLE3.16: SOCIAL ASSISTANCE POVERTY PROPORTIONS BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	33	33	41	0	[27]	4	10	0.3	[21]	43	10	10	42	7	[3]
Couple	1	10	11	0	0	0	5	1	[8]	[6]	7	12	5	0	[2]
Retired single	26	10	3	[100]	[50]	50	43	47	0	[34]	36	26	10	45	33
Retired couple	3	25	1	0	[10]	40	8	47	[3]	[12]	22	42	24	34	[12]
Lone parent + 1	11	5	11	0	0	0	6	0	[2]	[3]	5	2	3	0	[8]
Lone parent + 2	8	2	6	0	0	1	7	0	[2]	0	2	1	3	0	[14]
Couple + 1	6	10	7	0	0	1	4	0	[22]	0	10	5	3	0	[6]
Couple + 2	2	6	13	0	[11]	1	9	1	[20]	[4]	5	2	5	10	[11]
Couple + 3	9	1	6	0	0	5	9	3	[21]	0	3	2	5	4	[11]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] =number less than 30

TABLE 3.17: SOCIAL ASSISTANCE POVERTY PROPORTIONS AFTER HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	26	24	36	0	[18]	13	16	1	22	33	17	9	34	11	22
Couple	7	11	15	0	[5]	1	5	2	[8]	8	20	13	9	0	9
Retired single	27	24	8	[71]	[31]	51	43	50	17	33	15	28	20	25	27
Retired couple	7	20	4	[29]	[38]	26	11	41	[7]	13	17	38	17	45	12
Lone parent + 1	7	4	7	0	0	1	4	0	[3]	[2]	2	2	4	2	6
Lone parent + 2	8	2	4	0	0	1	4	0	[1]	[1]	1	1	3	0	5
Couple + 1	7	7	9	0	0	1	4	0	15	[3]	12	5	3	3	6
Couple + 2	6	6	13	0	[1]	2	7	2	19	[5]	12	3	6	10	7
Couple + 3	5	2	5	0	[6]	3	8	4	[9]	[2]	3	1	3	4	4
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ]=number less than 30

One possible problem with the social assistance threshold is that it represents a level of expenditure at which a substantial minority of the population might be at or about (because they are receiving social assistance). The danger of this is that a small variation in the social assistance standard may include or exclude large numbers of households (Bradshaw et al, 2000:paper 2). Ideally further sensitivity analysis to check for this would be desirable.

THE US POVERTY THRESHOLD

In Section 2 we applied the US Poverty threshold to income data in the ECHP. Here we apply the same thresholds to expenditure data in the HBS. As we saw in Section 2 the NAS panel criticised the current poverty measure for not taking into account various common expenses. The panel's proposal defined family resources as "the sum of money income form all sources together with the value of near-money benefits (e.g. food stamps) that are available to buy goods and services in the budget, minus expenses that cannot be used to buy these goods and services. Such expenses include income and payroll taxes, childcare and other work-related expenses, child support payments to another household and out-of-pocket medical care costs, including health insurance premiums". (as cited in Fisher, 1999). The HBS takes into account near money benefits. However, in order to apply the experimental US poverty line to the HBS, we had to adjust resources for the other common expenses that had not been taken into account. These were expenses that are necessary to hold a job and earn an income, and also out of pocket medical care costs that also reduce disposable income.

Adjusting resources for child care

It is vital for many families with children to pay care costs to enable parents to work in the labour market. This was easily accounted for in HBS survey since it asked about childcare expenses. Expenses accrued for the service of wetnurses, crèches, play schools; kindergartens, day-care centres and other childminding facilities are accounted for under a separate variable. These were deducted from the overall consumption expenditure before applying the thresholds.

Adjusting resources for other work-related expenses

Workers must also pay for the cost of commuting between home and work and also other work related expenses such as tools, uniforms etc. The NAS panel recommended that for each working adult, a flat amount be deducted from their earnings, representing 85% of the median work related expenses for all workers. Tabulations from the 1987 SUPP panel indicate median weekly amounts of $17 (in 1992 dollars) for these expenses; 85% of the median is

$14.42. We translated this amount into Ecus PPPs and calculated the yearly sum of 749.84 (ecu ppps) per annum. We deducted this amount from the total expenditure consumption before applying the thresholds.

Medical care costs

The NAS panel concluded that there is a problem with trying to combine non-medical and medical expenses since the two measure different things. Non medical resources measures the actual ability of families to meet their needs for goods that are universal and cannot be deferred. The medical element, however, measures a risk that may or may not take place. But they did note that medical out of pocket expenses (MOOP) reduce disposable income and therefore should be subtracted from the resources measure, using expenditure as a proxy.

The HBS covers health products and services purchased by individuals such as medical products, appliances and equipment, outpatient services, (e.g. dental services) and hospital services. It also includes data in the form of a separate variable for health insurance. We have therefore been able to account for MOOP expenses. The NAS also recommended adjusting for health insurance premiums. This presents a problem in comparative projects such as this one due to the differences in health care systems from country to country. We have therefore not adjusted for health insurance. To do so would not compare like with like.

Adjusting for homeownership

For homeowners paying a mortgage or no mortgage, out of pocket housing expenses can differ greatly from those paid by renters. The NAS panel concluded that this difference could be taken into account if a measure was developed that demonstrated the amount homeowners would pay if they were renting their homes. In addition, the value of the flow of services that owners obtain from their homes will be effected – for example, owners with a low or no mortgage have more of their income available to spend on other commodities. The ideal approach would account for the cost of the flow of services for homeowners.

The treatment of imputed rents in the Household Budget Survey has been discussed above. Imputed rent for homeownership is based on the rent, which would be paid for similar housing if rented on the market. Imputed rent has already been accounted for in the HBS survey and therefore no adjustment was necessary.

The Results

We applied both the official and experimental thresholds to the expenditure data in the HBS – identifying the proportions spending below these thresholds. Table 3.18 presents the overall poverty rates before and after housing costs for both standards. It can be seen that the overall rates vary between the two thresholds and although there are variations between countries and before and after housing costs. For example, only 3 per cent in Belgium are poor by the official and 6% by the experimental poverty standard before housing costs and 48 per cent and 57 per cent respectively are poor in Portugal.

TABLE 3.18: OVERALL POVERTY RATES: OFFICIAL US POVERTY LINE AND EXPERIMENTAL POVERTY STANDARD COMPARED

	Official	Experimental
Belgium	3	6
Denmark	6	9
Germany	9	14
Greece	32	42
Spain	21	31
France	9	14
Ireland	23	28
Italy	17	24
Luxembourg	[1]	[1]
Netherlands	6	9
Austria	14	5
Portugal	48	57
Finland	20	30
Sweden	6	10
United Kingdom	13	19

[ ]=number less than 30

Table 3.19 shows the results for the poverty rates using the official US poverty standard and table 3.20, the poverty proportions. It can be seen that the poverty rates vary between countries and between households type, although Portugal has the highest poverty rates for all household types. Tables 3.21 and 3.22 show the rates and poverty proportions for the Experimental Poverty Threshold. As with the official standard, Portugal has the highest poverty rates across all household types. Although there are not many dramatic differences between the official and experimental measures, the poverty rates for singles have generally decreased and those for retired couples and couples with one child have increased. This is generally reflected in the poverty proportions.

TABLE 3.19: POVERTY RATES: OFFICIAL US POVERTY LINE BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	6	14	14	23	[26]	13	29	14	[1]	10	16	43	30	13	17
Couple	0.3	1	2	24	[11]	2	8	8	0	[1]	8	35	7	1	[2]
Retired single	5	9	18	59	38	17	42	33	0	[12]	31	74	43	9	23
Retired couple	0.4	1	3	42	25	3	12	19	0	[2]	14	57	11	1	5
Lone parent + 1	6	11	20	[24]	0	10	53	0	0	[18]	13	56	19	7	32
Lone parent + 2	6	10	22	[28]	0	11	51	0	[5]	0	13	57	12	11	43
Couple + 1	1	1	3	16	[10]	4	10	0	[1]	[1]	7	26	5	2	7
Couple + 2	3	2	8	27	22	5	13	7	[0.3]	[6]	8	33	7	3	10
Couple + 3	10	2	14	39	0	14	21	15	[2]	[9]	9	60	11	7	19
Total	3	6	9	32	21	9	23	17	[1]	6	14	48	20	7	13

[ ]=number less than 30

TABLE 3.20: POVERTY PROPORTIONS: OFFICIAL US POVERTY LINE BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	33	60	35	9	[8]	35	20	15	[38]	43	20	7	44	73	25
Couple	2	4	6	12	[7]	3	5	8	0	[3]	12	10	7	2	[3]
Retired single	25	23	32	23	27	34	34	38	0	25	34	29	33	8	29
Retired couple	1	1	4	26	25	6	6	19	0	[3]	17	32	6	3	5
Lone parent + 1	5	5	5	[1]	0	3	6	0	0	[4]	2	2	2	2	8
Lone parent + 2	3	2	2	[1]	0	1	4	0	[7]	0	1	1	1	2	10
Couple + 1	4	1	4	6	[9]	4	4	0	[28]	[2]	6	8	2	2	4
Couple + 2	12	3	9	17	24	7	10	7	[9]	[12]	7	8	4	5	10
Couple + 3	15	1	4	5	0	7	11	14	[18]	[8]	2	3	2	4	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ]=number less than 30

TABLE 3.21: POVERTY RATES: EXPERIMENTAL POVERTY LINE BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	8	18	15	26	[28]	16	31	16	[1]	12	19	48	34	15	18
Couple	3.0	2	4	31	[14]	3	10	12	[1]	[1]	12	42	12	2	4
Retired single	10	12	26	71	52	27	51	44	0	23	41	82	62	19	35
Retired couple	4	8	10	61	41	11	23	33	[1]	[8]	30	70	35	9	16
Lone parent + 1	17	15	33	[31]	0	20	59	0	[3]	[22]	22	69	40	16	48
Lone parent + 2	18	22	34	[36]	0	24	60	0	[10]	9	7	57	26	22	53
Couple + 1	4	2	10	27	21	7	17	15	[3]	[7]	12	37	15	7	13
Couple + 2	3	2	12	35	29	9	17	20	[1]	[7]	13	37	14	7	13
Couple + 3	7	2	17	46	0	15	23	0	[2]	[9]	5	63	16	11	21
Total	6	9	14	42	31	14	28	24	1	9	5	57	30	10	19

[ ]=number less than 30

TABLE 3.22: POVERTY PROPORTIONS: EXPERIMENTAL POVERTY LINE BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	23	50	26	8	[6]	27	18	11	[16]	32	12	6	34	53	18
Couple	8	5	7	12	[7]	4	5	9	[15]	[3]	11	11	8	3	5
Retired single	25	23	31	21	25	35	34	35	0	[27]	35	27	32	11	31
Retired couple	10	10	8	29	27	13	9	22	[8]	[6]	25	33	12	12	11
Lone parent + 1	7	5	5	[1]	0	3	5	0	[6]	[4]	1	2	3	3	8
Lone parent + 2	6	3	2	[1]	0	2	4	0	[6]	0	0.2	1	1	2	8
Couple + 1	9	2	8	8	13	5	6	10	[30]	[7]	7	10	4	5	6
Couple + 2	7	2	9	17	23	8	10	13	[13]	[13]	8	8	5	7	9
Couple + 3	6	1	3	4	0	5	10	0	[7]	[9]	1	3	2	4	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ]=number less than 30

USING A THRESHOLD BASED ON BUDGET STANDARDS

In this final section we employ a "basket of goods" or budget standard approach for fixing an absolute poverty standard. Budget standards involve drawing up a list of commodities, employing normative judgements, supported by a combination of scientific and behavioural evidence. The 'normative' method uses recommended standards produced by official expert judgements (Bradshaw, 1993; Nelson et al 1993). After compiling the list of commodities, the budget is then priced and used as a standard - anyone living at or below that standard is in poverty (Bradshaw et al, 2000).

Pioneered by Seebohm Rowntree with his minimum subsistence standard of poverty, the budget standard approach was used to determine the scale rates proposed by Beveridge in 1942. In his definition of poverty in 1899, Rowntree used the nutritional studies of Atwater and formulated a diet, which was required to maintain physical effort. After pricing the components of this diet, he added housing derived from descriptive budget studies and minimal expenditure on clothing. In the post war period budget standards approaches to the measurement of poverty have tended to be neglected. The main argument against the budget standard approach was that it was an inappropriate method for defining poverty since it was based on a range of physical needs that had an ideological rather than a scientific basis. The level was too harsh since needs consist of more than just physical necessities in life – poverty also has a social meaning (Bradshaw et al, 1987a).

However budget standards can be used to represent any standard of living and can include needs for social participation. Indeed as Aronson (1984) pointed out, budget standards were first introduced in an attempt to get away from minimum nutrition-based criteria. Indeed, the very practice of translating nutritional standards into a basket of goods inevitably introduces social needs.

The US and certain European countries continued to utilise the budget standard method (Bradshaw et al, 1987a). NIBUD in the Netherlands publishes a budget standard which is influential in determining its social assistance scales. The Swedish National Board for Consumer Affairs produces a budget, which is influential in determining the social assistance payments made by municipalities. In Australia as part of the Department of Social Security's adequacy project the Social Policy Research Centre derived sophisticated low cost budgets (Saunders et al, 1998). As we have seen the US poverty standard was originally based on a budget standard but employed expenditure data to estimate the income at which a family with two children spend more than 30 per cent of their income on food (Orshansky 1965).

Perhaps the most detailed work in the European context (the SPRC Australian Budget Standard is an antipodean competitor) using budget standards methods has been the work of the Family Budget Unit in the UK. In 1993 they published two budget standards for the UK for a variety of family types. The FBU modest but adeqaute budget is similar to the notion of the Prevailing Family Standard defined by the Watts Committee in 1980: It is a standard that "affords full opportunity to participate in contemporary society and the basic options it offers. It is moderate in the sense of lying both above the requirements of survival and decency, and well below levels of luxury as generally understood" (Watts as cited in Bradshaw, 1993). The low costs but adequate standard (LCA) is a much more constrained budget but whereas Rowntree in 1901 (see above) restricted his budgets to core costs (food, shelter and clothing)

and relied on a margin to take account of other needs, the FBU costs all components of a typical family budget. It takes into account *social* necessities rather than merely *physical* necessities. The LCA is the budget that we have used to devise our thresholds in this project. The LCA distinguishes between variable and standard (normative) costs (Parker, 1998).

Standard costs: A budget standard calculates the average amount of money needed by a particular type of family per week, month or year to reach and maintain a certain standard. These expenditures are assumed to be the same for all households of a particular family type, although the actual purchases may vary (Parker, 1998). Standard costs include food (with or without alcohol), clothing, personal care, household goods, household services, leisure goods and leisure services.

Variable expenditure: Whilst the budget standard expenditures are recommendations, the variable expenditures are the actual expenditures incurred. Variable expenditure includes costs such as housing, fuel, transport healthcare and childcare but also debts and pets.

The LCA budgets used a combination of normative and behavioural approaches.
For its normative judgements, the FBU relied on recognised standards for nutrition, housing, warmth and exercises (Paxton, 1998). For its behavioural, it used consumer reports and national surveys to show how consumers spend the money they have (Paxton, 1998).

In order to apply the family budget unit standard to the 1994 Household Budget Survey we had to adjust the budget in several ways. First, we deducted housing costs, council tax, fuel and transport. This was for the purposes of comparison between countries (to compare like with like). When applying the family budget unit standard to the HBS, we therefore deducted housing costs, fuel and transport costs from the total consumption expenditure (taxes had already been taken into account previous to calculating the disposable income (expenditure) available). Second, we deflated the budget from 1998 prices to 1994 values. For this, we used the price index for January 1994 since the FBU used the 1998 January prices. Thirdly, we then translated the budget(s) totals from pounds to ECU Purchasing Power Parities to compare like with like. Fourth, the weekly amounts expressed in the FBU were also turned into per annum amounts. From this we found the proportion of the total expenditure spent on each budget commodity. Table 3.23 presents the revised budget**.**

Table 3.23: Costs of Low cost but acceptable standard for two parent families with a boy aged 10 and a girl aged 4 years £ and ECU per annum, Jan 1994 prices

	1994 costs (£ per annum)	1994 costs (ECU PPPs per annum)
A Budget standard costs		
Food (without alcohol)	2725	1908
Clothing	1150	805
Personal care	187	131
Household goods	727	509
Household services	250	175
Leisure goods	405	283
Leisure services	558	391
Costs without alcohol	6001	**4201**
B Variable costs		
Health charges	124	87
Insurance/pension contributions	70	49
Job-related costs	2246	1572
Pets	151	106
Alcohol units 24 (14+10)	397	278
Charitable donations	28	19
Variable costs with alcohol	**3016**	**2111**
A + B Total costs	**9017**	**6312**

The family budget unit calculated the costs of a low cost but acceptable budget for both a two parent and one parent family. The costs were calculated in £ per week. We have used the costs of low cost but acceptable standard for two parent families with a boy aged 10 and a girl aged 4 years and with two earners, one part time.

The total budgets are based on a hypothetical family and it would be wrong to generalise the expenditures to the population as a whole – the figures are merely indicators. The budget totals also depend on variable expenditures (which are illustrative) and therefore the budget totals are best regarded as bench marks rather than recommendations. (Paxton, 1998).

The food budget is considered the most scientific of the budgets constructed by the FBU. We have therefore used this as our threshold in this project. The food budget was constructed using both normative judgements concerning what is necessary for a healthy diet and behavioural data concerning the usual consumption pattern in the UK. This process involves seven steps:

1. The 1998 home food purchasing patterns of households believed to represent LCA level were defined, using the National Food Survey data.

2. The adequacy of the diet in terms of Dietary Reference Values (DRVs), taking into account waste, consumption of food by visits and food purchased and eaten away from home, were calculated. To apply the food budget to the HBS, we therefore needed to create a new variable for food that incorporated food eaten away from home since the existing food variable did not take this into account.
3. Minimum adjustments were made to food purchasing profiles to bring them into line with DRV and Health Education Authority guidelines on healthy eating and to meet any nutrient deficiencies identified housing the DRVs
4. The total quantity of food purchased was adjusted to reflect a diet which provides 100% of the DRV for energy; and the overall adequacy of the diet was reassessed. Steps 3 and 4 were repeated until an adequate and healthy food profile is obtained.
5. A basket of items in purchasable quantities was constructed, such that the nutrient value is equal to step four. The items identified for pricing were based on 10 focus group discussions (five representing lone-parent families) in five different locations around the UK.
6. The food basket was costed using Sainsbury and Kwick Save food prices in January 1998 and a component for foods purchase away from home was added, using family Expenditure Survey data).
7. Menus were constructed which utilised the items n the food basket; meals eaten away from home and the presence of visitors were allowed for.

The food budget establishes the levels of expenditure necessary to reach given standards of consumption and dietary adequacy. The LCA diet devised was aimed to "provide enough food to satisfy the recommended intakes of all nutrients, meet guidelines for healthy eating, be palatable and across with consumer preferences in the UK" (Paxton, 1998:3.3). The basket of foods represents a pattern of consumption characteristic of households living at LCA level in the UK, it contains a balance of foods, which will promote short and long term health in both adults and children, and is based on foods which are palatable and widely available at low prices.

Having already obtained the food threshold for our reference family (a two parent families with a boy aged 10 and a girl aged 4 years, with two earners, one part time), shown in Table 3.23, we adjusted this threshold (1907 Ecu ppps) to establish the thresholds for each household type using the OECD equivalence scale shown in table 3.24. Table 3.25 presents the thresholds for food after applying these equivalence scales.

Table 3.24: OECD equivalence scale

Household type	OECD equivalence scale
Single	0.48
Couple	0.71
Single retired	0.48
Couple retired	0.71
Lone parent +1	0.62
Lone parent +2	0.76
Couple +1	0.86
Couple +2	1.00
Couple +3	1.14

Table 3.25: The budget poverty threshold for food by household type per annum (Ecus PPP).

Household type	Food Budget in ECUs PPP
Single	908
Couple	1362
Single retired	908
Couple retired	1362
Lone parent +1	1181
Lone parent +2	1454
Couple +1	1635
Couple +2	1907
Couple +3	2174

We then applied the Family Budget Unit LCA food standard to the Household Budget Survey. We identified the households spending less than the food (including restaurants and cafes) thresholds shown in table 3.25.

Table 3.26 presents the poverty rates of each household type spending less than the food threshold overall and table 3.27 presents the rates for each household type. Overall the Netherlands and Portugal have the highest proportion of households spending less than the food threshold. The Netherlands also has the highest proportion of singles, lone parents with one child and couples with one or two children who are poor by this measure (although the numbers are small for the latter three groups and therefore the figures are not reliable). Portugal has the highest proportion of retired couples in poverty by this measure. Greece has the highest proportion of retired singles followed closely by the Netherlands and Portugal. The UK has the highest proportion of lone parents with two children in poverty (although the number is small).

TABLE 3.27: OVERALL POVERTY RATES: SPENDING BELOW FBU POVERTY THRESHOLDS ON FOOD

	Less than FBU poverty threshold on food
Belgium	5
Denmark	9
Germany	4
Greece	10
Spain	2
France	6
Ireland	4
Italy	2
Luxembourg	2
Netherlands	11
Austria	2
Portugal	11
Finland	8
Sweden	3
United Kingdom	6

TABLE 3.28: POVERTY RATE BY HOUSEHOLD TYPE: SPENDING BELOW THE FOOD THRESHOLDS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	10	14	7	12	[6]	11	8	2	[3]	16	2	7	12	6	9
Couple	3	3	2	7	[1]	1	1	1	[0.4]	[5]	1	5	4	1	[2]
Retired single	9	18	10	27	[5]	11	12	4	[1]	26	5	26	18	4	13
Retired couple	4	8	2	10	[2]	2	2	1	0	[6]	2	14	5	2	[2]
Lone parent + 1	10	12	4	[10]	0	6	4	0	[7]	[23]	5	0.3	4	2	[14]
Lone parent + 2	7	5	7	[4]	0	10	5	0	[5]	0	1	3	0	0	[13]
Couple + 1	4	2	2	6	[2]	3	2	1	[1]	[7]	2	5	2	1	[3]
Couple + 2	1	1	2	5	[0.3]	2	1	[0.5]	[1]	[7]	1	4	1	1	[2]
Couple + 3	7	0	2	[5]	0	4	0.2	0	[1]	[2]	3	6	1	1	[3]
Total	5	9	4	10	2	6	4	2	2	11	2	11	8	3	6

[ ] =number less than 30

Table 3.29 gives the poverty proportions of each household type spending less than the food threshold for their household type. Whilst for the majority of countries the highest proportion of the poor are either single or retired single, there is variation between countries. For example, 70 per cent of the poor are single in Sweden by this measure, the highest of all countries but only 7 per cent are retired single, the lowest of all countries. Only 5 per cent of the Portuguese poor are single, whilst 34 per cent are retired couples.

TABLE 3.29: POVERTY PROPORTIONS: SPENDING BELOW THE FOOD THRESHOLDS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	32	43	35	15	20	43	29	19	[54]	37	17	5	45	70	29
Couple	9	7	8	11	9	4	4	6	[4]	[10]	10	7	9	7	[6]
Retired single	26	33	37	33	33	32	49	50	[9]	30	34	42	35	7	37
Retired couple	9	9	6	20	18	6	6	13	0	[7]	14	34	7	8	[4]
Lone parent + 1	5	4	2	[1]	0	2	2	0	[11]	[3]	5	0	1	2	[7]
Lone parent + 2	3	1	1	[0.2]	0	2	2	0	[3]	0	0.3	0.1	0	0	[6]
Couple + 1	8	2	5	8	17	4	3	7	[11]	[5]	11	7	2	3	[4]
Couple + 2	2	2	4	10	3	4	4	5	[7]	[8]	5	4	1	3	[4]
Couple + 3	7	0	1	[2]	0	3	0.4	0	[2]	[1]	3	2	0.3	1	[2]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] =number less than 30

These results are interesting but in some ways puzzling. Why does the Netherlands have the highest poverty rates on a food standard for example? Why do Spain and Italy have such low food standard poverty rates. There is more work to be undertaken on this measure before we can be confident about its reliability. But there are four objections to using it as a poverty threshold:

- It is probably not a good principle to apply a food basket derived to achieve nutritional adequacy in the UK to other countries. The types of food purchased will vary in other countries; the costs of food will vary between countries and the share of the budget devoted to food will vary. Some findings relevant to this are illustrated in Table 3.30 which shows that the average proportion of the overall budget spent on food varies between 38 per cent in Portugal and 16 per cent in Netherlands. Table 3.30 also shows that the food budget share for those spending less on food than the FBU standard is lower than the overall mean. This is quite surprising because if this group were poor one would expect them to be spending a higher proportion of their budget on food. This indicates again that those spending less than the FBU food threshold are not necessarily the poorest.

TABLE 3.30: AVERAGE PROPORTION OF OVERALL BUDGET SPENT ON FOOD

	Proportion spent on food (overall population)	Proportion spent on food (those spending less than FBU food threshold)
Belgium	17	9
Denmark	17	8
Germany	19	10
Greece	26	17
Spain	31	[18]
France	21	9
Ireland	24	14
Italy	28	15
Luxembourg	18	[5]
Netherlands	16	8
Austria	23	14
Portugal	38	32
Finland	21	11
Sweden	21	9
United Kingdom	21	11

[ ]=number less than 30

- The adjustments for price changes between 1998 and 1994 could have been more sensitive for example using the food price index for each country.
- It is probably not safe to apply equivalence scales to establish the food budgets for other types of household. Equivalence scales are derived to represent the needs of different households for all items of consumption not just food and food may be subject to greater or lesser economies of scale than other items in the household budget.
- In future work it would be worth trying other combinations of the low costs budget – especially using more of the non variable items – for example food, clothing and personal care items.

SECTION 4

CONCLUSIONS AND RECOMMENDATIONS

Jonathan Bradshaw and Naomi Finch

INTRODUCTION

This has been a relatively short, low budget and largely exploratory project. It has relied on the secondary analysis of two comparative data sets. The European Community Household Panel (ECHP) and the Household Budget Survey (HBS). The Eurostat commission, while being concerned with the concept of absolute poverty, specified that it wanted the concept to be investigated using only income and expenditure data. Income and expenditure are not the only ways by which absolute poverty might be defined. There are (at least) three other approaches that are being used to explore poverty and could be used to explore absolute poverty. It is worth saying a little about each of these.

- **Social indicators**: A number of surveys, including the ECHP, collect data which is indicative of poverty. Perhaps the most elaborate application of this method has been in the *Poverty and Social Exclusion Survey of Britain* (Gordon et al 2000) in which the social indicators – the socially perceived necessities - are selected on the basis of the judgements of a representative sample of the population. This method was developed to represent the notion or relative poverty, but there is no reason why it could not be adapted to represent a more absolute understanding of poverty. For example, instead of counting as socially perceived necessities only those items and activities that more than 50 per cent of the population consider to be necessities, why not include only items thought to be essential by more than 75 per cent of the population? The point is that it is possible to use social indicator methodology to produce a more absolute measure of poverty. Indeed Dirven et al (2000) have been working for Eurostat on the ECHP, and have derived from that survey a set of indicators to form an index of "basic need". Also there are a group of researchers within the EU who are collaborating to produce an agreed set of poverty indicators, and they might be encouraged to think about a basic or absolute set of indicators.

- **Subjective measures**: A number of poverty surveys have employed questions that enable respondents to determine whether they are in poverty. These generally involve questions which ask respondents what income they need to keep their family out of poverty, and then, whether their actual income is above or below that level. Such a question is included in the, and in analysing the survey Eurostat have produced estimates of those living up to 10 per cent below their own poverty threshold (Eurostat 1999). Some results based on this measure are in Paper 2. After the World Summit on Social Development in Copenhagen in 1995, 117 countries adopted a declaration and programme of action which included commitments to eradicate *absolute* poverty and reduce *overall* poverty, drawing up national poverty alleviation plans as a priority (UN, 1995). Gordon et al (2000) have sought to operationalise these subjective notions of *absolute* and *overall* poverty in the *Poverty and Social Exclusion Survey of Britain.*

- **Combinations of measures**: It is being increasingly accepted in the poverty studies community, that no single measure of poverty is satisfactory by itself and that the best way to identify the poor is by using a combination of measures. Thus Layte, Nolan and Whelan

(2000) combined an income threshold with the lack of selected consumption items to trace the impact of the Irish anti poverty strategy. Bradshaw and Finch (2001) used the *Poverty and Social Exclusion Survey of Britain* to explore the overlap between four measures of poverty – income poverty, lack of socially perceived necessities, subjective poverty and receipt of social assistance and their overlap with indicators of social exclusion. They have explored the potential of this overlap for identifying core poverty or the really poor. Data on all these elements exist in the ECHP and it would be worth using that data set to explore overlaps in EU countries.

So, in addition to the approaches using income and expenditure outlined in this project, there are these other techniques which could be adopted in the measure of absolute poverty – indeed it is likely that the best way forward in poverty research is to use measures in combination.

ABSOLUTE POVERTY

At the heart of this project is the notion of absolute poverty. In the three earlier working papers we have briefly discussed this concept, but in general have avoided coming to terms with it - in order to avoid circumscribing the empirical applications which were the main purpose of this project. However, in order to make a judgement about which (if any) of the empirical approaches have the best potential, it is necessary to face up to what is meant by absolute poverty. The Statistical Programme Committee of Eurostat did not proffer a definition!

The obvious association of absolute poverty is with the notion of basic needs. Basic needs are what philosophers call categorical needs – needs which must be met in order for human beings to function. There is no doubt that food, clothing (at least in all European countries), shelter and fuel for heating (at least in most/all European countries) are categorical needs. However any attempt to represent these as a basket of goods and services immediately comes up against the impossibility of avoiding relative judgements. Choices about what to include in a dietary, in a wardrobe, the form of shelter and type of heating are all inescapably determined socially – by the societies we live in, and therefore relatively. Minimum subsistence is a relative notion. Furthermore most governments in European societies would not find it acceptable only to meet these physical needs. They would, and do in the minimum income schemes they provide, go further than the meeting basic physical needs. The UN defined absolute poverty as a "condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not just on income but also on access to services" (UN 1995, p.57). This definition goes beyond minimum subsistence ideas of absolute poverty. In addition Sen (1983) and Doyal and Gough (1991) have argued that basic human needs cannot be understood purely in physical terms – the essence of humanity is the capacity to make choices and any (absolute) measure of poverty has to take account of capabilities – including the capacity to participate. But at what level? The answer to that question takes us back to a relative understanding of poverty.

So there is no such thing as absolute poverty. Or rather, all poverty measures are more or less relative, and what we mean by absolute poverty is something that is less relative than our traditional measures of relative income poverty – which are really measures of inequality. So what we are seeking to do in this project, to put it at its crudest, is to find measures which

give poverty rates which are lower than those obtained using the Eurostat convention of equivalent household income less than 60 per cent of the median[8].

However that seems to be too arbitrary an objective. So we have added three other requirements of an absolute poverty measure.

Thus the absolute poverty measure should

1. Be more restricted, giving poverty rates lower than those obtained by less than 60 per cent of the median equivalent income.
2. Where possible have some kind of structural authority – be recognised, used at present or in the past by government(s).
3. Have some kind of scientific authority – that it must be related to ideas about basic needs, minimum subsistence, minimum but adequate notions – and not be just arbitrary.
4. It must not be purely relative.

The measures chosen in this project to represent absolute poverty are, to a greater or lesser extent, chosen on the basis of these criteria. But before reviewing them let us first discuss a measure that Eurostat might consider adopting to represent absolute poverty. What about establishing a relative threshold that does not move with incomes but only with prices? Take, say, the conventional less than 60 per cent of median equivalent income at a point in time and then up-rate it in real terms only as time passes. How does it meet the four criteria above?

1. As long as inflation in earnings (and other sources of income) exceed price inflation it would, year after year, produce lower poverty estimates than a measure based on the current median.
2. It is recognised by some governments already. For over a decade the UK government published poverty estimates based on a 1979 real terms income threshold, and in the *Opportunity for All* indicators (DSS 2000), is now publishing poverty indicators which includes one based on a 1994/5 real terms income threshold. The US Poverty Standard has been up-rated only in real terms for four decades.
3. There never has been any scientific justification for the 60 per cent of median equivalent income threshold (or indeed the other relative income thresholds based on the mean or median).
4. It is not purely relative.

So Eurostat could adopt a measure based on a real-terms income threshold, fixed at a point in time but it fails the test of scientific justification. Further, not only the level but also the date the threshold is fixed would be entirely arbitrary. Sooner or later it would have to be re-based – again at an arbitrary level and at an arbitrary time.

APPROACHES TO FIXING ABSOLUTE MEASURES OF POVERTY

In the two empirical papers produced during this project we have employed the following measures of poverty. In relation to each of them we will review the case for using them against our four criteria, then discuss the empirical problems involved in using them and then draw conclusions about their potential as an EU standard.

[8] It is of course theoretically possible for an absolute measure to give higher poverty rates than a relative measure.

CONSTRAINED EXPENDITURE APPROACH

One way of using expenditure data to fix poverty thresholds is to take the point on the distribution of expenditure (or income) where expenditure on non necessities and/or luxuries is constrained – indicated by nil or a small proportion of expenditure on going on those items. The argument is that it is these households who are giving priority to meeting basic needs.

In Section 3, we examined 'constrained –expenditure' poverty using five different definitions. The first three were related to expenditure on non-necessities – those spending less than 10, 20 or 25 per cent on non-necessities. The other two definitions were related to expenditure on luxuries. We looked at both the absence of expenditure on luxuries and the proportions spending less than 10 per cent on luxuries.

The four tests:

1. All these thresholds produce lower poverty rates than the conventional relative income thresholds.
2. We do not know of any example of this technique being used by Governments to set minimum income thresholds but it is an element of the budgets standards approach which is certainly used by national governments.
3. The use of budget shares to establish constraints on household resources has been part of the armory of micro economics ever since Engel and this approach is a derivative of S curve analysis.
4. It is not a relative measure.

The empirical problems:

There are four problems in the application of these ideas:

First, in defining non-necessities and luxuries. Any definition is open to challenge.

Second, isolating those particular commodities in the expenditure classification. In the HBS groups of items are collected together and working at an aggregate level as we were it was not always possible to separate necessities from non-necessities and luxuries. However the data could be made available at a more dis-aggregated level.

Third, a household may spend little or nothing on luxuries or non necessities not because their budget is constrained but because it just happens that during the expenditure period covered by the budget survey they did not spend on these items. In contrast a poor household may have spent on non-necessities during the expenditure period despite spending very little over the year. Thus there are inevitable false positives and false negatives.

Potential as an EU standard

It is worth exploring further but we have tried this kind of analysis in previous comparative work on poverty thresholds and using regression techniques to fix thresholds. The equivalence scales implied by the thresholds have not made much intuitive sense (Saunders et al 1999).

SOCIAL ASSISTANCE STANDARDS:

Every EU country has some scheme of social assistance, which provides a floor below their social insurance system, providing for those who have limited resources a source of income on the basis of a test of their incomes, assets and also, often for some classes of claimant, a behavioural test (that they are available for employment). The schemes are not necessarily a minimum income guarantee as their coverage is not universal, but, with the exception of Greece for single and childless couples, there are scales covering all household types.

The four tests:

1. For each country their social assistance scales give lower poverty rates than the relative income threshold (as we shall show below).
2. They are government determined or government influenced standards. Even in those countries where there is a considerable degree of local discretion in the administration of social assistance, there are national guidelines more or less influencing that discretion.
3. The extent to which the social assistance scales are based on some scientific notion of adequacy, varies from country to country. In some countries the link with science is an old one with the rationale lost in the passage of time (eg France, UK). In others it is more up to date and still formally based on a standard budget (eg Sweden).
4. Social assistance scales may be up-rated in line with incomes, but (subject to correction) in no country is there a statutory obligation that they are up-rated with income. How they are up-rated varies – in some countries they are up-rated in comparison with a budget standard (eg Sweden), in others in line with price inflation, in others in line with a minimum wage and in others on the basis of a purely political judgement.

The empirical problems:

There are no routinely collected data on social assistance packages in each country in the EU. This project relied on a DSS/OECD study undertaken by Eardley et al (1996) and the work of the *European Observatory on National Family Policy* which collected the necessary data until 1996 (Ditch et al 1996,1997 and 1998)(but now does not). MISSOC collects some of the relevant information, but not enough to fix a value for the *package* of provision. The OECD collects data on the social assistance package for the unemployed but only for a few family types.

One major analytical problem concerns housing costs. It causes problems at both the numerator and denominator ends of the analysis, and makes comparison very difficult. Without repeating the detailed discussions in Papers 2 and 3, some countries meet actual housing costs in their social assistance schemes, some provide a general subsidy to housing costs and some do nothing. Neither the ECHP nor the HBS provide data that enables one to match social assistance standards before and after housing costs to income or expenditure before and after housing costs. Whether poverty rates are calculated before or after housing costs makes a big difference to the size and composition of the poor, and needs to be done consistently between countries. (This is incidentally also a problem for income measures of poverty.)

Another major analytical problem concerns the treatment of multi-benefit unit households. In most countries minimum income standards are fixed for a benefit unit. But income and expenditure data in the ECHP and the HBS is collected at the household level. The ECHP could and does disaggregate income to benefit (family) units but this is impossible for expenditure data. Future work on the ECHP ought to go further than we have been able to in

estimating poverty rates among units in multi-unit households, particularly as this effects such a high proportion of households in southern EU countries.

Potential as an EU standard

What is the standard to be? In Section 2 we applied national social assistance scales to ECHP income data for each country (plus some variants). The national scales could be the Eurostat standard. However there are very large national (and some local) variations in the level of the scales, their implied equivalence scales and their treatment of housing costs. Their relationship to average earnings varies considerably. If Eurostat were to publish poverty rates based on national social assistance scales they would be representing national aspirations, but they would hardly be comparing like with like.

An alternative would be to take the scales in one country as a standard. We have presented results using the scales for Denmark and Portugal as examples of this approach. Using the Danish scales in the southern EU countries produces poverty rates well above the less than 60 per cent of median equivalent income threshold poverty rates. Using the Portuguese scales produces very low poverty rates in the northern EU countries. Also there are the effects of the different implied equivalence scales on the composition of the poor. Denmark and Portugal are at the extremes of the distribution, and there might be reason to calculate a weighted average, or take a country with scales nearer the average. Alternatively further work on national minimum income standards might reveal a scale with a much more substantial scientific basis than other countries.

THE US POVERTY STANDARD:

This standard could be an alternative with the possible advantages that it is external to any one EU country, has been explored in great detail by US social scientists and has stood the test of time.

The four tests:

1. It gives lower poverty rates than the EU relative income standard.
2. It has substantial, nay incredible, structural authority in the US having been used not just as a poverty standard for over three decades but also employed as the basis of means tests for a variety of federal programmes.
3. There is room to argue about the quality of its scientific basis. However it certainly has its origins in a budget standard and was originally derived from a food budget.
4. It is not relative and has only ever been up-rated in line with price inflation.

The empirical problems:

There are no particular empirical problems. The US Poverty threshold can be applied, as it has been here to income data in the ECHP before and after housing costs. It can also be applied to expenditure data. The standard is well supported with a vast array of documentation produced by the Bureau of Labour Statistics and US Department of Health and Welfare. However there will be arguments about the validity of the measure itself based on the criticism of it by the National Academy of Science (Citro and Michael 1995). Without going into these in detail they include the argument that the multiplier (three times the food budget) is no longer appropriate because the cost of food has fallen; that the types of income included is incomplete; that certain types of expenditure ought to be excluded in calculating

net income; that the equivalence scale is anomalous; and that the standard does not adjust for geographical variations in the costs of living, especially housing costs. As a result of these criticisms a number of proposal for reform were made and some adopted in the US Census Bureau Experimental Poverty thresholds. But to date there has been no resolution of how to take account of common expenses such as child care, work related expenses, medical costs and housing costs – at present the extant suggestion is that these should be simulated.

Potential as an EU standard
If the EU is to adopt the US Poverty threshold it would either have to adopt the present standard with its burden of scientific criticism, or do the work necessary to implement the Experimental Standard. In this project, in our analysis of the ECHP we were unable to replicate the US Experimental Poverty Standard income definition because the appropriate data is not collected in the ECHP. In our analysis of the HBS we were able to make some of the adjustments, but more work of a similar nature is required if the US Experimental Poverty Standard is to be adopted.

An alternative would be to derive an absolute poverty standard based on a similar methodology. This we have begun to explore using budget standards and expenditure thresholds.

BUDGET STANDARDS

Budget standards are normative basket of goods designed to represent a standard of living. Budget standards are produced in a number of countries in the EU and their uses include setting social assistance standards. In this project we have made use of what is perhaps the most detailed budget standard produced in the EU, one designed to establish a *minimum but adequate* standard for the UK (Parker 1998).

Because of constraints on the number of runs we could do on the HBS we have only explored poverty rates based on a food budget.

The four tests:
1. The budget standard based on a food budget gives lower poverty rates than relative poverty thresholds
2. Budget standards are being used for a variety of purposes in EU and many minimum income schemes originally had their origin in budget standards methodology. The Family Budget Unit budget has not yet been adopted for any official purpose in the UK.
3. The food budget used in this project was derived using systematic scientific procedures and is designed to provide a healthy diet. The choice of items included in the food basket is influenced by consumer research. The prices paid for those items is based on national outlets.
4. A budget standard is not relative. It can be up-rated by the movements in a price index or commodity price index. But from time to time would need to be revised to take account of changes in general living standards.

Empirical problems:
Drawing up a budget standard from scratch is a major undertaking, involving the production of list of items, deciding on quality and quantity, setting life-times for items bought

occasionally or irregularly and then pricing the items. Ideally a budget standard needs to reflect differences in consumption patterns and prices in each EU country. A short-cut would be to build on the FBU budget standards and adapt them for each country. So for example the FBU food budget could be adopted as a template and adjusted for each country to reflect the foods consumed, at the same time as ensuring that the nutritional standards are maintained, then the budget could be priced at local prices and then up-rated using a commodity price index. The same process could be repeated for the other commodity groups in the budget.

In the analysis in this project we have short-circuited this process by taking only the food budget for the UK for a couple plus two children and adjusting it for other family types using equivalence scales and for other countries using purchasing power parities. More work needs to be done on the reliability of equivalence scales applied to separate commodities of a budget as well as to price differences in food and other commodity baskets between countries.

The test that we have applied is that if a household is not spending enough to purchase the food budget then they are in poverty. Of course some households will be achieving the food budget by going short on other essentials and ideally we need to include a wider range of commodities – clothing, personal care, heating fuel. But short of the full budget there are difficult decisions to be made about where to draw the line. If we were to use the whole of the *minimum but adequate budget*, the test would be whether a household has a net income sufficient to meet the budget standard. There will inevitably be disputes about the items that are included in the budget but the great asset that budget standards have over other poverty standards is that they are transparent and can be easily adapted.

Potential as an EU standard:

We have been responsible for re-pioneering budget standards methods in the UK (Bradshaw 1993) and believe that they have potential in living standards research. In a number of countries in the EU including Sweden, Germany, and the Netherlands there are traditions of budget standards being used to fix minimum income standards. However, ironically, because they are so transparent they tend to receive more critical attention than other poverty standards do. In the UK and Australia where some of the most detailed work on budget standards have been done in recent years they have not been adopted as standards by national governments (though there is some evidence that New Labour Government in the UK has set targets for the pensioners' Minimum Income Guarantee with regard to a pensioners budget drawn up by the FBU).

THE RESULTS OF THE ANALYSIS

The analytical strategy in this project was to test out a variety of poverty standards selected on the basis of the principles outlined above. The measures and their variants were examined in three ways

- first by estimating the overall poverty rates that they produced in comparison with the standard relative measure[9] – 60 per cent of median income (and expenditure) – and in comparison with each other. We wanted the measures to produce lower poverty rates,

[9] We could also have made comparisons with the weighted average EU poverty standard now published (Eurostat 2000).

more absolute ones, than the relative measure. We also expected the measures to produce, not the same, but consistently different estimates. If we are measuring the same phenomenon then we should be suspicious of the reliability of a measure that gives a widely inconsistent result for one country or some countries.

- Second by estimating the poverty rates for each of a selection of nine different family types.
- Third by estimating the proportion of the poor falling into each of the nine different family type groups.

There were a number of motives for looking at the poverty rates and composition of the poor by family type. It is important to be aware of the fact if a measure produces higher poverty rates or proportions of the poor among different family types and to consider why this is. It is a way of the examining the face validity of the measure. Thus if a measure gives the result that childless couples have very high poverty rates and lone parents very low poverty rates there is reason to be suspicious of its merits, given what we know about the relative living standards of these two groups in many countries in the EU. Further, previous research using relative income measures of poverty has found that using different equivalence scales may not alter the overall poverty rate but does alter the composition of the poor, and that using lower thresholds may produce consistently higher overall poverty rates but very inconsistent changes in the composition of the poor.

It is a straightforward task to present a summary of the overall poverty rates produced for each country using each of the measures. In Table 4.1 below we have selected one or two measures from each of the classes of measures that we have examined in this project and presented the poverty rates obtained by that measure and also a ranking (in brackets) which is a quick way of identifying changes in relativities produced by the measure. Remember that the poverty rates presented here are poverty rates for the restricted nine family types included in the analysis and will be different from ECHP estimates based on all households.

ECHP Analysis

Taking the ECHP bases measures first. We have selected four of the absolute measures that we tried in Section 2 and compared them with the poverty rates derived from the standard relative threshold of below 60 per cent of the median before housing costs.

Below national social assistance scales before housing costs gives poverty rates which are lower than the relative measure for all countries. Leaving Greece aside (for which the data is not reliable) there are considerable re-rankings of countries – in general the southern European countries move up the league table (Spain moves from ninth to second) and the northern EU countries move down (the Netherlands move from first to twelfth). Austria and the UK buck the latter trend and Ireland and the Netherlands have social assistance poverty rates closest to their relative income poverty rates.

Below Portugal's social assistance scales after housing costs gives poverty rates which are lower than the relative measure for all countries and produces a league table of countries which is more like that obtained with the relative measure. Germany and the Netherlands both move down the league table with this absolute measure and Austria and the UK move up. The Greek data is again not reliable.

Below the US official poverty threshold before housing costs gives slightly lower poverty rates than the relative measure for northern EU countries and much higher poverty rates for the southern EU countries and Ireland. The rankings are fairly consistent with the exceptions of Italy – lower in the league table and the UK higher.

Below the subjective threshold before housing costs gives higher poverty rates than the relative measure for the southern EU countries, Ireland and France. The rankings are interestingly very close to those obtained with the US poverty threshold, but the UK is an exception coming higher in the league table on subjective poverty.

HBS Analysis

Below 60 per cent of median expenditure after housing costs generally gives lower poverty rates than the relative income threshold. France, Ireland, Italy and Austria move down the league table and Belgium and the UK move up.

Below 60 per cent of median expenditure and below 60 per cent of median income gives much lower poverty rates than the relative income. The biggest changes in rankings are for Belgium and the UK, both moving up and Germany, France and Ireland moving down.

Spending less than 20 per cent on non-necessities gives a much lower poverty rate than the relative measure for the northern European countries but the rates for the southern EU countries are rather similar to those obtained by the relative income threshold. The rankings of the northern EU countries move about with Germany moving up the league table and Denmark and Italy down.

Spending less than 5 per cent on luxuries gives a much higher poverty rate than the relative measure for southern EU countries and, curiously, Denmark, France Ireland and Austria. As a result the rankings are very different.

Spending below the social assistance threshold before housing costs gives lower poverty rates for all countries than the relative income measure but rankings that do not coincide with other measures except to some extent the social assistance measure before housing costs on the income measure. Italy and Portugal rank lower and the Netherlands higher in the expenditure based social assistance threshold.

Spending below the US official poverty threshold before housing costs gives lower poverty rates than the relative measure for the northern EU countries. There is very little consistency between the rankings on this measure and the relative income measure. Belgium moves up the league table and Ireland and Italy down. However the rankings are very similar to those obtained using the US threshold with the ECHP.

Spending less on food than the FBU food budget gives perhaps the most unexpected results of all - no clear pattern between poorer and richer EU countries- the Netherlands and Portugal with the highest proportions and Italy and Luxembourg with the lowest proportions, Denmark also with a high poverty rate and Spain with a low poverty rate.

TABLE 4.1: POVERTY RATES USING A SELECTION OF ECHP AND HBS BASED THRESHOLDS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Income															
< 60% median before housing costs	18 (9)	14 (3)	17 (6)	26 (12)	18 (9)	16 (5)	17 (6)	15 (4)	13 (2)	12 (1)	17 (6)	27 (13)	-	-	20 (11)
< SA before housing costs	7 (6)	8 (9)	9 (11)	0 (1)	4 (2)	4 (2)	14 (13)	7 (6)	7 (6)	10 (12)	4 (2)	8 (9)	-	-	5 (5)
< Portugal's SA after housing costs	4 (6)	3 (2)	6 (11)	9 (12)	5 (8)	3 (2)	3 (2)	4 (6)	2 (1)	5 (8)	3 (2)	10 (13)	-	-	5 (8)
< US official before housing costs	11 (4)	6 (2)	15 (7)	41 (12)	36 (11)	12 (6)	33 (10)	23 (9)	3 (1)	11 (4)	10 (3)	48 (13)	-	-	18 (8)
Subjective before housing costs	15 (6)	5 (1)	16 (7)	43 (13)	26 (10)	19 (8)	21 (9)	35 (11)	8 (2)	10 (3)	13 (4)	41 (12)	-	-	13 (4)
Expenditure															
< 60% median after housing costs	9 (4)	8 (2)	11 (5)	19 (14)	13 (7)	13 (7)	18 (12)	15 (11)	13 (7)	8 (2)	18 (12)	29 (15)	11 (5)	6 (1)	13 (7)
< 60% median + income < 60% median	5 (3)	4 (2)	7 (11)	11 (14)	5 (3)	6 (7)	9 (12)	9 (12)	6 (7)	5 (3)	6 (7)	18 (15)	5 (3)	2 (1)	6 (7)
< 20% on non-necessities	4 (3)	5 (6)	3 (2)	30 (15)	21 (13)	8 (7)	10 (10)	19 (12)	5 (5)	[1] (1)	9 (9)	28 (14)	10 (10)	4 (3)	8 (7)
< 5% on luxuries	13 (5)	25 (8)	9 (1)	57 (15)	30 (10)	26 (9)	41 (13)	40 (12)	12 (4)	11 (2)	33 (11)	41 (13)	19 (7)	11 (2)	18 (6)
< SA before housing costs	1 (2)	7 (13)	4 (7)	[0.02] (1)	[1] (2)	2 (5)	10 (15)	5 (12)	4 (7)	4 (7)	4 (7)	8 (14)	4 (7)	1 (2)	2 (5)
< US official before housing costs	3 (2)	6 (3)	9 (6)	32 (14)	21 (12)	9 (6)	23 (13)	17 (10)	[1] (1)	6 (3)	14 (9)	48 (15)	20 (11)	7 (5)	13 (8)
< FBU food threshold	5 (8)	9 (12)	4 (6)	10 (13)	2 (1)	6 (9)	4 (6)	2 (1)	2 (1)	11 (14)	2 (1)	11 (14)	8 (11)	3 (5)	6 (9)

[ ]= number less than 30 ( ) = ranking

Turning to examine the poverty rates by household type we have in the tables below selected three of the income thresholds and four of the expenditure thresholds. We have also been able to reduce the amount of detail in the expenditure threshold comparisons by combining the categories of families. Also to reduce the amount of data we have only compared poverty rates by household type and not poverty proportions. All the missing data is in the appendices.

The first three tables are selected from the ECHP analysis. First Table 4.2 gives the poverty rates produced by the conventional less than 60 per cent of median income threshold for comparison purposes.

In Table 4.3 the social assistance threshold poverty rates are lower than the relative measures for most household types in most countries. However Denmark's are higher for retired couples and couples with one child, Ireland's for retired singles and the Netherlands for lone parents with one child. This is likely to be due to the differences between the OECD equivalence scales and the implied equivalence scale in social assistance schemes. In Table 4.4 the US official poverty threshold tends to give lower poverty rates to retired couples and higher rates to families with children than the relative measure. Again the result of the differences in the equivalence scale as well as the income distribution.

In Table 4.5 the expenditure less than 60 per cent of the median gives the highest poverty rates to the retired singles and lone parents in most countries. Austria and Portugal also have high poverty rates for retired couples on this measure. In Table 4.6 spending less than 20 per cent on non necessities gives the highest poverty rates for almost all countries to retired singles and couples, though lone parents have higher rates than retired couples in Belgium, Ireland, Sweden and the UK. In Table 4.7 the US poverty standard gives high poverty rates for all countries to retired singles and lone parents and for some countries (Denmark, Finland and Sweden) singles. In Table 4.8 the spending less than FBU food threshold also gives high poverty rates for the retired singles, lone parents (94 per cent in Luxembourg!) and singles in some countries.

TABLE 4.2: POVERTY RATES: INCOME LESS THAN 60% OF MEDIAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	UK
Single	18	23	20	21	19	24	25	14	11	24	20	37	19
Couple	13	7	11	17	13	10	8	8	7	4	9	27	8
Retired single	24	28	23	43	13	24	27	28	19	8	26	57	32
Retired couple	25	15	14	46	24	16	8	10	13	11	16	42	26
Lone parent + 1	25	10	36	39	29	25	46	18	25	14	29	20	38
Lone parent + 2	42	8	42	37	32	26	66	19	31	44	53	27	52
Couple + 1	11	5	11	8	15	8	6	11	10	9	13	9	8
Couple + 2	14	4	18	12	18	10	10	14	13	9	12	16	15
Couple + 3	20	7	25	15	27	15	21	31	32	11	25	28	25
Total	18	14	17	26	18	16	17	15	13	12	17	27	20

[ ]=number less than 30

TABLE 4.3: POVERTY RATES: SOCIAL ASSISTANCE POVERTY RATES BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	UK
Single	10	12	12		9	5	3	3	5	24	5	31	6
Couple	5	6	8		3	1	4	4	6	3	2	16	3
Retired single	8	7	4	0	3	8	39	14	6	8	4	2	10
Retired couple	7	17	5	1	1	10	7	10	3	9	2	5	5
Lone parent + 1	19	4	31		8	5	42	8	25	18	13	20	7
Lone parent + 2	16	3	39	6	10	7	43	13	31	24	30	3	10
Couple + 1	4	6	7		5	1	4	5	6	6	4	4	2
Couple + 2	5	3	13		4	1	8	5	8	5	3	6	4
Couple + 3	8	3	17		6	1	17	13	26	5	8	9	8
Total	7	8	9	0	4	4	14	7	7	10	4	8	5

[ ]=number less than 30

TABLE 4.4: POVERTY RATES: US OFFICIAL POVERTY RATES BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	UK
Single	16	16	20	42	35	23	42	21	3	28	15	58	25
Couple	7	3	9	25	21	6	13	11	3	3	6	43	6
Retired single	17	10	18	71	69	18	74	46	6	8	10	83	32
Retired couple	10	2	9	57	33	7	11	11	2	5	6	61	13
Lone parent + 1	19	4	35	55	37	23	56	21	5	19	27	43	44
Lone parent + 2	16		36	39	41	23	71	25	18	30	34	62	54
Couple + 1	6	1	8	21	26	5	15	14	3	7	6	26	6
Couple + 2	8	2	16	28	34	6	18	25	2	8	5	42	15
Couple + 3	13	2	24	36	41	9	34	46	8	11	19	50	25
Total	11	6	15	41	36	12	33	23	3	11	10	48	18

[ ]=number less than 30

TABLE 4.5: POVERTY RATES: EXPENDITURE LESS THAN 60% OF THE MEDIAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	12	14	12	9	[14]	15	18	9	11	10	16	18	14	9	12
Couple	5	3	5	13	[7]	4	8	8	[7]	[2]	14	17	5	2	3
Retired single	12	10	21	39	21	24	32	28	14	19	35	49	27	11	22
Retired couple	9	9	10	35	23	12	17	25	14	[9]	25	40	11	8	14
Lone parents	20	11	20	[6]	0	14	43	0	[14]	[7]	14	20	1	9	32
Couples with children	7	2	10	11	8	10	12	10	16	7	10	14	3	5	11
Total	9	8	11	19	13	13	18	15	13	8	18	29	11	6	13

[ ] =number less than 30

TABLE 4.6: POVERTY RATES: SPENDING LESS THAN 20% ON NON-NECESSITIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	7	4	2	25	[29]	6	11	16	[6]	[2]	4	23	7	2	8
Couple	1	1	1	20	[9]	2	2	8	[2]	0	3	18	2	1	[1]
Retired single	11	19	11	65	48	24	33	46	18	[5]	22	50	34	21	26
Retired couple	3	4	2	48	39	8	9	30	[9]	[3]	14	42	17	6	7
Lone parents	9	3	2	[30]	2	0	11	0	0	0	6	29	3	13	12
Couples with children	1	0.5	0	14	[5]	1	1	6	[0.4]	0	4	8	1	1	[1]
Total	4	5	2	25	13	6	7	15	4	[1]	7	20	9	4	7

[ ] =number less than 30

TABLE 4.7: POVERTY RATES: US OFFICIAL THRESHOLD BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	6	14	14	23	[26]	13	29	14	[1]	10	16	43	30	13	17
Couple	0.3	1	2	24	[11]	2	8	8	0	[1]	8	35	7	1	[2]
Retired single	5	9	18	59	38	17	42	33	0	[12]	31	74	43	9	23
Retired couple	0.4	1	3	42	25	3	12	19	0	[2]	14	57	11	1	5
Lone parents	6	11	20	[26]	0	11	52	0	[1]	[13]	13	56	17	8	37
Couples with children	3	1	7	24	16	6	15	11	[1]	[5]	8	32	7	3	10
Total	3	6	9	32	21	9	23	17	[1]	6	14	48	20	7	13

[ ]=number less than 30

TABLE 4.8: POVERTY RATES: SPENDING LESS THAN FBU FOOD THRESHOLD

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	10	14	7	12	[6]	11	8	2	[3]	16	2	7	12	6	9
Couple	3	3	2	7	[1]	1	1	1	[0.4]	[5]	1	5	4	1	[2]
Retired single	9	18	10	27	[5]	11	12	4	[1]	26	5	26	18	4	13
Retired couple	4	8	2	10	[2]	2	2	1	0	[6]	2	14	5	2	[2]
Lone parents	9	10	5	[7]	0	7	4	0	94	[17]	4	1	32	32	14
Couples with children	3	1	2	5	[1]	4	1	1	[1]	[6]	2	5	1	1	2
Total	5	9	4	10	2	6	4	2	2	11	2	11	8	3	6

[ ] =number less than 30

CONCLUSIONS

The objectives of this project have been to assess absolute poverty measures using the ECHP and the HBS. The general purpose was to provide Eurostat with a framework for carrying out future work on absolute poverty. We have employed both the data sets that were envisaged should be used and explored a variety of ways of measuring absolute poverty.

It was never the intention of the project to come up with a single absolute poverty measure for the EU. Even if that was the objective it is clear from these results

- that there is no single measure that leaps out as the best candidate.
- that a good deal more exploratory work needs to be done in order to produce such a measure.
- in the end it may be a combination of measures that will be required.

Originally and as this project has gone on staff in Eurostat have been most interested in the potential of the US Poverty Standard. It has merits and the Experimental Standard has more merits. But the Official standard has been seriously criticised in the US and the Experimental measure has not yet been operationalised even in the US. Work needs to be done on thinking through how it can be applied in an EU context and whether instead the EU should develop a measure of its own – not least because the scientific rationale for the existing US measure is weak.

Work also needs to be done on the two surveys that an absolute threshold might be applied to. The ECHP cannot produce a net income variable that can be used with the US measure because it does not collect the appropriate costs data and we also have anxieties about the housing costs data it collects. The HBS provides more of the information needed but it is produced only every four years, with a long time lag and Eurostat are anxious about the quality of the income data in some of the national surveys.

However we do not think that all this should deter Eurostat following up this work. The Statistical Programme Committee may have reached a consensus on the threshold, income definition, equivalence scale and so on for the production of the Eurostat relative poverty standard but it remains an entirely arbitrary standard and needs to be supported with other standards with greater scientific rationale.

RECOMMENDATIONS:

1. In future work by external contractors using the HBS, Eurostat are encouraged to give direct access to the data sets on the same basis as they do with the ECHP. It is not desirable scientifically or practically for runs to undertaken by Eurostat staff. If it is impossible for the data set to be given to contractors then it would be better for contractors to come into the Eurostat offices to undertake their own analysis. In general, given the level of resources invested by Eurostat in the HBS, it is a sadly neglected data set. It cries out for more attention from the EU research community
2. Eurostat should consider incorporating more questions covering socially perceived necessities into the ECHP and its successor and to reintroducing a subjective measure of poverty.
3. Meanwhile Eurostat should commission some work on the overlaps between income poverty, lack of necessities poverty, subjective poverty and receipt of social assistance

using the ECHP - on the grounds that poverty and absolute poverty is best measured using a combination of techniques.

4. There is also more work to be done exploring the data in the HBS – in this project we have only been able to scrape the surface. In particular more analysis using the constrained expenditure approach, budget standards and attempting to meet the income definition of the US Experimental Poverty Standard would be desirable.
5. The EU ought to have a mechanism for collecting up to date data on the minimum income scheme or social assistance package in each member state – and what if any scientific rationale they have. A weighted average of such packages might represent a viable absolute poverty standard.
6. Eurostat needs to do some more work on the recording and analysis of housing costs and subsidies in both the ECHP and the HBS – to ensure that in both cases like is being compared with like.
7. There is more work to be done on how multi-unit households can be incorporated into the analysis using absolute poverty thresholds – even if only for the income based thresholds.
8. There is more work to be done in an attempt to match the US Experimental Poverty Threshold definition in the EU. Given the availability of the HBS it should be easier to overcome the problems they are having in the US. However it should also be possible to draw on the experience of the US poverty threshold debates and derive a standard from scratch.
9. A variety of further work using budget standards might prove fruitful. Adapting and pricing the FBU minimum but adequate food basket in each member state and then applying that threshold to HBS expenditure data would be worth undertaking. Adapting and pricing other components of the budget at member state level would also be worth undertaking.

REFERENCES

Abel Smith, B. and Townsend, P. (1965) *The Poor and the Poorest*, London: Bell.

Anon (1998) “Revising the poverty measure” in *Focus* Vol 19, no 2

Bradbury, B. and Jantti, M.. (1999) *Child poverty across industrialised countries*, Innocenti Occasional paper, Economic and Social Policy Series, No 71

Bradshaw, J (ed) (1993) *Budget Standards for the United Kingdom*, Aldershot: Avebury.

Bradshaw, J and Finch, N. (2001) Real Poverty, University of York: PSE Working Paper.

Bradshaw, J. (ed) (1993) *Budget Standards for the United Kingdom,* Studies in Cash & Care, Avebury: Aldershot

Bradshaw, J.R. and Morgan, J. (1987b) *Budgeting on Benefits: the Consumption of Families on Supplementary Benefit*, Occasional Paper No. 5, Family Policy Studies Centre: London

Bradshaw, J.R., Mitchell, D. and Morgan, J. (1987) 'Evaluating adequacy: the potential of budget standards', *Journal of Social Policy*, 16, 2, 165-181

Burtless, G, Corbett, T, Primus, W (1997) *Improving the measurement of American Poverty,* Brookings Institute and IRP.

Citro, C. and Michael, R. (eds) (1995) *Measuring poverty: a new approach*, National Academy Press, Washington DC.

Dirven, H-J et al. (2000) Income Poverty and Social Exclusion in the EU Member States: TASK 4. Paper presented at the Working Group Statistics on Income, Social Exclusion and Poverty, April 20000.

Ditch, J and Oldfield, N. (1998) Social Assistance in the OECD update, Data Base, University of York.

Ditch, J., Barnes, H. and Bradshaw, J. (1996) *A Synthesis of National Family Policies 1995 (Volume 1)*, European Observatory on National Family Policies, Social Policy Research Unit, University of York: York

Ditch, J., Barnes, H. and Bradshaw, J. (1996) *Developments in National Family Policies in 1995 (Volume 2)*, European Observatory on National Family Policies, Social Policy Research Unit, University of York: York

Ditch, J., Barnes, H. and Bradshaw, J. (1998) *A Synthesis of National Family Policies in 1996 (Volume 1)*, European Observatory on National Family Policies, European Commission: University of York, York

Ditch, J., Barnes, H., Bradshaw, J., Commaille, J. and Eardley, T. (1995) *A Synthesis of National Family Policies 1994 (Volume 1)*, European Observatory on National Family Policies, Social Policy Research Unit, University of York: York

Ditch, J., Bradshaw, J. and Eardley, T. (1995) *Developments in National Family Policies in 1994 (Volume 2)*, European Observatory on National Family Policies, Social Policy Research Unit, University of York: York

Doyal, L. and Gough, I. (1991) *A theory of human needs*, Basingstoke: Macmillan.

DSS (2000) *The Changing Welfare State: Opportunity for all – One year on making the difference Cm 4865*, London: DSS.

Eardley, T., Bradshaw, J., Ditch, J., Gough, I. and Whiteford, P. (1996) *Social Assistance in OECD Countries: Synthesis Report*, Department of Social Security Research Report No.46, HMSO: London

Eurostat (1997) *Household Budget surveys in the EU: Methodology and recommendations for harmonisation* Office for official Publications of the European Communities, Luxembourg.

Eurostat (1997) Income distribution and poverty in the EU in *Statistics in Focus*: Population and Social Conditions, Vol 6.

Eurostat (1999) *European Community Household Panel: selected indicators from the 1995 wave*.Luxembourg: Eurostat.

Eurostat (2000) *European Social Statistics: Income, Poverty and Social Exclusion*, EC/Eurostat.

Fisher, G (1999) An overview of developments since 1995 relating to the possible new U.S poverty measure, (http://www.census.gov/hhes/poverty/povmeas/papers/fisher.html)

Fisher, G. (1992a) The Development and History of the Poverty Thresholds, *Social Security Bulletin* 55, 4, 3-14.

Fisher, G. (1992b) Poverty Guidelines for 1992, *Social Security Bulletin* 55, 1, 43-46.

Fisher, G. (1997) The Development and History of the US Poverty thresholds- A Brief Overview, GSS/SSS Newsletter (Newsletter of the Government Statistics Section and the Social Statistics Section of the American Statistical Association, winter. (http://aspe.hhs.gov/poverty/papers/hptgssiv.htm).

Gordon, D. and Pantazis, C. (eds), *Breadline Britain in the 1990s*, Department of Social Policy and Planning, University of Bristol: Bristol

Gordon, D. et al (2000) *Poverty and Social Exclusion in Britain*, York: Joseph Rowntree Foundation

Guibentif, P. and Bouget, D. (1997) *Minimum Income Policies in the European Union*, EU.

Heikkila, M. and McCausland, D. (1997) Report on the GM! Development in EU Member Countries in 1992-1997 (photocopy).

Layte, R. Nolan, B. and Whelan, C. (2000) Poverty and affluence in Ireland: a comparison of income and deprivation approaches to the measurement of poverty, in Gordon, D. and Townsend, P. (eds) *Breadline Europe: The Measurement of Poverty*, Bristol: The Policy Press

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

Mcabe, M and Rose, A (1993) "The clothing budget" in Bradshaw, J, (ed.) *Budget Standards for the United Kingdom* Ashgate publishing limited, Aldershot.

Nolan, B. and Whelan, C. (1996) *Resources, deprivation and poverty*, Oxford: Clarendon Press.

Orshansky, M. (1965) Counting the Poor: another look at the poverty profile, *Social Security Bulletin*, June 3-29.

Orshansky, M. (1969) How poverty is measured, *Monthly Labor Review* 92, 37-41.

Parker, H, (ed.) (1998) *Low Cost but Acceptable: A minimum income standard for the UK*, Family Budget Unit, London.

Saunders, P (1998) "Towards a better poverty measure" in *Focus* Vol 19, no 2

Saunders, P. et al (1998) *Development of Indicative Budget Standards for Australia*, Canberra, Department of Social Security.

Saunders, P., Bradshaw, J., Hirst, M. and Matheson, G. (1999) Using household expenditure data to develop an income poverty line: experimental estimates for Australia and the United Kingdom, Paper to the Foundation for International Studies in Social Security, Sigtuna, Sweden, June.

Sen, A. (1983) Poor relatively speaking, *Oxford Economic Papers* 35, 1983, 153-169

Short, K. et al (1999) *Experimental Poverty Measures: 1990 to 1997*, Washington: US Census Bureau.

Short, K; Garner, D and Doyle, P (1999) *Experimental poverty Measure: 1990-1997* US Census Bureau, Washington

Townsend, P., (1979) *Poverty in the United Kingdom- a Survey of Household Resources and Standards of Living*, Harmondsworth: Penguin Books

Townsend, P., Gordon, D., Bradshaw, J. and Gosschalk, B. (1997) *Absolute and Overall Poverty in Britain in 1997: What the Population Themselves Say: British Poverty Line Survey*, Bristol Statistical Monitoring Unit, School for Policy Studies: University of Bristol, Bristol

United Nations (1995) *The Copenhagen Declaration and Programme of Action: World Summit for Social development 6-12 March 1995*, New York, UN Department of Publications

Veit Wilson, J. (1998) *Setting Adequacy Standards: How governments define minimum incomes*, Bristol: Policy Press.

Watts, H.W. (1980) *New American Budget Standards: Report of an expert committee on family budget revisions*, Special Report Series, Wisconsin Madison; Institute for Research on Poverty.

Weinberg, D and Nelson, D (1997) *Changing the way the United States Measures Income Poverty: A progress report*, US Bureau of Census.

APENDIX 1
ANALYSIS OF ECHP
POVERTY RATE TABLES

POVERTY RATES BEFORE HOUSING COSTS WITH 40% MEAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	9	9	9	16	12	15	3	7	3	16	9	31	10
Couple	5	2	7	10	8	4	4	5	5	2	6	21	5
Retired single	7	6	8	34	5	10	9	7	7	5	6	44	15
Retired couple	11	3	8	30	3	6	4	4	6	4	6	25	8
Lone parent+1	14	3	17	25	15	13	25	15	14	9	14	20	12
Lone parent + 2	13		18	25	19	12	10	14	31	19	29	17	14
Couple + 1	5	2	7	5	8	4	2	5	6	5	7	6	5
Couple + 2	6	1	13	7	9	3	4	6	6	5	3	11	7
Couple + 3	10		16	7	17	4	6	13	12	6	11	21	14
All	8	4	9	17	8	7	5	6	6	7	7	19	9

POVERTY RATES BEFORE HOUSING COSTS WITH 50% MEAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	16	17	16	20	17	22	28	12	11	23	16	37	18
Couple	11	6	9	16	13	9	9	7	7	3	8	28	7
Retired single	20	19	18	42	13	20	38	20	16	6	17	58	30
Retired couple	20	9	12	44	23	14	9	9	13	8	13	46	24
Lone parent+1	19	5	28	39	27	23	46	18	25	14	27	20	32
Lone parent + 2	26	3	32	37	32	26	66	19	31	35	34	40	50
Couple + 1	8	4	9	8	14	7	6	9	10	8	11	11	7
Couple + 2	9	3	16	12	18	8	12	12	12	8	7	16	14
Couple + 3	15	7	20	15	27	12	22	27	29	11	21	29	23
All	14	10	14	25	17	14	20	12	12	10	13	29	18

POVERTY RATES BEFORE HOUSING COSTS WITH 60% MEAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	23	26	24	30	25	29	36	17	19	33	24	45	29
Couple	18	9	13	21	17	14	14	10	10	8	12	35	11
Retired single	33	33	28	57	35	34	74	38	29	25	33	72	51
Retired couple	33	22	19	55	33	21	28	19	23	23	25	57	40
Lone parent+1	36	10	46	44	33	34	55	21	30	29	44	34	56
Lone parent + 2	48	14	58	37	34	37	69	24	31	58	55	53	66
Couple + 1	13	6	13	14	22	13	18	14	15	14	17	17	14
Couple + 2	16	6	21	19	25	15	19	21	24	17	19	25	23
Couple + 3	25	8	32	25	36	26	31	40	52	25	38	42	32
All	24	17	21	34	27	22	34	21	21	20	23	38	30

POVERTY RATES BEFORE HOUSING COSTS WITH 40% MEDIAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	8	8	7	14	8	12	2	5	3	13	8	18	8
Couple	5	2	6	8	7	3	3	4	5	2	4	18	3
Retired single	7	5	6	30	4	6	5	5	6	4	5	21	9
Retired couple	7	2	7	23	1	4	4	3	3	3	6	12	4
Lone parent+1	13	3	10	9	13	8	5	11	5	4	10	20	7
Lone parent + 2	12		16	21	10	9	5	13	18	14	26	4	8
Couple + 1	4	1	6	4	6	3	2	5	5	3	5	5	3
Couple + 2	5	1	12	5	7	2	2	5	2	4	3	8	5
Couple + 3	8		15	5	12	2	6	12	8	4	11	9	7
All	6	3	7	14	6	5	3	5	4	5	6	11	5

POVERTY RATES BEFORE HOUSING COSTS WITH 50% MEDIAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	13	14	12	18	14	18	3	8	7	18	12	34	12
Couple	8	4	8	12	9	6	4	6	6	2	7	22	5
Retired single	15	12	11	36	7	14	9	7	7	5	10	45	19
Retired couple	14	3	10	32	3	10	4	5	6	5	9	26	13
Lone parent+1	16	4	21	25	15	18	30	17	25	9	19	20	19
Lone parent + 2	17	3	27	0	23	21	10	19	31	22	34	17	33
Couple + 1	8	3	8	6	9	5	2	7	6	7	9	7	6
Couple + 2	8	2	13	8	11	5	4	7	7	5	5	12	9
Couple + 3	12	3	17	7	18	7	6	19	23	7	18	21	15
All	11	7	11	19	9	10	5	7	8	8	10	20	12

POVERTY RATES BEFORE HOUSING COSTS WITH 60% MEDIAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	18	23	20	21	19	24	25	14	11	24	20	37	19
Couple	13	7	11	17	13	10	8	8	7	4	9	27	8
Retired single	24	28	23	43	13	24	27	28	19	8	26	57	32
Retired couple	25	15	14	46	24	16	8	10	13	11	16	42	26
Lone parent+1	25	10	36	39	29	25	46	18	25	14	29	20	38
Lone parent + 2	42	8	42	37	32	26	66	19	31	44	53	27	52
Couple + 1	11	5	11	8	15	8	6	11	10	9	13	9	8
Couple + 2	14	4	18	12	18	10	10	14	13	9	12	16	15
Couple + 3	20	7	25	15	27	15	21	31	32	11	25	28	25
All	18	14	17	26	18	16	17	15	13	12	17	27	20

POVERTY RATES AFTER HOUSING COSTS WITH 40 % MEAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	17	24	24	23	16	27	12	11	16	28	16	34	31
Couple	7	8	11	12	11	9	5	7	8	5	7	22	9
Retired single	13	31	22	36	9	22	11	12	10	20	14	36	35
Retired couple	12	9	11	31	4	9	4	6	6	11	9	28	18
Lone parent+1	25	11	35	31	28	27	47	16	25	22	30	28	52
Lone parent + 2	31	27	44	29	23	31	18	22	31	52	36	23	55
Couple + 1	8	5	11	12	10	8	5	8	11	10	11	10	10
Couple + 2	11	4	18	9	13	9	8	10	9	8	8	15	16
Couple + 3	17	4	26	9	18	13	16	21	26	14	19	21	24
All	12	14	18	20	11	15	10	10	12	15	12	23	22

POVERTY RATES AFTER HOUSING COSTS WITH 50 % MEAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	25	36	31	28	22	37	35	15	27	39	24	43	40
Couple	14	13	17	18	16	15	13	10	10	9	10	31	12
Retired single	32	48	32	46	19	33	45	26	27	41	30	65	56
Retired couple	25	20	17	45	24	19	11	12	18	24	17	49	35
Lone parent+1	45	33	54	41	34	41	55	26	41	51	39	39	68
Lone parent + 2	47	45	68	39	31	44	59	26	31	67	46	40	75
Couple + 1	13	9	17	13	20	13	15	13	21	15	15	15	16
Couple + 2	15	7	24	14	22	21	18	21	21	20	17	21	24
Couple + 3	26	12	36	17	31	29	29	34	45	25	33	29	35
All	22	24	25	28	21	24	26	17	22	25	21	33	33

POVERTY RATES AFTER HOUSING COSTS WITH 60 % MEAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	33	53	39	37	30	47	41	20	33	45	37	48	48
Couple	22	19	23	24	22	22	17	14	14	14	14	37	17
Retired single	44	63	46	60	41	44	74	44	36	55	44	74	66
Retired couple	38	35	26	56	35	28	29	22	26	39	30	59	47
Lone parent+1	52	56	65	50	40	57	80	31	47	63	59	42	81
Lone parent + 2	62	69	82	39	38	58	69	35	45	74	78	54	77
Couple + 1	20	18	24	19	29	20	26	20	32	28	20	22	24
Couple + 2	24	17	35	24	30	31	25	31	32	38	29	30	32
Couple + 3	34	31	52	26	39	44	39	49	60	50	46	45	50
All	31	36	34	37	32	34	39	27	30	36	31	42	41

POVERTY RATES AFTER HOUSING COSTS WITH 40 % MEDIAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	15	22	21	20	13	22	5	8	12	24	14	26	23
Couple	6	7	9	9	9	7	4	6	7	4	6	19	7
Retired single	12	25	17	32	6	15	5	10	6	11	9	30	19
Retired couple	8	5	10	24	2	6	4	5	3	7	6	14	10
Lone parent+1	25	10	27	15	24	21	21	11	25	17	23	20	41
Lone parent + 2	31	7	37	23	14	28	14	21	18	32	29	17	39
Couple + 1	7	3	10	6	9	6	3	6	7	8	10	8	9
Couple + 2	9	4	16	6	10	7	4	8	6	7	6	10	10
Couple + 3	12	3	22	5	15	9	7	17	15	9	15	18	16
All	10	12	15	16	8	11	5	8	8	11	10	15	14

POVERTY RATES AFTER HOUSING COSTS WITH 50 % MEDIAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	22	31	27	24	18	30	13	11	20	31	21	37	34
Couple	11	10	14	14	12	11	5	7	9	7	8	25	9
Retired single	25	40	27	39	11	27	12	13	10	30	21	50	43
Retired couple	18	13	14	34	4	14	4	7	9	15	12	29	25
Lone parent+1	30	25	45	31	28	33	47	21	30	29	34	28	54
Lone parent + 2	41	34	51	32	25	38	18	25	31	65	46	23	62
Couple + 1	12	8	13	9	14	10	5	10	12	18	13	10	12
Couple + 2	13	5	22	10	86	14	8	13	11	12	12	16	17
Couple + 3	21	8	29	9	22	19	16	26	35	17	25	22	26
All	18	19	21	22	13	19	10	12	14	18	16	24	25

POVERTY RATES AFTER HOUSING COSTS WITH 60 % MEDIAN THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	27	46	34	29	23	40	32	17	28	41	29	43	41
Couple	18	16	19	14	17	17	11	11	11	10	12	31	12
Retired single	36	58	37	47	19	36	37	33	29	44	36	65	58
Retired couple	31	26	20	47	25	22	9	13	18	27	21	46	37
Lone parent+1	49	45	57	43	34	48	55	28	47	51	51	39	69
Lone parent + 2	54	58	75	39	31	47	59	26	31	70	55	40	75
Couple + 1	16	14	19	13	21	15	14	14	21	18	17	14	18
Couple + 2	22	13	28	16	15	24	16	22	24	23	22	21	26
Couple + 3	29	19	42	20	31	33	28	36	51	31	40	29	35
All	26	31	28	29	22	27	24	20	23	28	25	33	34

POVERTY RATES BEFORE HOUSING COSTS SOCIAL ASSISTANCE THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	10	12	12		9	5	3	3	5	24	5	31	6
Couple	5	6	8		3	1	4	4	6	3	2	16	3
Retired single	8	7	4	0	3	8	39	14	6	8	4	2	10
Retired couple	7	17	5	1	1	10	7	10	3	9	2	5	5
Lone parent+1	19	4	31		8	5	42	8	25	18	13	20	7
Lone parent + 2	16	3	39	6	10	7	43	13	31	24	30	3	10
Couple + 1	4	6	7		5	1	4	5	6	6	4	4	2
Couple + 2	5	3	13		4	1	8	5	8	5	3	6	4
Couple + 3	8	3	17		6	1	17	13	26	5	8	9	8
All	7	8	9	0	4	4	14	7	7	10	4	8	5

POVERTY RATES AFTER HOUSING COSTS SOCIAL ASSISTANCE THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	18	28	27		14	13	13	5	18	41	9	33	16
Couple	6	13	14		5	3	8	5	9	9	4	17	6
Retired single	16	34	6	1	4	18	46	21	6	44	5	5	22
Retired couple	8	28	7	1	1	13	9	13	3	25	3	8	11
Lone parent+1	44	31	57		21	18	55	11	25	53	30	28	45
Lone parent + 2	47	42	67	6	11	22	59	21	31	59	40	9	43
Couple + 1	6	18	13	1	7	3	10	6	12	12	6	6	7
Couple + 2	8	9	21	1	6	3	13	8	13	9	3	6	10
Couple + 3	14	9	30	1	11	5	23	20	43	11	10	9	16
All	12	22	17	1	6	9	20	10	13	24	7	10	14

POVERTY RATES BEFORE HOUSING COSTS USING SOCIAL ASSISTANCE LEVEL + 10 % THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	13	14	16		12	7	19	4	9	29	5	35	7
Couple	6	7	9		5	1	8	4	6	5	2	19	3
Retired single	15	11	4	0	3	12	61	28	6	19	4	4	14
Retired couple	12	28	6	1	1	12	11	13	6	15	2	7	8
Lone parent+1	27	7	42		10	8	43	11	25	29	19	20	12
Lone parent + 2	38	8	48	6	10	8	66	13	31	30	34	3	14
Couple + 1	4	7	9		5	1	6	5	6	7	5	4	4
Couple + 2	5	4	15		5	1	13	6	9	5	3	6	6
Couple + 3	9	7	20		8	2	22	19	31	7	10	9	13
All	10	11	11	0	5	6	23	11	9	14	4	9	7

POVERTY RATES AFTER HOUSING COSTS USING SOCIAL ASSISTANCE LEVEL + 10 % THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	22	31	30		16	15	27	6	23	44	10	38	19
Couple	8	16	17		7	3	12	6	10	11	4	20	7
Retired single	25	39	8	1	5	24	65	33	9	53	6	7	32
Retired couple	13	42	9	1	2	17	14	17	6	33	4	11	17
Lone parent+1	48	45	65		21	20	59	11	30	58	37	28	48
Lone parent + 2	47	54	75	6	14	26	62	21	31	67	42	9	49
Couple + 1	7	21	16	1	8	3	14	7	14	13	9	6	8
Couple + 2	10	14	24	1	7	4	19	10	19	14	5	7	12
Couple + 3	17	14	36	1	12	6	29	27	51	13	15	9	22
All	16	27	20	1	7	11	29	14	17	28	8	11	18

POVERTY RATES BEFORE HOUSING COSTS USING SOCIAL ASSISTANCE LEVEL - 10 % THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	8	8	9		8	4	2	3	3	21	4	19	6
Couple	4	4	7		2	1	4	3	5	3	1	12	2
Retired single	7	5	3	0	3	6	11	7	6	5	3	1	6
Retired couple	5	11	4	0	0	6	5	7	3	6	1	4	3
Lone parent+1	14	4	26		8	3	12	8	5	12	7	15	7
Lone parent + 2	14		27	6	10	5	10	13	31	19	23	3	8
Couple + 1	3	4	7		3	1	2	4	5	5	4	4	2
Couple + 2	3	2	13		4	1	3	4	2	4	3	5	3
Couple + 3	8		16		6	0	8	12	20	4	6	8	5
All	6	5	8	0	3	3	5	5	5	8	3	6	4

POVERTY RATES AFTER HOUSING COSTS USING SOCIAL ASSISTANCE LEVEL - 10 % THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	15	23	24		12	11	9	4	14	37	8	27	14
Couple	6	10	12		4	2	5	4	8	7	4	14	6
Retired single	13	25	5	1	3	13	21	13	6	36	5	4	15
Retired couple	6	22	7	0	1	8	5	9	3	16	3	6	8
Lone parent+1	29	20	52		21	15	48	11	25	39	24	15	34
Lone parent + 2	36	32	59	6	11	19	34	21	31	55	36	9	37
Couple + 1	5	11	11	1	6	2	5	5	8	10	6	6	7
Couple + 2	6	6	18	1	5	2	7	6	9	7	3	5	8
Couple + 3	11	5	26	1	9	3	16	16	30	9	9	9	16
All	9	17	15	1	5	7	12	8	10	19	6	8	11

POVERTY RATES BEFORE HOUSING COSTS USING DENMARK SOCIAL ASSISTANCE THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	11	12	12	34	28	18	35	18	2	21	9	54	15
Couple	12	6	10	38	31	10	17	19	4	5	7	53	9
Retired single	13	7	10	67	58	14	65	35	4	5	6	81	22
Retired couple	31	17	19	82	68	21	61	47	6	26	17	80	42
Lone parent+1	22	4	31	65	38	24	57	21	5	19	27	50	47
Lone parent + 2	35	3	36	51	42	23	76	25	18	33	34	69	57
Couple + 1	12	6	15	45	47	12	31	31	5	14	14	54	17
Couple + 2	12	3	18	42	44	12	26	38	2	13	7	57	20
Couple + 3	14	3	21	43	42	10	36	47	4	12	19	54	25
All	16	8	14	53	47	15	40	33	4	14	10	63	22

POVERTY RATES AFTER HOUSING COSTS USING DENMARK SOCIAL ASSISTANCE THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	20	28	26	43	34	30	39	21	7	36	16	57	37
Couple	16	13	18	40	37	17	21	24	7	11	9	56	14
Retired single	21	34	24	70	62	26	68	40	6	34	14	82	49
Retired couple	36	28	26	83	70	28	62	52	6	43	22	82	49
Lone parent+1	46	31	57	70	41	45	80	39	25	54	45	50	74
Lone parent + 2	47	42	67	51	45	41	79	39	18	67	42	76	76
Couple + 1	21	18	25	49	55	20	35	36	8	32	17	60	26
Couple + 2	18	9	30	46	49	23	32	44	6	32	14	60	30
Couple + 3	24	9	38	46	46	26	43	53	12	34	27	59	38
All	23	22	26	57	52	25	44	38	7	30	16	66	36

POVERTY RATES BEFORE HOUSING COSTS USING PORTUGAL SOCIAL ASSISTANCE THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	4	2	3	14	8	4	1	5		6	4	31	6
Couple	1	0	1	6	3	1	2	3	2	1	1	16	2
Retired single	3	0	1	13	2	1	1	1	2	2	1	2	0
Retired couple	1	0	1	11	0	1	2	1		1	1	5	0
Lone parent+1	3		4	13	8	3	5	8		1	4	20	4
Lone parent + 2	6		7	21	10	1	5	13		11	4	3	1
Couple + 1	1	0	1	2	3	0	0	3		1	0	4	1
Couple + 2	1		3	3	3	0	1	3		3	1	6	2
Couple + 3	3		4	4	5		4	8		1	2	9	
All	2	1	2	8	3	1	2	3	1	2	2	8	2

POVERTY RATES AFTER HOUSING COSTS USING PORTUGAL SOCIAL ASSISTANCE THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	7	7	10	20	12	11	3	7	3	15	7	33	14
Couple	2	1	5	7	5	2	3	4	3	2	3	17	5
Retired single	4	2	3	13	2	2	2	2	4	3	1	5	3
Retired couple	1	1	4	11	0	2	2	2		2	1	8	1
Lone parent+1	14	3	11	19	21	9	8	11	5	7	7	28	16
Lone parent + 2	9	1	15	23	11	7	5	21	18	14	18	9	12
Couple + 1	3	2	5	4	6	1	0	4	2	2	3	6	2
Couple + 2	3	2	9	3	5	1	2	4	2	4	2	6	3
Couple + 3	4		11	5	7		5	10		3	6	9	3
All	4	3	6	9	5	3	3	4	2	5	3	10	5

POVERTY RATES BEFORE HOUSING COSTS USING OFFICIAL US POVERTY THRESHOLDS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	16	16	20	42	35	23	42	21	3	28	15	58	25
Couple	7	3	9	25	21	6	13	11	3	3	6	43	6
Retired single	17	10	18	71	69	18	74	46	6	8	10	83	32
Retired couple	10	2	9	57	33	7	11	11	2	5	6	61	13
Lone parent+1	19	4	35	55	37	23	56	21	5	19	27	43	44
Lone parent + 2	16		36	39	41	23	71	25	18	30	34	62	54
Couple + 1	6	1	8	21	26	5	15	14	3	7	6	26	6
Couple + 2	8	2	16	28	34	6	18	25	2	8	5	42	15
Couple + 3	13	2	24	36	41	9	34	46	8	11	19	50	25
All	11	6	15	41	36	12	33	23	3	11	10	48	18

POVERTY RATES AFTER HOUSING COSTS USING OFFICIAL US POVERTY THRESHOLDS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	25	34	34	49	40	39	45	26	12	43	23	61	44
Couple	10	9	15	28	27	12	16	16	6	9	8	47	10
Retired single	27	38	33	75	71	31	74	51	6	44	21	83	57
Retired couple	11	7	13	58	35	11	14	15	2	15	8	63	25
Lone parent+1	45	28	57	61	41	43	79	39	25	54	45	50	74
Lone parent + 2	47	35	65	45	45	39	69	37	18	67	42	62	74
Couple + 1	8	4	14	27	33	10	23	21	4	13	11	33	13
Couple + 2	12	4	25	33	39	17	25	34	6	22	10	48	24
Couple + 3	21	7	39	39	45	22	41	53	15	32	27	53	38
All	17	18	25	45	41	22	38	29	7	26	16	52	32

POVERTY RATES BEFORE HOUSING COSTS US EXPERIMENTAL POVERTY THRESHOLDS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	13	13	17	35	30	20	37	20	3	23	12	54	18
Couple	7	3	9	25	20	6	13	11	3	3	6	43	6
Retired single	15	10	18	70	68	17	74	44	6	7	9	82	30
Retired couple	13	3	10	62	40	11	19	21	3	7	7	65	20
Lone parent+1	22	4	37	62	38	26	59	21	5	22	27	49	51
Lone parent + 2	27		39	46	42	23	76	34	18	46	34	62	57
Couple + 1	7	3	10	26	33	6	19	19	4	9	10	32	8
Couple + 2	8	2	16	29	34	6	19	27	2	8	5	42	15
Couple + 3	12	2	21	34	39	8	33	44	5	10	19	50	25
All	11	6	14	43	38	12	34	25	4	11	9	50	19

SUBJECTIVE POVERTY RATES BEFORE HOUSING COSTS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	35	15	26	84	67	52	38	74	21	24	26	81	29
Couple	7	2	10	33	22	9	11	27	5	3	6	45	7
Retired single	42	6	28	87	72	36	52	79	19	20	24	90	28
Retired couple	7	1	10	52	13	8	12	28	3	5	6	54	8
Lone parent+1	22	2	22	71	46	26	41	56	10	8	27	58	15
Lone parent + 2	9	0	11	48	29	8	21	43	31	22	18	27	6
Couple + 1	4	0	7	18	12	3	7	13	2	2	4	23	3
Couple + 2	3	1	7	10	9	2	3	10	2	4	2	16	4
Couple + 3	2	0	12	8	7	1	5	13	0	3	3	9	3
Total	15	5	16	43	26	19	21	35	8	10	13	41	13

APPENDIX 1: ANALYSIS OF THE ECHP
POVERTY PROFILE TABLES

PROPORTION OF POOR BEFORE HOUSING: BELOW 40 % MEAN

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	18	52	22	10	13	37	8	13	9	51	28	9	15
Couple	11	11	16	8	13	10	9	12	17	8	17	14	11
Retired single	13	19	15	30	9	19	29	16	11	9	16	27	28
Retired couple	22	7	12	34	5	11	8	10	12	6	9	24	13
Lone parent+1	4	3	4	3	2	5	13	4	6	3	4	2	4
Lone parent + 2	4		2	2	2	2	3	3	4	4	5	2	4
Couple + 1	9	5	8	4	17	6	4	15	15	6	10	7	5
Couple + 2	12	3	15	9	28	6	14	19	14	10	6	12	11
Couple + 3	7		5	1	13	3	13	9	12	4	5	4	8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR BEFORE HOUSING: BELOW 50 % MEAN

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	17	40	25	8	8	29	21	12	17	46	25	7	13
Couple	12	12	14	9	9	11	6	8	11	8	13	13	8
Retired single	19	25	22	26	10	20	33	25	13	8	24	23	27
Retired couple	22	11	10	36	22	14	4	12	13	8	10	30	18
Lone parent+1	3	2	5	3	1	5	6	2	5	3	5	1	6
Lone parent + 2	4	1	2	2	2	3	5	2	2	5	3	3	7
Couple + 1	8	5	7	5	14	7	3	12	13	7	9	8	4
Couple + 2	9	3	12	10	25	8	10	18	14	11	7	12	11
Couple + 3	5	3	4	2	9	4	12	10	13	5	5	4	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR BEFORE HOUSING: BELOW 60 % MEAN

	B	DK	D	EL	E	F	IRE	I	L	NL	A	p	UK
Single	15	36	24	9	8	24	16	10	18	33	22	6	13
Couple	12	11	13	8	8	12	5	7	10	9	11	12	8
Retired single	19	26	24	27	17	22	38	28	14	15	26	22	29
Retired couple	21	15	11	33	20	13	8	15	13	12	11	28	18
Lone parent+1	3	2	5	2	1	4	4	2	4	3	4	2	6
Lone parent + 2	5	1	2	1	1	2	3	1	1	4	3	3	6
Couple + 1	8	5	7	6	14	7	6	11	11	6	7	10	5
Couple + 2	11	4	10	12	23	9	10	18	16	12	10	14	11
Couple + 3	6	2	4	2	8	6	10	8	14	6	5	4	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR BEFORE HOUSING: BELOW 40 % MEDIAN

	B	DK	D	EL	E		IRE	I	L	NL	A	P	UK
Single	19	55	21	10	12	41	8	13	13	51	30	8	19
Couple	12	10	17	7	15	11	12	12	22	9	15	21	13
Retired single	16	19	15	34	9	18	26	14	13	10	16	21	27
Retired couple	17	5	12	33	3	9	11	8	9	7	10	19	9
Lone parent+1	5	3	3	1	2	4	4	4	3	2	4	3	4
Lone parent + 2	5		2	2	1	3	2	3	3	4	5	1	4
Couple + 1	9	5	8	4	17	7	5	16	18	5	9	9	6
Couple + 2	12	4	17	7	30	6	12	19	8	11	6	15	12
Couple + 3	6		6	1	12	2	20	11	11	4	6	3	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR BEFORE HOUSING: BELOW 50 % MEDIAN

	B	DK	D	EL	E	F	IRE	1	L	NL	A	P	UK
Single	17	47	24	10	13	32	7	12	18	49	27	9	14
Couple	11	13	15	8	12	11	9	11	15	7	15	15	9
Retired single	19	23	19	30	10	20	28	15	8	8	19	26	27
Retired couple	20	5	11	34	6	13	8	10	9	7	9	24	16
Lone parent+1	3	2	4	2	1	5	15	4	8	2	4	2	5
Lone parent + 2	4	1	2	2	2	3	3	3	3	4	4	2	7
Couple + 1	10	5	7	4	16	6	4	16	11	8	9	7	5
Couple + 2	11	4	13	9	28	6	14	18	12	10	6	12	11
Couple + 3	6	2	5	1	11	4	13	11	17	5	6	4	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR BEFORE HOUSING: BELOW 60 % MEDIAN

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	15	38	24	8	9	27	22	11	17	43	24	7	13
Couple	11	11	13	9	9	12	6	8	11	8	11	13	8
Retired single	18	26	24	26	10	21	27	29	14	8	28	25	27
Retired couple	21	12	10	36	22	13	5	10	12	10	10	28	18
Lone parent+1	3	3	5	3	1	4	7	2	5	2	4	1	6
Lone parent + 2	5	1	2	2	2	2	6	2	2	5	3	2	7
Couple + 1	9	4	7	5	14	7	4	12	12	7	8	8	4
Couple + 2	12	3	11	10	25	9	11	17	14	12	8	13	11
Couple + 3	6	2	4	2	9	5	13	9	14	5	5	4	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR AFTER HOUSING: BELOW 40 % MEAN

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	21	39	30	12	12	33	19	13	28	40	29	8	19
Couple	9	11	13	8	12	11	7	10	13	9	12	13	9
Retired single	15	28	21	28	11	21	19	19	8	17	21	25	27
Retired couple	15	7	8	31	6	8	4	9	6	8	7	23	12
Lone parent+1	4	3	4	3	2	5	13	3	5	3	5	2	7
Lone parent + 2	6	3	2	2	2	3	3	3	2	5	3	2	7
Couple + 1	9	4	7	5	19	7	6	14	14	6	9	10	4
Couple + 2	13	3	10	9	28	8	14	19	11	8	8	14	10
Couple + 3	7	1	4	1	9	5	17	9	13	4	5	3	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR AFTER HOUSING: BELOW 50 % OF THE MEAN

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	17	35	27	10	9	28	20	11	24	32	25	7	17
Couple	10	12	14	9	9	11	6	8	9	9	10	12	8
Retired single	20	27	23	25	12	19	30	23	12	20	27	23	29
Retired couple	18	10	8	32	19	10	4	11	10	10	8	27	15
Lone parent+1	5	5	5	3	1	5	6	2	5	4	5	2	7
Lone parent + 2	5	3	2	2	1	3	3	2	1	4	3	2	6
Couple + 1	8	5	7	6	16	7	6	13	14	5	8	10	5
Couple + 2	11	3	10	11	24	12	12	22	14	12	10	13	10
Couple + 3	6	2	4	2	8	6	12	9	12	5	5	3	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR AFTER HOUSING: BELOW 60 % MEAN

	B	DK	D	EL	E	F	IRE	I	L	NL	A	p	UK
Single	16	33	24	10	8	25	16	9	22	26	25	6	16
Couple	11	11	14	9	8	12	6	7	9	9	10	12	9
Retired single	20	23	24	25	17	19	33	25	12	19	26	21	27
Retired couple	18	11	9	30	18	11	7	13	10	12	10	26	16
Lone parent+1	4	5	4	2	1	5	6	2	4	3	4	2	6
Lone parent + 2	5	3	2	1	1	2	3	2	1	3	3	2	5
Couple + 1	9	6	7	7	16	7	7	13	16	7	6	12	5
Couple + 2	12	5	11	13	23	12	12	21	15	15	11	15	11
Couple + 3	6	3	4	2	7	7	11	8	11	6	5	4	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR AFTER HOUSING: BELOW 40 % MEDIAN

	B	DK	D	EL	E		IRE	I	L	NL	A	P	UK
Single	21	44	31	13	13	36	15	13	29	45	31	9	21
Couple	9	12	13	8	13	11	10	11	16	9	13	16	11
Retired single	16	28	20	32	9	18	18	19	7	13	18	23	22
Retired couple	12	5	8	31	3	7	7	9	5	7	7	17	9
Lone parent+1	5	3	4	2	2	5	11	2	7	3	5	2	9
Lone parent + 2	7	1	2	2	2	4	4	4	2	4	3	2	7
Couple + 1	10	3	7	5	19	7	6	14	13	7	10	12	6
Couple + 2	13	3	11	8	28	8	13	18	10	9	8	14	10
Couple + 3	6	1	4	1	10	4	15	10	11	4	5	4	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR AFTER HOUSING: BELOW 50 % MEDIAN

	B	DK	D	EL	E	F	IRE	1	L	NL	A	P	UK
Single	19	37	27	12	12	29	18	12	28	35	28	8	18
Couple	10	11	14	9	11	11	7	9	13	9	11	14	8
Retired single	20	28	23	28	12	20	20	18	7	20	24	24	29
Retired couple	16	7	8	31	6	10	4	10	7	9	8	23	13
Lone parent+1	4	5	5	2	2	5	12	3	5	3	5	2	7
Lone parent + 2	5	3	2	2	2	3	2	3	2	5	3	2	6
Couple + 1	9	5	6	6	19	6	5	15	13	6	8	10	4
Couple + 2	11	3	11	9	27	10	14	21	12	9	9	14	10
Couple + 3	6	2	4	1	10	5	17	10	14	4	5	3	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR AFTER HOUSING: BELOW 60 % MEDIAN

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	16	34	26	10	9	27	21	11	24	31	25	7	16
Couple	11	11	14	9	9	11	6	8	9	9	10	12	8
Retired single	19	25	23	25	12	19	28	26	12	20	27	23	28
Retired couple	18	10	9	32	19	10	4	11	9	10	9	26	15
Lone parent+1	4	5	5	3	1	5	6	2	5	3	4	2	6
Lone parent + 2	5	3	2	2	1	2	4	2	1	4	3	2	6
Couple + 1	9	5	7	6	16	7	6	13	13	6	7	10	5
Couple + 2	13	4	10	12	24	12	12	21	14	12	11	14	10
Couple + 3	6	2	4	2	8	6	13	8	12	5	5	3	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR BEFORE HOUSING WITH SOCIAL ASSISTANCE THRESHOLDS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	22	34	28	15	20	21	3	5	12	51	26	21	15
Couple	11	15	18	58	11	5	4	8	16	9	9	27	10
Retired single	22	11	7		10	29	49	30	8	10	17	3	32
Retired couple	16	25	7		4	31	5	21	6	9	6	12	12
Lone parent+1	6	2	8		2	4	8	2	8	4	7	4	4
Lone parent + 2	5	1	4	27	2	2	5	2	3	4	9	1	5
Couple + 1	8	9	8		20	3	3	11	12	6	11	12	4
Couple + 2	10	4	15		24	3	10	13	15	7	8	16	11
Couple + 3	6	1	5		9	2	14	8	20	2	6	4	8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR AFTER HOUSING WITH SOCIAL ASSISTANCE THRESHOLDS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	23	29	34		19	27	10	5	28	36	30	18	16
Couple	8	13	17		11	5	5	7	13	10	13	23	10
Retired single	18	20	7	12	9	28	40	31	4	23	15	6	26
Retired couple	10	15	5	28	3	20	4	20	3	12	5	16	10
Lone parent+1	8	5	8		3	6	7	2	5	4	10	5	10
Lone parent + 2	9	3	4	10	2	4	4	3	2	4	7	2	8
Couple + 1	7	10	8	19	19	4	5	10	13	4	10	14	5
Couple + 2	10	4	13	28	24	4	12	14	14	5	6	13	10
Couple + 3	6	1	5	3	10	3	13	9	19	2	5	3	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF POOR BEFORE HOUSING COSTS USING SOCIAL ASSISTANCE LEVEL + 10 %

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	19	29	31		21	22	13	5	19	43	24	21	12
Couple	9	13	17		13	5	5	6	14	8	11	27	8
Retired single	21	13	7	13	9	32	46	41	6	17	16	5	32
Retired couple	18	28	7	64	4	29	5	20	8	12	5	15	14
Lone parent+1	6	2	8		2	4	5	2	7	4	9	4	5
Lone parent + 2	9	1	4	23	2	2	4	2	3	3	9	1	5
Couple + 1	6	7	8		16	2	3	8	9	5	11	11	5
Couple + 2	8	4	14		24	3	10	10	15	6	7	14	11
Couple + 3	5	2	5		9	2	11	8	19	3	7	4	8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF THE POOR AFTER HOUSING COSTS USING SOCIAL ASSISTANCE LEVEL + 10 %

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	21	26	33		19	25	14	5	27	33	28	18	14
Couple	8	13	18		12	5	5	6	11	10	11	23	8
Retired single	22	19	7	11	10	31	39	36	5	24	14	7	30
Retired couple	13	18	6	32	3	20	5	20	4	13	5	17	13
Lone parent+1	7	6	7		2	5	6	1	4	4	10	4	9
Lone parent + 2	7	3	3	10	2	3	3	2	1	3	6	2	7
Couple + 1	7	9	8	18	18	4	5	8	13	4	11	13	5
Couple + 2	10	5	13	26	24	5	12	14	17	7	8	13	9
Couple + 3	6	2	5	3	9	3	11	9	17	2	6	3	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF THE POOR BEFORE HOUSING COSTS USING SOCIAL ASSISTANCE LEVEL - 10 %

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	21	35	26		21	25	6	7	11	54	29	17	19
Couple	12	15	19		9	6	9	9	20	8	9	27	12
Retired single	17	12	6	31	11	30	37	21	11	8	17	3	26
Retired couple	15	22	7	12	2	26	8	21	7	8	4	12	10
Lone parent+1	6	3	8		2	3	6	3	3	3	5	4	5
Lone parent + 2	6		3	57	3	3	3	3	5	3	8	1	5
Couple + 1	8	9	9		17	4	5	11	15	5	13	14	4
Couple + 2	8	4	17		26	4	10	16	7	8	10	18	12
Couple + 3	7		6		10	0	17	10	23	3	6	5	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF THE POOR AFTER HOUSING COSTS USING SOCIAL ASSISTANCE LEVEL - 10 %

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	24	32	35		21	30	11	7	27	39	28	18	17
Couple	9	13	16		9	5	6	8	15	9	14	23	11
Retired single	18	20	6	15	9	28	32	26	6	23	16	6	22
Retired couple	10	15	6	7	2	16	4	19	3	9	5	14	10
Lone parent+1	7	4	8		3	6	11	2	6	4	9	3	9
Lone parent + 2	9	3	4	14	2	4	4	4	2	4	7	2	8
Couple + 1	7	8	8	24	20	4	5	11	12	4	10	17	6
Couple + 2	10	4	13	36	25	5	10	15	13	5	6	14	9
Couple + 3	6	1	5	4	10	3	16	9	17	2	5	4	7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF THE POOR BEFORE HOUSING COSTS USING PORTUGAL SOCIAL ASSISTANCE LEVEL

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	31	73	38	19	22	53	11	20		48	56	21	47
Couple	10	9	14	11	13	9	11	16	59	10	17	27	20
Retired single	19	9	8	25	7	14	14	7	41	10	5	3	4
Retired couple	5	3	6	27	1	13	11	3		3	6	12	2
Lone parent+1	4		4	3	2	5	8	5		1	5	4	9
Lone parent + 2	7		3	3	3	1	4	6		6	2	1	2
Couple + 1	10	7	6	4	17	3	2	15		3	3	12	3
Couple + 2	8		15	7	26	2	11	17		17	3	16	13
Couple + 3	7		6	2	9		27	12		3	3	4	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF THE POOR AFTER HOUSING COSTS USING CORRESPONDING PORTUGAL SOCIAL ASSISTANCE LEVEL

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	29	63	35	22	22	59	16	21	23	56	41	18	36
Couple	10	7	17	11	14	8	12	14	25	10	17	23	20
Retired single	15	9	7	22	6	10	15	7	16	7	6	6	8
Retired couple	4	3	7	24	0	8	8	6		4	3	16	3
Lone parent+1	8	4	4	4	4	7	8	4	6	3	5	5	10
Lone parent + 2	5	0	2	3	2	3	3	7	6	4	6	2	6
Couple + 1	13	7	8	6	20	4	2	15	12	4	9	14	4
Couple + 2	11	7	15	7	25	2	13	16	12	10	8	13	9
Couple + 3	5		5	2	8		23	10		3	6	3	3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF THE POOR BEFORE HOUSING COSTS USING DENMARK SOCIAL ASSISTANCE LEVEL

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	11	34	18	7	5	22	14	7	9	31	19	5	9
Couple	12	15	15	10	8	13	6	8	21	9	15	11	9
Retired single	11	11	13	19	17	14	29	17	11	5	11	15	17
Retired couple	30	25	17	30	24	19	15	23	18	21	17	24	26
Lone parent+1	3	2	5	2	1	5	4	1	3	3	6	1	7
Lone parent + 2	5	1	2	1	1	2	3	1	4	3	4	2	7
Couple + 1	11	9	11	12	17	11	8	16	20	9	14	20	7
Couple + 2	11	4	14	17	23	11	12	21	9	14	8	19	13
Couple + 3	5	1	4	3	5	4	10	6	5	4	6	3	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF THE POOR AFTER HOUSING COSTS USING DENMARK SOCIAL ASSISTANCE LEVEL

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	13	29	22	8	6	22	14	7	19	24	22	5	14
Couple	11	13	15	10	9	12	6	9	18	9	12	11	9
Retired single	13	20	17	19	16	15	27	16	8	14	16	15	23
Retired couple	24	15	13	29	22	15	13	22	10	15	14	23	19
Lone parent+1	4	5	5	2	1	5	5	2	8	3	6	1	7
Lone parent + 2	5	3	2	1	1	2	3	1	2	3	3	2	6
Couple + 1	13	10	10	12	18	10	9	16	16	9	11	21	7
Couple + 2	12	4	12	17	23	13	13	21	11	16	11	19	12
Couple + 3	6	1	4	3	5	6	11	6	9	5	6	3	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF THE POOR BEFORE HOUSING COSTS USING US POVERTY THRESHOLDS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	22	58	30	11	8	36	19	11	16	51	32	7	18
Couple	10	9	12	8	7	10	5	7	17	7	14	12	8
Retired single	21	21	22	26	26	22	39	31	17	8	19	20	29
Retired couple	14	3	7	27	15	8	3	8	6	5	6	24	10
Lone parent+1	4	2	5	2	1	6	5	2	4	3	6	2	8
Lone parent + 2	3		2	1	1	3	3	1	4	4	4	2	8
Couple + 1	8	2	5	7	13	5	5	11	13	6	7	12	3
Couple + 2	11	4	11	15	23	7	10	20	10	11	6	18	11
Couple + 3	6	1	5	3	7	4	11	9	13	5	6	4	7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF THE POOR AFTER HOUSING COSTS USING US POVERTY THRESHOLDS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	22	43	29	11	9	33	18	11	33	34	31	6	19
Couple	9	10	13	8	8	10	6	8	15	8	10	12	7
Retired single	22	28	23	25	24	21	34	27	8	21	24	19	30
Retired couple	10	4	6	26	14	6	4	8	3	6	5	22	11
Lone parent+1	6	5	5	2	1	6	6	2	8	4	6	2	7
Lone parent + 2	7	3	2	1	1	3	3	2	2	4	3	2	6
Couple + 1	7	3	6	8	14	6	7	13	8	5	7	14	4
Couple + 2	11	3	10	15	23	11	12	22	11	12	7	20	11
Couple + 3	7	1	5	3	6	6	12	8	12	6	6	4	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

PROPORTION OF THE POOR BEFORE HOUSING COSTS EXPERIMENTAL US POVERTY THRESHOLDS

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	17	50	25	9	7	31	17	10	16	45	27	6	13
Couple	10	10	13	8	7	10	5	6	17	8	15	11	7
Retired single	19	22	22	26	24	21	38	27	16	8	17	19	27
Retired couple	18	5	9	29	18	12	5	14	9	7	8	24	15
Lone parent+1	4	2	6	3	1	6	5	1	4	4	6	2	9
Lone parent + 2	6		2	1	1	3	3	2	4	6	4	2	8
Couple + 1	9	6	8	8	15	6	6	13	17	8	11	14	4
Couple + 2	11	4	12	15	22	7	10	20	10	11	7	18	11
Couple + 3	6	1	4	3	6	4	11	8	8	4	6	4	7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

POVERTY PROFILE BEFORE HOUSING COSTS USING SUBJECTIVE POVERTY THRESHOLD

	B	DK	D	EL	E	F	IRE	I	L	NL	A	P	UK
Single	34	70	35	20	22	50	28	25	49	48	42	10	30
Couple	7	10	12	10	11	9	7	11	12	8	9	14	12
Retired single	39	15	31	31	38	27	44	34	22	25	34	26	36
Retired couple	8	1	7	24	9	6	6	13	4	6	5	25	8
Lone parent+1	3	1	3	3	1	4	5	2	3	1	4	2	4
Lone parent + 2	1	0	1	1	1	1	2	2	3	3	2	1	1
Couple + 1	4	1	4	6	8	2	4	6	3	2	3	13	2
Couple + 2	3	2	5	5	8	1	2	5	4	5	2	8	5
Couple + 3	1	0	2	1	2	0	3	2	0	1	1	1	1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

APPENDIX 2: HBS ANALYSIS

Relative Poverty Measures

POVERTY RATES 40 PER CENT OF MEAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	3	4	3	[6]	[8]	5	8	5	[3]	[1]	6	14	4	2	6
Couple	0.3	1	1	6	[2]	1	3	4	[2]	0	5	12	1	0	2
Retired single	3	2	7	26	[12]	9	16	16	[5]	[5]	22	42	6	5	12
Retired couple	1	1	2	21	[9]	3	5	14	[3]	[2]	14	34	2	1	5
Lone parent + 1	3	2	5	[3]	0	3	17	0	[7]	0	9	16	1	0	[10]
Lone parent + 2	3	2	6	0	0	10	27	0	[10]	0	3	12	0	0	25
Couple + 1	3	0.4	1	[4]	[1]	3	3	3	[5]	0	6	9	0.2	1	[6]
Couple + 2	1	1	2	5	[4]	2	4	6	[5]	[1]	4	8	1	1	4
Couple + 3	3	0	4	[9]	0	8	7	0	[12]	[1]	4	27	0.4	1	[9]
Total	2	2	3	11	6	4	8	8	4	[1]	9	23	3	1	6

[ ] = number less than 30

POVERTY PROPORTIONS 40 PER CENT OF MEAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	33	58	25	[6]	[9]	27	16	10	[20]	[19]	12	4	46	56	16
Couple	4	11	5	9	[6]	4	5	8	[7]	0	11	8	4	0	[5]
Retired single	23	19	40	29	[30]	34	39	38	[15]	[49]	36	33	36	22	31
Retired couple	4	4	8	38	[32]	12	7	28	[7]	[14]	25	40	9	7	10
Lone parent + 1	4	2	4	[0.2]	0	2	5	0	[4]	0	2	1	1	0	[5]
Lone parent + 2	4	1	2	0	0	2	7	0	[2]	0	[0.3]	[0.2]	0	0	11
Couple + 1	18	2	3	[5]	[5]	6	3	6	[18]	0	7	6	1	3	[8]
Couple + 2	4	2	8	10	[18]	5	8	11	[16]	[12]	5	4	2	8.0	9
Couple + 3	7	0	3	[3]	0	8	10	0	[13]	[5]	1	3	[0.5]	3	[6]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] = number less than 30

POVERTY RATES 50 PER CENT OF MEAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	9	11	10	10	[14]	12	16	10	10	7	15	23	11	5	11
Couple	3	2	3	14	[5]	3	7	9	[4]	[1]	12	20	3	1	3
Retired single	9	9	16	41	18	20	30	30	[9]	[12]	33	56	20	6	20
Retired couple	4	5	8	36	21	10	14	26	[9]	[4]	23	45	8	4	11
Lone parent + 1	8	9	13	[7]	0	9	39	0	[13]	0	13	37	1	2	21
Lone parent + 2	15	7	20	12	0	11	43	0	[10]	0	16	41	0	14	37
Couple + 1	6	1	5	9	[5]	6	10	9	[10]	[1]	9	16	3	2	8
Couple + 2	3	2	8	13	[8]	7	10	13	13	[6]	9	13	2	2	9
Couple + 3	5	2	12	19	0	15	15	0	[21]	[7]	14	35	4	3	15
Total	6	6	9	20	12	11	16	17	10	5	17	33	8	3	11

[ ] = number less than 30

POVERTY PROPORTION 50 PER CENT OF MEAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	26	50	26	6	[8]	26	15	10	25	[34]	15	5	39	54	18
Couple	9	6	9	11	[6]	5	6	9	[7]	[5]	14	9	6	3	5
Retired single	23	25	31	25	24	33	3	35	[12]	[28]	30	32	38	11	28
Retired couple	9	9	10	35	37	15	10	26	[8]	[10]	23	37	9	14	13
Lone parent + 1	3	4	3	[0.2]	0	2	6	0	[3]	0	2	1	[0.4]	2	6
Lone parent + 2	5	1	2	[0.4]	0	1	5	0	[1]	0	1	1	0	4	9
Couple + 1	13	1	6	6	[8]	5	6	8	[14]	[2]	6	7	3	4	6
Couple + 2	6	3	9	13	[17]	8	10	12	19	[14]	6	5	3	6	9
Couple + 3	4	1	4	4	0	6	11	0	[10]	[7]	2	3	2	3	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] = number less than 30

POVERTY RATES 60 PER CENT OF MEAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	14	18	19	16	[15]	22	27	18	16	15	23	33	20	13	20
Couple	7	6	9	23	[10]	8	11	17	[9]	[5]	19	27	7	3	8
Retired single	14	20	29	52	28	35	46	44	20	29	42	64	33	18	41
Retired couple	12	14	17	47	30	19	27	39	21	[14]	32	55	18	12	29
Lone parent + 1	24	17	26	[14]	0	19	52	0	[15]	[22]	23	41	6	9	41
Lone parent + 2	32	29	36	[20]	0	32	52	0	[16]	[12]	26	54	7	16	53
Couple + 1	11	5	13	16	[9]	13	15	17	20	[10]	15	23	7	5	15
Couple + 2	8	6	18	22	14	16	17	25	24	[11]	16	20	6	8	18
Couple + 3	10	11	23	33	0	23	24	0	[32]	[18]	25	49	9	10	31
Total	12	13	18	30	18	20	26	27	18	14	25	42	16	10	23

[ ] = number less than 30

POVERTY PROPORTION 60 PER CENT OF MEAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	20	38	24	7	[5]	25	16	11	22	27	16	6	37	48	16
Couple	12	9	11	13	[8]	6	6	10	[8]	[8]	15	9	9	7	7
Retired single	19	25	27	21	24	30	32	31	13	27	26	29	32	10	29
Retired couple	13	11	11	32	34	15	11	24	10	[12]	22	37	11	16	16
Lone parent + 1	5	4	3	[0.3]	0	2	5	0	[2]	[2]	2	1	1	2	5
Lone parent + 2	5	3	2	[0.4]	0	1	4	0	[1]	[0.4]	1	1	[0.4]	1	6
Couple + 1	11	3	8	7	[10]	6	6	10	16	[6]	7	8	4	4	5
Couple + 2	9	5	11	15	19	9	11	14	19	[10]	8	6	4	8	10
Couple + 3	4	2	4	4	0	5	10	0	8	[7]	3	3	2	3	6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] = number less than 30

POVERTY RATES 40 PER CENT OF MEDIAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	2	2	2	[2]	[7]	3	4	2	[1]	[1]	4	8	2	0	[1]
Couple	0.3	1	0.3	[3]	[2]	0.3	2	2	[2]	0	3	7	0.3	0	[0.3]
Retired single	2	1	4	18	[8]	4	10	8	[2]	[5]	16	29	5	3	[2]
Retired couple	0.2	0.2	1	12	[6]	2	3	7	[1]	[2]	9	19	1	0	[1]
Lone parent + 1	3	0	2	0	0	0	10	0	0	0	5	8	0	0	[2]
Lone parent + 2	3	0	4	0	0	5	21	0	[10]	0	0	11	0	0	[6]
Couple + 1	2	0	0.4	[2]	[1]	1	2	1	[4]	0	3	4	0	0	[1]
Couple + 2	1	0	1	[2]	[1]	2	2	2	[2]	[1]	2	5	0.4	0.4	[1]
Couple + 3	2	0	2	[5]	0	5	3	0	[6]	0	2	9	0	0	[3]
Total	1	1	1	6	4	2	4	4	[1]	[1]	6	14	1	0	1

[ ] = number less than 30

POVERTY PROPORTION 40 PER CENT OF MEDIAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	28	62	24	[5]	[11]	27	15	9	[15]	[16]	11	4	34	38	[17]
Couple	4	18	4	[8]	[7]	2	5	8	[13]	0	10	7	4	0	[5]
Retired single	25	18	44	34	[33]	32	42	40	[11]	[57]	42	39	52	48	[24]
Retired couple	2	2	6	38	[34]	16	7	29	[5]	[16]	45	38	7	0	[10]
Lone parent + 1	5	0	3	0	0	0	5	0	0	0	2	1	0	0	[5]
Lone parent + 2	5	0	2	0	0	2	9	0	[4]	0	0	0.4	0	0	[12]
Couple + 1	16	0	3	[5]	[6]	5	3	5	[28]	0	7	4	0	0	[6]
Couple + 2	6	0	10	[7]	[9]	8	7	9	[12]	[11]	3	4	3	14	[12]
Couple + 3	9	0	4	[3]	0	9	7	0	[13]	0	1	2.0	0	0	[9]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] = number less than 30

POVERTY RATE 50 PER CENT OF MEDIAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	6	7	6	[6]	[11]	7	10	5	7	[3]	9	11	7	3	4
Couple	1	1	2	6	[4]	2	4	4	[3]	[1]	7	11	2	1	[1]
Retired single	6	4	10	27	[13]	13	19	17	[6]	[7]	25	39	14	5	10
Retired couple	2	2	4	22	14	6	7	15	[5]	[3]	18	31	5	1	4
Lone parent + 1	5	3	8	[3]	0	6	27	0	[9]	0	10	12	1	1	[10]
Lone parent + 2	14	5	12	0	0	10	33	0	[10]	0	8	12	0	5	22
Couple + 1	4	1	2.0	4	[2]	4	5	3	[7]	[1]	7	7	1	1	[4]
Couple + 2	1.0	1	4	6	[5]	4	6	6	[10]	[3]	5	6	1	1	[4]
Couple + 3	4	2	7.0	[10]	0	11	10	0	[14]	[3]	6	22	2	1	[8]
Total	4	3	5	11	8	7	10	9	7	3	12	21	6	2	5

[ ] = number less than 30

POVERTY PROPORTION 50 PER CENT OF MEDIAN

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	26	56	27	[6]	[9]	24	16	10	24	[24]	14	4	38	54	15
Couple	7	6	7	8	[7]	4	5	7	[7]	[6]	12	8	7	6	[6]
Retired single	25	20	33	29	[26]	35	35	38	[11]	[33]	33	35	39	15	31
Retired couple	9	7	9	38	[39]	14	8	28	[7]	[11]	25	40	9	9	10
Lone parent + 1	3	3	4	0	0	2	6	0	[3]	0	2	1	1.0	1	[5]
Lone parent + 2	7	2.0	3.0	[0.2]	0	1	6	0	[1]	0	1.0	0.3	0	2	12
Couple + 1	12	2	5.0	[5]	[4]	5	5	6	[15]	[4]	7	5	2	3	[6]
Couple + 2	5.0	3	9	10	[15]	6	9	11	[21]	[15]	5	4	2	7.0	[9]
Couple + 3	6	1	4	3	0	7	11	0	[10]	[6]	2.0	3	1	3	[6]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] = number less than 30

Appendix 3: HBS ANALYSIS
"Constrained-Expenditure" Approach

POVERTY RATES BY HOUSEHOLD TYPE: LESS THAN 25% OF EXPENDITURE ON NON-NECESSITIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	15	9	4	31	37	11	19	24	10	[3]	10	32	12	5	16
Couple	3	2	1	31	18	6	4	15	[3]	[0.5]	6	29	4	4	[2]
Retired single	20	34	19	76	67	38	43	59	27	18	30	60	48	33	40
Retired couple	8	15	6	62	53	17	20	44	[13]	[8]	22	53	28	16	15
Lone parent + 1	27	9	6	[34]	0	7	21	0	[3]	0	10	35	7	24	21
Lone parent + 2	16	16	5	[48]	0	10	13	0	[5]	0	23	27	11	24	[18]
Couple + 1	3	2	1	22	[11]	2	3	11	[3]	0	11	13	4	3	[3]
Couple + 2	1	1	1	26	[9]	3	3	13	[3]	[0.2]	7	15	2	4	[2]
Couple + 3	2	0	2	30	0	3	6	0	[4]	0	13	28	1	4	[6]
Total	9	11	6	41	30	14	16	29	9	4	14	37	16	8	14

[ ]=number less than 30

POVERTY PROPORTIONS BY HOUSEHOLD TYPE: LESS THAN 25% OF EXPENDITURE ON NON-NECESSITIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	28	23	18	10	8	19	19	14	[29]	[18]	12	6	24	23	21
Couple	6	3	6	12	9	6	4	9	[6]	[2]	9	11	6	10	[4]
Retired single	35	53	57	23	33	48	50	39	37	58	32	30	48	23	47
Retired couple	12	15	12	30	36	20	14	25	[13]	[21]	26	39	17	26	14
Lone parent + 1	7	2	3	[1]	0	1	3	0	[1]	0	2	1	1	6	[5]
Lone parent + 2	3	2	1	[1]	0	1	2	0	[0.5]	0	1	0.3	1	3	[4]
Couple + 1	4	1	1	7	7	1	2	6	[6]	0	9	5	2	2	[2]
Couple + 2	1	1	2	13	7	2	3	7	[5]	[1]	6	5	1	5	[2]
Couple + 3	1	0	1	3	0	1	4	0	[2]	0	3	2	0.3	1	[2]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ]=number less than 30

POVERTY RATES BY HOUSEHOLD TYPE: SPENDING NOTHING ON LUXURIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	3	2	0.2	16	[7]	5	6	8	[1]	0	2	15	2	0	[1]
Couple	0.2	1	0.1	10	[1]	2	1	5	0	0	2	12	0.2	0	[0.1]
Retired single	4	10	2	57	22	16	16	23	0	0	9	39	2	0	[3]
Retired couple	1	2	0.3	19	[4]	6	3	12	0	0	6	24	0	0	[1]
Lone parent + 1	0	0	0.3	[14]	0	1	14	0	0	0	0.2	9	4	0	[1]
Lone parent + 2	0	2	1	[20]	0	2	8	0	0	0	0	19	0	0	[3]
Couple + 1	0	0	0	[4]	0	1	0.4	3	[0.3]	0	3	4	0	0	[0.4]
Couple + 2	0.3	1	0	5	0	0.1	1	4	0	0	1	5	0	0	[0.3]
Couple + 3	0	0	0	[9]	0	0.3	1	0	0	0	2	6	0	0	[0.4]
Total	1	2	0.4	17	5	5	5	10	[0.3]	0	4	18	1	0	1

[ ]=number less than 30

POVERTY PROPORTIONS BY HOUSEHOLD TYPE: SPENDING NOTHING ON LUXURIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	42	17	15	12	[9]	22	19	14	[84]	0	10	6	63	0	[22]
Couple	2	6	4	10	[3]	5	3	8	0	0	10	9	3	0	[2]
Retired single	46	64	68	43	70	53	57	45	0	0	38	40	25	0	[47]
Retired couple	7	10	9	22	[18]	17	7	21	0	0	27	36	0	0	[9]
Lone parent + 1	0	0	2	[1]	0	0.4	6	0	0	0	0.1	1	9	0	[3]
Lone parent + 2	0	1	2	[1]	0	0.3	3	0	0	0	0	0.5	0	0	[9]
Couple + 1	0	0	1	[3]	0	2	1	6	[16]	0	10	3	0	0	[3]
Couple + 2	3	2	0	[7]	0	0.3	2	6	0	0	4	3	0	0	[3]
Couple + 3	0	0	0	[2]	0	0.3	2	0	0	0	2	1	0	0	[2]
Total	100	100	100	100	100	100	100	100	100	0	100	100	100	0	100

[ ]=number less than 30

POVERTY RATES BY HOUSEHOLD TYPE: SPENDING 10% ON LUXURIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	45	43	26	58	47	40	59	52	22	31	47	41	37	23	36
Couple	28	38	21	78	41	40	51	57	20	23	45	55	31	20	19
Retired single	55	68	43	93	80	65	83	78	46	55	67	69	63	47	65
Retired couple	43	58	32	89	73	55	77	77	30	40	68	72	60	44	44
Lone parent + 1	43	54	34	[86]	0	45	80	0	[35]	[32]	60	57	48	41	48
Lone parent + 2	52	71	39	[92]	0	32	77	0	[61]	[33]	83	43	25	53	53
Couple + 1	29	44	24	71	39	32	54	59	29	29	55	36	33	23	25
Couple + 2	21	43	25	80	36	30	52	64	26	34	53	38	33	27	21
Couple + 3	28	41	34	81	0	29	56	0	[28]	[30]	62	49	26	29	28
Total	29	42	24	48	25	31	37	37	18	29	40	30	34	20	28

[ ] =number less than 30

POVERTY PROPORTIONS BY HOUSEHOLD TYPE: SPENDING 10% ON LUXURIES

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Single	20	25	21	9	6	21	15	13	19	23	15	6	27	30	19
Couple	15	17	16	16	12	14	10	15	11	16	16	14	14	16	11
Retired single	23	23	25	14	23	25	24	23	20	21	18	23	24	10	30
Retired couple	15	12	13	22	29	20	14	19	10	13	21	35	14	20	16
Lone parent + 1	3	3	3	[1]	0	2	3	0	[3]	[1]	3	1	3	3	4
Lone parent + 2	3	2	1	[1]	0	1	2	0	[2]	[0.5]	1	0.4	1	2	4
Couple + 1	9	8	9	12	14	6	8	14	16	7	12	10	7	6	6
Couple + 2	7	8	9	21	17	8	13	15	14	13	12	8	8	9	7
Couple + 3	4	2	3	4	0	3	10	0	[5]	[5]	3	2	2	3	3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[ ] =number less than 30