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In the field of income, poverty, social exclusion and living conditions, the EU Statistics on Income and Living Conditions (EU-SILC) is the main source for statistical data at European level.

Over the last years, important progress has been achieved in EU-SILC as a result of the coordinated work of Eurostat and NSIs.

In June 2010, the European Council adopted a social inclusion target as part of the Europe 2020 Strategy: to lift at least 20 million people in the EU from the risk of poverty and exclusion by 2020. To monitor progress towards this target, the 'Employment, Social Policy, Health and Consumer Affairs' (EPSCO) EU Council of Ministers agreed on an 'at risk of poverty or social exclusion' indicator. To reflect the multidimensional nature of poverty and social exclusion, this indicator consists of three sub-indicators: i) at-risk-of-poverty (i.e. low income); ii) severe material deprivation; and iii) living in very low work intensity households.

In this context, the Second Network for the Analysis of EU-SILC (Net-SILC2) is bringing together National Statistical Institutes (NSIs) and academic expertise at international level in order to carry out in-depth methodological work and socio-economic analysis, to develop common production tools for the whole European Statistical System (ESS) as well as to ensure the overall scientific organisation of the third and fourth EU-SILC conferences. The current working paper is one of the outputs of the work of Net-SILC2. It was presented at the third EU-SILC conference (Vienna, December 2012), which was jointly organised by Eurostat and Net-SILC2 and hosted by Statistics Austria.

It should be stressed that this methodological paper does not in any way represent the views of Eurostat, the European Commission or the European Union. This is independent research which the authors have contributed in a strictly personal capacity and not as representatives of any Government or official body. Thus they have been free to express their own views and to take full responsibility both for the judgments made about past and current policy and for the recommendations for future policy.

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Eurostat databases are also available at this address, as are tables with the most frequently used and requested short- and long-term indicators.

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Household composition, poverty and hardship across Europe

Maria IACOVOU ([1])

Abstract: This paper examines the relationship between household composition and several measures of income sufficiency, including two measures of relative poverty and two measures of subjective hardship. Data from the European Union Statistics on Income and Living Conditions (EU-SILC) are used to calculate the risk of poverty and hardship by household type for all countries in the EU. We find that whereas the importance of different household types varies greatly between countries, the same household types are at the highest risk of poverty and hardship in virtually all countries: lone parents, single elderly people, and other single-adult households. However, while these at-risk groups account for a majority of the poor population across Northern and Western Europe, they account for only a minority of the poor population across Eastern and Southern Europe.

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1. Introduction

This paper examines the relationship between household composition and a range of measures of the sufficiency, or otherwise, of people's incomes. The link between household structure and the risk of poverty has been documented in a range of studies (Bane and Ellwood, 1986), with particular attention paid to vulnerable groups, including families with children (Bradbury and Jantti, 1999); young adults (Aassve et al, 2007) and older people (Rendall and Speare, 1995). However, these studies tend to be restricted to subgroups in society; no study has attempted to document the relationship between household structure and income sufficiency across a wide range of household types, and across all 27 countries of the post-2007 European Union. That is the aim of this paper.

Both household composition and income sufficiency have been the subject of extensive study in their own right. Incomes and poverty rates, in particular, have received a great deal of attention: a large number of studies have documented the ways in which income levels vary across Europe, with particular attention paid to inequality; the incidence of poverty and low income; and the incomes of individuals who are statistically at higher than average risk of poverty, including most particularly children, the elderly, and lone parents. These studies typically find wide disparities in income across Europe, with incomes across Southern and much of Eastern Europe substantially lower than across most of North-Western Europe, and with income dispersions (and hence, relative poverty rates) typically lower in the Nordic countries and parts of Eastern Europe, than in many Southern European countries. These are stylised generalities which cannot hope to do justice to the large and insightful literature in the area of incomes and poverty; we will refer to several studies individually in the course of the discussion which follows.

A somewhat smaller literature (Iacovou, 2004; Tomassini et al, 2004; Andersson, 2004; Robson and Berthoud, 2003; Iacovou and Skew, 2011, Hantrais et al, 2006; Hoem et al, 2009; Gerber, 2009; Mandic, 2008; Liefbroer and Fokkema, 2008; Saraceno, 2008; and others) deals with household composition. As with incomes, substantial variations may be observed across Europe; household sizes are relatively small in Western and particularly Northern Europe, while they tend to be larger in Southern Europe, and particularly large in parts of Eastern Europe. Large households may arise for many reasons: high fertility, late home-leaving among young adults, and high rates of intergenerational co-residence, for example between older people and their adult children. As well as the body of literature describing patterns of household composition, several studies also investigate the reasons why household composition varies between countries, examining a range of cultural and economic factors.

Because living expenses (housing costs, utility bills, food bills, and so on) are likely to be pooled among members of the same household, to some extent at least, there are reasons to believe that living arrangements are likely to be linked to the incidence of poverty and hardship, with the causality running in both directions.

Considering first the ways in which incomes may affect individuals' choices of living arrangements (and therefore the composition of the entire household of which they end up forming a part), we might expect the nature of this effect to differ over the life course. At certain stages, we would expect individuals with fewer means of their own to be more likely to form a household with other people, taking advantage of the opportunity to share household expenses. There is evidence that for some groups in particular this influence is fairly strong; for example, Aassve et al (2005) show that young people with lower incomes are more likely to remain living in the parental home, while a corresponding literature shows that the same is true for elderly people, who are more likely to live with their adult children if their own incomes are smaller.

At other times in the life course, higher individual-level incomes may be associated with a tendency to live in larger households. For example, young adults may choose to delay marriage or cohabitation until such time as they can live in a degree of relative comfort, and couples may delay having children until their incomes are high enough to support a growing family.

Turning now to consider the ways in which living arrangements and household structures may affect people's incomes, the relationship is again not straightforward. Individuals' incomes accrue from a range of sources – labour incomes; private and public pensions; welfare benefits (of which some may be means-

tested); rents, dividends, and transfers. We consider two of these – labour incomes and welfare benefits – which account for a sizeable proportion of people's incomes.

It is welfare benefits which are most obviously affected by living arrangements. Some welfare benefits, for example rent subsidies in some countries, and social assistance in others, are payable to households rather than to individuals; typically, the total amount of these benefits is lower where households live together rather than separately. This may also be the case with other benefits which are paid not to a whole household, but to combinations of individuals living within the household: typically, an equivalence scale is applied to these benefits, so that two adults living in the same household would receive a lower level of support than two adults living separately, to account for the fact that two adults can live more cheaply as a single unit than as two separate units.

Although benefit income is the source of income most obviously affected by living arrangements, it is at least plausible that labour incomes may also be affected; to the extent that such an effect occurred, this would most likely be via effects on effort or hours worked. For example, a man with a partner and four children may feel the need for a higher income than a single man, and may adjust his hours of overtime accordingly; conversely, a young man living with his parents may feel less of an imperative to find a well-paid job than a young man living on his own.

These two examples give an indication of some of the ways in which people's nominal incomes (ie, their cash incomes) may vary as a result of their living arrangements. However, the most important route via which income sufficiency in general, and the risk of poverty in particular, may be affected by living arrangements, arises because of the reduction in per-capita living expenses which comes about when people live together rather than separately. These efficiencies in the pooling of resources are well researched in the academic literature (Forster, 1994; Atkinson et al, 2005), and are factored into income and poverty calculations in the form of equivalence scales, which adjust household income by a factor relating to the needs of household members, and which typically assess the needs of second and subsequent adults living in a household as some fraction of the needs of the first adult in a household. Contemporary poverty analysis (including the analysis in this paper) most commonly uses the modified OECD equivalence scale, which assumes that the second and subsequent adults in a households have needs equal to 0.5 of the needs of the first adult, while children have needs of 0.3 times the needs of the first adult (OECD 1982). Different equivalence scales may lead to different estimates of poverty rates, and often to different poverty rankings between countries, regions and groups of people (Burniax et al 1998). Thus, it is possible that when we compare the incidence of poverty between household types, differences may arise as an artefact of the particular equivalence scale used. It is beyond the scope of this paper to perform the sort of sensitivity analysis which would answer this question definitively. Instead, alongside our analysis of incomes and poverty, we include analysis of two different self-reports of the sufficiency of people's incomes, which are not sensitive to the particular equivalence scale used in income analysis.

2. Data and descriptive statistics

Analysis is based on the European Community Statistics on Income and Living Conditions (EU-SILC), a data set covering all countries of the European Union, plus Norway and Iceland. The EU-SILC is a general-purpose data set, with a particular focus on incomes. The survey is administered annually. In most countries the design takes the form of a four-year rolling panel: a representative sample is selected, each year one quarter of the sample is replaced with a fresh representative sample, while the other three quarters are re-interviewed (either at their existing addresses, or at their new addresses, if they have moved to a new address within their home country). Data are released in both longitudinal and cross-sectional files; the analysis in this paper is based on data from Release 2009-3 of the cross-sectional files.

The use of cross-sectional data is clearly appropriate in this context, but it has one disadvantage, namely that the data on household structures relate to the time of interview (in this case, 2009) while the data on incomes relate to an earlier period, the "income reference period" which in most countries is the previous 12 months, though in some cases relates to the previous calendar year. This causes two problems. Most seriously, where there have been movements in or out of the household, the calculated total income over the past year may not refer to individuals currently living in the household. Even where no movements into or out of the household have occurred, the problem remains that household income relates to a 12-month period, whereas household composition and other variables in the data set relate to a moment in time.

In order to address the first of these problems, many researchers follow a procedure when working with longitudinal data sets, which involves matching incomes collected at time t+1 (but which relate to time t) with other data which are collected at time t and which also refer to the situation at time t (Heuberger, 2003). This is not possible when using the EU-SILC cross-sectional files; incomes for households therefore relate to the incomes of current household members measured over a previous time period.

2.1 Poverty and hardship

Two poverty indicators are used in this paper: the first, which is the standard measure of poverty used by the EU, is an indicator based on whether the equivalised income of the household falls below 60% of the national median. The second is based on a similar methodology, but indicates a more severe level of relative poverty, which may be more pressing from a policy perspective: this is whether the household's income falls below 50% of the national median.

We also use two indicators of hardship, based on the head of household's answers to two questions. The first is as follows:

> 'A household may have different sources of income and more than one household member may contribute to it. Thinking of your household's total income, is your household able to make ends meet, namely, to pay for its usual necessary expenses?'

This is answered on a scale of 1 (with great difficulty) to 6 (very easily).

The second indicator is based on answers to the following 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, that is to pay its usual necessary expenses? Please answer in relation to the present circumstances of your household, and what you consider as usual necessary expenses (to make ends meet).'

This question is answered with a monthly amount; we create an indicator of hardship which takes the value 1 if total monthly household income (ie, annual income divided by 12) is less than 95% of the stated necessary monthly amount.

These two indicators of hardship have the advantage that they do not depend on assumptions made by the analyst about economies of scale within the household (that, is they do not vary according to which equivalence scale is used). However, they have the shortcoming that the questions on which they are based are asked only of household heads, and not of other individuals resident in the household. In fact, it is possible that the perceptions of household heads may differ from the perspectives of other household members; unfortunately, the EU-SILC does not currently have the data necessary to test this.

2.2 Working with clusters of countries

We analyse data for 29 countries, examining how incomes differ across 10 different household types. In the analysis which follows, this gives 290 cells for each of four indicators, which is arguably too much for the average human brain to process. We therefore take the following approach. We include full country breakdowns of all variables studied, either in the body of the paper or in the Appendix. However, when presenting results in figures or in tabular form, we take as our starting point results not for single countries, but for groups of countries, and proceed to examine the extent to which countries vary within their groupings.

How should these groups of countries to be defined? One possibility is to use a typological grouping, such as the seminal welfare-regime-based schema proposed by Esping-Andersen (1990 and 1999), or an adaptation of such a schema. There are notable advantages to this approach, namely that it is to a degree at least driven by theory; however, as Berthoud and Iacovou (2004) point out, a typology arrived at for the purposes of understanding (for example) income redistribution may not be the best typology for understanding (for example) the dynamics of the family. Another possibility is to select a schema empirically, allocating countries to the same group which display similar characteristics on some key dimension. Because this paper is concerned with household structure, we use the distribution of household types presented in Appendix A1 as a set of characteristics on which to group countries. We choose the country grouping which gives the lowest score on a purpose-built minimum distance algorithm, which calculates the sum of the squared deviations (SSD) from calculated group means. This algorithm yields the grouping below.

Nordic	Sweden, Norway, Denmark, Finland, Iceland
North-Western	UK, Ireland, France, Belgium, Luxembourg, Netherlands, Germany, Austria
Southern	Italy, Spain, Portugal, Greece, Cyprus, Malta
Eastern	Czech Republic, Hungary, Estonia, Lithuania, Latvia, Romania, Bulgaria, Slovakia, Slovenia, Poland.

Interestingly, this reflects a similar typology to one which we might have chosen via an adaptation of welfare regime typology, starting with the fourfold typology proposed by Esping-Andersen (1990 and 1999); incorporating a "southern" cluster as suggested by Ferrera (1996) and noted by numerous other authors as displaying clear differences from the Northern and Western countries in terms of family forms; including the UK and Ireland which Esping-Andersen categorises as members of the "liberal" regime type with the "conservative" countries of North-Western Europe; and assigning the countries which joined the EU in or after 2005 to a separate category, with the exception of Cyprus and Malta, which have clear geographical and cultural commonalities with the Southern European countries.

3. Methodology

3.1 Defining household types

Ten household types are defined, according to the number and ages of people living in a household, and the relationships between them. These household types are listed in the table below and follow the typology of Iacovou and Skew (2011).

Note that the 'other households' category includes some households where all the members are from the same family, i.e. which properly should be considered as extended families, but for whom this information cannot be recovered from the information available in EU-SILC, which does not provide a full household grid.

The distribution of these household types varies greatly between countries. These distributions are shown in the Appendix. The tables presented follow the methodology in Iacovou and Skew (2011), but are not identical to the data presented in that paper, because we consider different years of data, and because of small differences in the weighting procedures used.

Single person < 65	A single person under age 65
Single person >= 65	A single person aged 65 or over
Couple both < 65	A couple (married or cohabiting) both aged under 65
Couple, at least one >= 65	A couple (married or cohabiting), one or both of whom is aged 65 or over
Couple + dependent child/ren	A couple with one or more of their own children, including at least one child aged under 18.
Couple + adult child/ren	A couple living with one or more of their own children, all of whom are aged 18 or over.
Lone parent + dependent child/ren	A single adult plus one or more of his or her own children, including at least one child aged under 18.
One parent + adult child/ren	A household consisting of one parent plus one or more of his or her own children, all of whom are aged 18 or over.
Extended family	Non-nuclear households whose members all belong to the same family. Most of these are either three-generation families, or households including a parent and an adult child with a partner or spouse.
Other households	Other households, incl. lodgers, unrelated sharers, etc.

Source: Iacovou and Skew (2011)

3.2 Weighting

All estimates are calculated using weights. The cross-sectional weights provided with the EU-SILC are used as a starting point; however, we "trim" some of the weights which are extremely large. When considering groups of countries or all-EU averages, several weighting procedures are possible, and none are perfect. Procedures which have been used include (a) adjusting weights so that every country makes a contribution to the mean proportional to its population; (b) adjusting weights so that every country makes an equal contribution to the mean; and (c) avoiding the issue by not adjusting weights at all. Option (a) means that estimated means would be dominated by populous countries such as Germany and France, at the expense of smaller countries such as Malta and Iceland, which would make virtually no impression on means at all. Under option (b), by contrast, the influence of smaller countries may be inflated by a factor of several hundred relative to their population. We take a middle way, by adjusting weights by a factor reflecting the square root of a country's population. This means that larger countries have a larger influence over group averages than smaller countries, but not by such a huge margin.

4. Results: The risk of poverty and hardship, by household type

4.1 Relative risks for households

Figure 1 shows how the risk of poverty and hardship varies by household type, over the four groups of countries defined earlier. The average risk of poverty for all household types in each group is shown by blue lines on the graph.

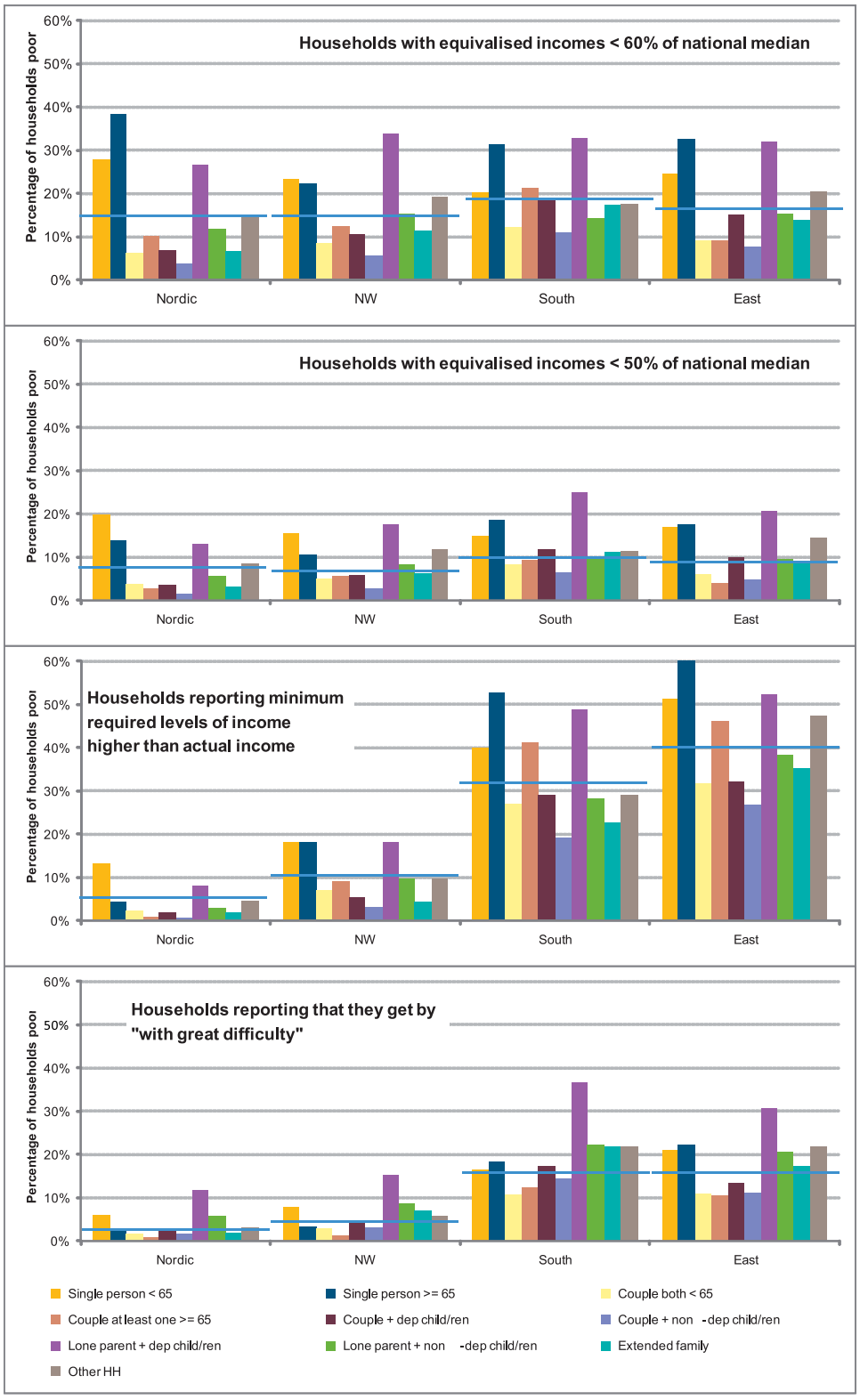
Turning first to the panel which shows the percentage of households defined as poor by the standard measure of 60% of median income, we see that in all groups of countries, lone parents are one of the two groups with the highest risk of poverty, with the percentage at risk of poverty ranging from 28% in the Nordic countries to 34% in the North-Western countries. The risk of poverty is among single elderly people is also high, standing at 22% in the North-Western countries and at over 30% in all the other groups of countries. Other single-adult households are also at a relatively high risk of poverty in all groups of countries: this proportion ranges from 20% in the Southern countries, to 28% in the Nordic countries. In all countries, couples with dependent children are at a slightly higher risk of poverty than couples under age 65 without children; the difference is very small in the Nordic and North-Western countries, and larger in the Southern and Eastern countries (where couples with dependent children are slightly more likely than the average household to be poor).

In all groups of countries, couples with adult children are less likely to be poor than couples with dependent children; indeed, couples with adult children are at a lower risk of poverty than couples with no co-resident children. Extended-family households are at a lower-than-average risk of poverty in the Nordic and North-Western countries, and at only an average risk of poverty in the other two groups of countries, while "other" households are at a higher than average risk of poverty in three out of the four groups.

How similar or different are the relative risks of poverty by household type? Arguably, they do not differ much between countries. Certainly, poverty is more concentrated within a few household types in the Nordic countries, with single elderly people being over six times more likely to be poor than non-elderly couples without children, or couples with children. And poverty is less concentrated between household types in the Southern countries, with the most vulnerable groups (the single elderly and lone parents) being at only three times the risk of poverty than the least vulnerable groups.

However, if we rank household types by their risk of poverty, we generate rankings which are very similar across all groups of countries. Comparing pairs of country groups yields a Spearman's rank correlation coefficient of over 90% for the three pairs of country groups which do not include the Southern countries, and coefficients of around 75% for the three pairs of country groups which do include the Southern countries. This suggests that to the extent that there are differences in the patterns of poverty between country groups, it is the Southern countries which differ from the other groups. This arises primarily because elderly couples in the Southern countries are at a higher risk of poverty than they are elsewhere, and because lone parents with non-dependent children are at a lower risk of poverty than elsewhere.

Figure 1: Percentage of households in poverty or hardship, by household type



Source: EU-SILC cross-sectional files release 2009-3

Turning now to the panel which shows the risk of more severe poverty, namely households with equivalised incomes under half of the national median, we see that as expected, the percentages of households at this deeper level of poverty are lower than when we consider the 60% threshold. However, the distributions by household type are similar, with one important exception, namely that elderly people are comparatively less vulnerable to this deeper degree of poverty. In the Nordic and North-Western countries, single adults under age 65 are at a substantially higher risk of deeper poverty than single adults over age 65, while in the other two groups of countries, elderly single adults are still more vulnerable than their younger counterparts, but by a much smaller margin than when we consider the 60% poverty threshold. The same is true for couple households, with elderly couples being at a similar risk of poverty to younger couples, whereas they were at a generally higher risk under the 60% threshold. This indicates that pension incomes or social assistance for elderly people, while in many cases insufficient to keep people out of poverty under the 60% threshold, are sufficient to keep people out of poverty at the 50% threshold. By contrast, the levels of social assistance payable to younger adults, or low earnings, may not be adequate to keep them out of this deeper level of poverty.

We now consider two measures of subjective hardship. Here, the distributions change markedly. The two poverty measures previously considered were relative measures, defined by households' incomes relative to the incomes of other households in the same countries. Under these measures, poverty rates in the relatively affluent regions of Northern and North-Western Europe are a little lower than, but not very different to, poverty rates in the less affluent regions of Southern and Eastern Europe. Under the two measures of subjective hardship, however, far higher levels of hardship are reported in Southern and Eastern Europe, demonstrating that these measures relate to real rather than relative incomes.

The first measure defines as "poor" those households where the household head reports a minimum level of income required to "get by" higher than the actual level of income reported by the household([1]). Less than 3% of households in the Nordic countries report this type of hardship; the corresponding figures are 7% for the North-Western group, and 26% and 33% for the Southern and Eastern groups. Despite these differences in the *levels* of hardship, each country group shows a *distribution* of hardship by household type which is (a) similar to the distribution under the relative poverty measures, and (b) similar between country groups. Once again, lone parents and single adults (both elderly and non-elderly) are most likely to report hardship, while couples without children, and those living with adult children, are less likely.

Finally, we turn to the last panel, which reports the percentages of households which report that they get by "with great difficulty". This is also a subjective measure, and in some sense it is an absolute rather than a relative measure of poverty, although it does also reflect the degree of adaptation to people's incomes. As with the previous measure, we observe higher percentages reporting hardship in the Eastern and (particularly) the Southern countries, where incomes are lower, both in nominal terms and adjusted for purchasing power. Here, the figures are dominated by lone parents in every group of countries, with lone parents around twice as likely to report that they get by "with great difficulty" than single adults, either elderly or non-elderly (except in the Eastern countries, where they are still 10 percentage points more likely to report hardship).

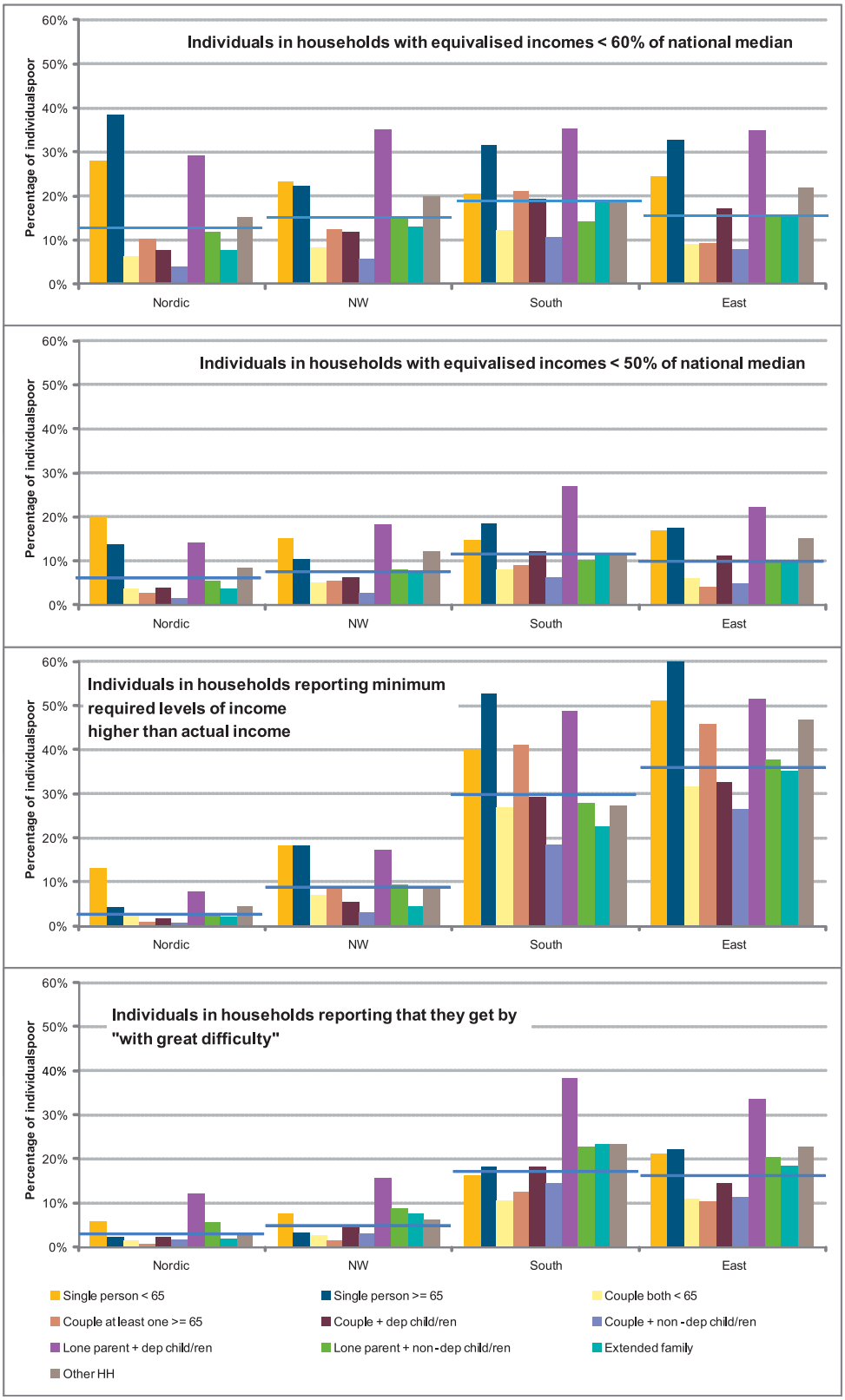
4.2 Relative risks for individuals

The figures discussed in the previous section related to the risk of poverty or hardship for households of a particular type. In this section we discuss the risk of poverty or hardship for individuals living in households of different types. Note that in what follows, equivalised incomes are still calculated on the basis of total household income and not on individual income.

Figure 2 presents this information. Note that the figures relating to single-person households and couple-only households are identical between Figures 1 and 2; this is because all households within each type are the same size. However, where household sizes vary, the two figures may not be the same. In some household types, larger households tend to be at higher risk of poverty or hardship. This would be the case for households where children are present, since children contribute substantially to the needs of a household, but typically contribute only marginally to its income. In these cases, we would expect a higher risk of individuals than of households to be at risk of poverty within that household type.

[7] In the EU-SILC people working for at least two weeks are recorded as working for the whole month. Overestimation then applies also to those who work two or more weeks, but less than the full month. Conversely, work intensity is understated for those who work less than two weeks in a month, as they are recorded as not working in that month.

Figure 2: Percentage of individuals in poverty or hardship, by household type



Source: EU-SILC cross-sectional files release 2009-3

We may expect this effect to be reversed for other household types. For example, where several adults live together, each additional adult would contribute to the estimated needs of the household by only a factor of 0.5, whereas they may bring in the same level of income as the household head. Here, we might expect larger households to be at lower risk of poverty, and for a higher proportion of households rather than individuals to be at risk of poverty or hardship.

As may be seen from Table 1, the aggregate percentage of individuals in poverty or hardship is in almost all cases smaller than the percentage of households in poverty or hardship. This is because it is the smallest household types, namely single-person households, and to a lesser extent lone parent households, which account for the highest rates of poverty and hardship; larger households, such as couples with children and extended families, are less vulnerable. In many cases, these differences in aggregate figures are relatively minor, but in some cases they are fairly large: for example, in the Nordic countries we calculate 15% of households, but only 12.1% of individuals, to be below the 60% poverty threshold.

Table 1: Percentage of households in poverty or hardship, by country type

		60% poverty	50% poverty	Income insufficient	Gets by "with great difficulty"
Nordic	**Households**	15.7	8.3	4.8	3.1
	Individuals	12.1	6.2	3.2	2.8
North-Western	**Households**	15.6	8.6	10.8	4.8
	Individuals	14.1	7.6	8.5	4.9
Southern	**Households**	18.8	11.6	33.0	16.7
	Individuals	17.9	11.1	29.4	17.5
Eastern	**Households**	16.8	10.2	40.0	16.1
	Individuals	15.6	9.8	36.2	15.9

Source: EU-SILC cross-sectional files release 2009-3

Considering now the differences between Figures 1 and 2, we note firstly that the rankings between household types are virtually unchanged if we consider individuals rather than households as the unit of analysis. Second, we note that on the two indicators of poverty, we see changes in the expected direction for couples with dependent children and lone parents with dependent children (that is, a higher risk for individuals than for households). These differences are relatively modest, but are larger in the case of lone parents: in three of the four country groups, poverty rates using the 60% threshold are 2-3 percentage points higher if we consider the individual as the unit of analysis, rather than the child.

There is some evidence that estimated poverty rates are lower for lone parents and couples living with adult children, if we consider the individual rather than the household. However, these differences are extremely small. Finally, the subjective hardship estimates are much less affected by whether we consider the individual or the household as the unit of analysis.

4.3 Poverty and hardship, by country

Tables 2 and 3 present analogous data to that given in Figures 1 and 2, but broken down by country instead of by country groups. Because each table contains a large number of cells, of the eight possible tables (four indicators x household-level and individual-level figures) we present only two: poverty at 60% of median income, and getting by with "great difficulty" as a measure of hardship, both at the level of the individual.

In each of these tables, the percentage of individuals who are poor or living in hardship is given for each country group and each household type, in the shaded rows. There is also one unshaded row for each country; the figures in these rows represent the deviations of countries from the group means.

Tables 2 and 3 show that there is a fair degree of heterogeneity between countries, and that this is the case not only between clusters, but also, in some cases, within groups. For example, if we look at couples aged 65 and over, we see that the Eastern cluster of countries has in general low rates of poverty among this group, averaging 9.2%. However, there are some countries in this cluster, notably Bulgaria and Latvia, with very high levels of poverty among this group.

One simple means of assessing whether any countries are outliers (in that the distribution of the incidence of poverty and hardship looks different in these countries than in most others), is to perform rank correlation tests, comparing the rankings of the incidence of poverty and hardship by household in each country against the averages for groups of countries, and against the all-country average. The results of this exercise are presented in Table 4.

Looking first at the columns labelled "all", in which the rankings of poverty risk in individual countries are compared against the all-country average rankings, we note that these are in general much higher for the poverty measure than for the hardship measure. For the poverty measure, the correlation coefficient between rankings in individual countries and the overall rankings is well over 70% in a large majority of countries, and over 50% in all but two. The countries with the lowest coefficients are Malta (42%), Luxembourg (49%) and Cyprus (51%). In both Cyprus and Malta, the main contribution to this low correlation coefficient comes primarily from the higher-than-average risk of poverty among elderly couples; in both countries, but particularly in Malta, this is added to by a relatively high risk of poverty among younger couples as well. In Luxembourg, by contrast, the low correlation coefficient is driven primarily by elderly single people being at a much lower risk of poverty than in most other countries.

Looking at the corresponding figures for subjective hardship, the picture is rather different: here, the correlation coefficients are generally lower, and are well below 50% in seven countries, and in the low fifties in two others. Here, the Nordic countries appear to be systematically different from the other countries: this is driven both by relatively high rates of hardship among people under 65 living alone, and by relatively low rates of hardship among people living in extended families. The same is true for the Netherlands, Germany and Austria, while in Luxembourg, the low correlation coefficient is driven by a *higher* than average rate of hardship among extended families and among couples living with adult children.

We have already seen in Figures 1 and 2 that the levels of subjective hardship are subject to far more regional variation than the levels of poverty. Results at a country-by-country level also support this picture of regional patterning of subjective hardship; the other columns in Table 4, which report correlation coefficients between individual countries and group averages, tend to support this view, with correlation coefficients between individual countries and their own regional group tending to be higher than the correlation coefficients between countries and other regional groups in the case of subjective hardship, but much less so in the case of poverty.

Table 2: Risk of poverty (60% median income) by household type, as a % of all individuals living in that household type. Figures for country groups indicate total risk; figures for individual countries are deviations from group means.

	Single person aged under 65	Single person aged 65+	Couple both under 65	Couple, 1 or both aged 65+	Couple + dependent child/ren	Couple + adult child/ren	Lone parent + dependent child/ren	One parent + adult child/ren	Extended family	Other
Nordic	28.0	38.4	6.3	10.2	7.7	3.8	29.2	11.9	7.6	15.3
Sweden	-0.4	-0.7	-0.6	-3.4	0.4	0.5	5.1	-0.1	9.0	-5.1
Finland	7.5	8.5	1.0	0.4	2.3	1.3	-3.0	7.8	-3.1	15.5
Denmark	-6.8	1.0	-1.7	11.2	-1.4	-1.6	-8.4	-4.7	0.0	-1.5
Norway	-0.9	-8.8	0.8	-7.4	-1.6	-1.3	4.4	-3.5	3.2	15.8
Iceland	0.1	-2.9	3.4	-8.2	0.9	0.5	-5.2	-2.9	-1.9	-2.8
N-W	23.2	22.2	8.5	12.4	11.8	5.8	35.1	15.3	13.2	20.0
Netherlands	-4.6	-11.2	-4.7	-2.2	-1.7	-3.9	0.9	-1.7	-13.2	-5.1
UK	-1.0	6.3	0.3	5.5	2.2	2.2	-3.1	-1.3	3.1	3.2
France	-5.1	-6.3	-2.1	-5.4	1.3	0.5	-1.4	0.3	8.4	4.0
Germany	6.0	2.8	3.1	-0.7	-1.6	0.5	5.6	5.9	-8.2	3.0
Austria	-4.5	2.2	0.8	0.1	-1.6	-2.0	-8.6	-6.4	-6.6	-2.6
Belgium	-2.9	1.6	0.5	9.7	-0.7	-0.5	4.1	-2.4	0.0	-5.9
Luxembourg	-10.6	-15.0	-4.7	-10.3	2.0	1.7	9.2	0.0	5.8	-10.8
Ireland	10.8	-0.3	3.7	-2.4	-1.3	-1.2	0.5	-5.0	-11.4	-3.2
Southern	20.4	31.5	12.0	21.2	19.3	10.8	35.4	14.4	18.7	18.5
Italy	-0.7	0.3	-2.4	-3.3	2.4	0.6	0.6	0.3	2.4	1.7
Spain	0.7	-0.6	-2.4	4.7	0.2	1.2	1.0	0.4	-2.9	-2.4
Portugal	-0.1	-2.0	4.3	-4.1	-1.5	-1.9	2.2	-0.7	0.0	1.2
Greece	1.7	-1.2	5.9	-2.4	0.6	0.8	-8.1	1.3	4.9	-1.1
Cyprus	-3.5	28.7	1.1	20.8	-12.4	-3.5	-8.0	-5.8	-11.2	14.9
Malta	2.5	-15.1	4.4	6.4	-4.9	-6.6	8.6	-8.7	-7.9	-8.7
Eastern	24.5	32.7	9.1	9.2	17.0	7.8	34.8	15.4	15.4	21.9
Czech Rep	-7.7	-16.3	-6.0	-8.2	-9.9	-6.6	1.7	-7.8	-12.0	-15.8
Hungary	-6.0	-24.2	-3.2	-6.9	-0.2	-1.9	-9.3	-5.5	-3.3	-5.8
Estonia	6.7	14.5	-1.1	-7.0	-5.1	-0.5	2.6	1.9	-2.2	-0.9
Latvia	8.7	42.6	6.4	13.1	2.5	5.0	2.1	8.1	-0.4	-3.1
Lithuania	15.3	11.8	5.5	-4.3	1.3	3.1	5.6	5.1	-2.6	0.9
Slovenia	11.6	21.3	1.5	3.8	-6.8	-2.8	-3.6	-2.0	-10.0	-7.3
Slovakia	-5.3	-6.7	-5.5	-7.1	-3.7	-2.2	-7.2	-4.3	-3.3	-10.5
Poland	-0.4	-15.1	0.4	-5.1	2.0	1.5	4.9	4.3	-1.0	-2.3
Bulgaria	7.7	35.2	5.0	23.5	-1.7	0.7	-7.0	-1.6	5.3	1.7
Romania	-2.3	-0.1	2.9	3.3	12.0	3.9	2.1	4.5	5.7	10.1
All	23.7	28.5	8.8	13.4	14.2	8.1	34.3	14.9	15.8	19.8

Source: EU-SILC cross-sectional files release 2009-3

Table 3: Risk of hardship (getting by with great difficulty) by household type, as a % of all individuals living in that household type. Figures for country groups indicate total risk; figures for individual countries are deviations from group means.

	Single person aged under 65	Single person aged 65+	Couple both under 65	Couple, 1 or both aged 65+	Couple + dependent child/ren	Couple + adult child/ren	Lone parent + dependent child/ren	One parent + adult child/ren	Extended family	Other
Nordic	5.9	2.3	1.4	0.8	2.3	1.6	12.0	5.6	1.9	2.7
Sweden	0.2	0.4	0.0	-0.2	0.5	-0.4	0.7	-0.8	-1.9	0.3
Finland	0.0	-0.9	-0.2	-0.4	-0.8	0.4	-3.6	0.2	-1.9	-1.8
Denmark	-1.3	0.0	0.0	0.4	-0.4	-1.0	-1.4	4.9	-1.9	-0.9
Norway	-0.3	-0.6	-0.2	-0.4	-0.7	-0.4	0.1	-3.8	-1.9	-1.5
Iceland	7.3	5.3	3.3	1.9	4.8	2.6	9.7	2.4	6.7	5.4
N-W	7.7	3.2	2.7	1.3	4.9	3.1	15.7	8.7	7.6	6.2
Netherlands	-1.7	-1.1	-1.3	-0.7	-3.0	-2.7	-7.0	0.4	-7.6	-5.3
UK	2.5	-0.9	1.0	0.3	2.1	0.9	1.5	3.2	1.6	3.2
France	-2.9	-1.7	-1.1	-0.6	-0.8	0.8	-0.4	-1.9	1.9	-3.7
Germany	-1.2	0.0	-0.9	-0.6	-2.1	-0.7	-6.0	-3.7	-7.6	-2.5
Austria	1.3	1.5	1.2	0.5	0.8	0.0	-2.3	-0.6	-5.3	0.6
Belgium	6.1	6.2	2.2	3.9	2.0	0.1	3.7	5.6	4.8	-0.2
Luxembourg	-3.7	-2.4	-1.5	-0.8	-3.1	-0.5	-7.8	-7.0	-2.3	-6.2
Ireland	3.9	1.0	3.4	1.7	6.8	1.4	13.6	1.9	7.3	6.0
Southern	16.2	18.3	10.6	12.5	18.1	14.5	38.2	22.7	23.3	23.4
Italy	-2.6	-3.4	-0.9	-2.2	-0.4	-1.6	-9.6	-3.0	-3.4	-3.1
Spain	1.2	-6.8	-1.9	-4.7	-2.5	-3.8	-0.2	-7.8	-4.8	-1.0
Portugal	9.3	5.9	2.0	4.9	4.9	2.8	16.0	11.0	6.4	7.0
Greece	1.0	15.9	4.2	6.3	2.7	6.9	6.5	8.8	5.8	3.8
Cyprus	0.1	3.5	-0.5	1.5	-1.9	4.5	2.3	19.7	-1.1	-2.5
Malta	3.7	-5.2	1.9	-0.8	0.1	-1.4	14.1	2.0	6.9	-4.8
Eastern	21.2	22.3	10.9	10.4	14.5	11.3	33.5	20.3	18.4	22.7
Czech Rep	-9.8	-13.7	-6.6	-8.5	-7.5	-5.8	-6.2	-9.5	-10.0	-18.0
Hungary	7.4	0.2	5.3	0.0	10.8	6.4	11.5	4.3	13.0	10.7
Estonia	-11.1	-15.6	-7.1	-7.7	-7.3	-7.4	-13.5	-7.7	-7.7	-7.3
Latvia	0.8	-0.3	3.2	2.8	3.7	1.3	-5.9	0.6	-1.6	-3.7
Lithuania	-7.7	-7.0	-4.3	-7.0	-4.5	-5.0	-12.2	-6.3	-4.1	-8.1
Slovenia	1.6	-9.3	-3.9	-5.2	-9.3	-6.4	-13.0	-10.7	-12.6	-11.1
Slovakia	-6.2	-6.4	-5.3	-5.9	-2.9	-4.1	-10.0	-6.5	-0.9	-12.3
Poland	4.2	1.7	-1.5	0.5	-1.6	1.1	8.8	6.4	-6.7	-7.3
Bulgaria	10.9	24.2	11.1	19.0	9.5	9.5	6.9	11.0	13.6	4.9
Romania	3.3	5.4	4.5	2.7	4.7	2.3	6.1	1.8	-0.6	9.1
All	11.1	11.6	5.4	5.7	9.8	9.7	21.6	17.0	18.2	16.2

Source: EU-SILC cross-sectional files release 2009-3

Table 4: Rank correlation coefficients

	Poverty (< 60% median)					Hardship (getting by with great difficulty)				
	Nordic	N-W	South	East	All	Nordic	N-W	South	East	All
Sweden	85.5	90.3	72.1	87.9	95.2	90.9	72.1	45.5	72.1	43.0
Finland	92.7	79.4	57.6	80.6	73.3	71.5	57.6	16.4	43.0	23.6
Denmark	81.8	73.3	84.2	64.8	69.7	84.8	66.1	40.6	66.1	43.0
Norway	79.4	89.1	51.5	85.5	92.7	83.0	61.8	31.5	64.2	33.9
Iceland	78.2	75.8	41.8	80.6	78.2	83.6	90.3	77.0	83.0	83.0
Netherlands	84.2	84.2	53.9	79.4	72.1	76.4	60.0	27.3	52.7	33.3
UK	91.5	91.5	81.8	86.7	91.5	84.8	95.2	69.7	67.3	74.5
France	68.5	85.5	53.9	79.4	89.1	64.2	87.9	62.4	45.5	74.5
Germany	90.3	86.7	62.4	81.8	77.0	92.1	72.1	49.1	78.2	47.9
Austria	89.1	80.6	83.0	86.7	79.4	94.5	79.4	52.7	77.0	51.5
Belgium	86.7	84.2	91.5	77.0	81.8	82.4	90.3	68.5	68.5	81.8
Luxembourg	20.0	44.2	16.4	44.2	49.1	38.8	58.8	27.3	20.0	44.2
Ireland	78.2	74.5	55.2	81.8	72.1	60.6	75.8	75.8	58.8	72.1
Italy	66.1	64.8	79.4	81.8	79.4	70.3	79.4	98.8	79.4	92.7
Spain	80.6	72.1	97.6	78.2	73.3	77.6	83.0	87.9	81.8	83.0
Portugal	81.8	85.5	81.8	90.3	92.7	81.2	90.3	91.5	81.8	93.9
Greece	60.0	61.2	84.2	68.5	73.3	50.9	56.4	81.8	68.5	83.0
Cyprus	70.9	57.6	58.8	46.7	51.5	61.8	77.0	83.0	68.5	91.5
Malta	48.5	46.1	78.8	44.8	42.4	78.2	95.8	83.6	71.5	92.1
Czech Rep	79.4	84.2	55.2	90.3	85.5	86.1	86.7	57.6	70.9	72.1
Hungary	50.3	67.3	40.6	75.8	70.9	77.6	83.0	87.9	81.8	83.0
Estonia	86.7	89.1	53.9	91.5	93.9	83.6	91.5	92.7	84.2	90.3
Latvia	91.5	79.4	79.4	81.8	74.5	89.1	72.7	59.4	86.1	63.0
Lithuania	86.7	83.0	51.5	91.5	86.7	72.7	69.7	87.9	92.7	85.5
Slovenia	95.2	86.7	64.8	83.0	80.6	78.2	63.0	47.3	80.0	50.9
Slovakia	70.9	75.8	64.8	89.1	86.7	71.5	79.4	74.5	74.5	85.5
Poland	67.3	79.4	35.8	80.6	75.8	94.5	83.0	66.1	83.0	69.7
Bulgaria	74.5	64.8	86.7	62.4	64.8	58.2	55.2	52.7	66.1	64.8
Romania	83.0	80.6	73.3	95.2	90.3	88.5	72.1	78.2	97.6	70.9

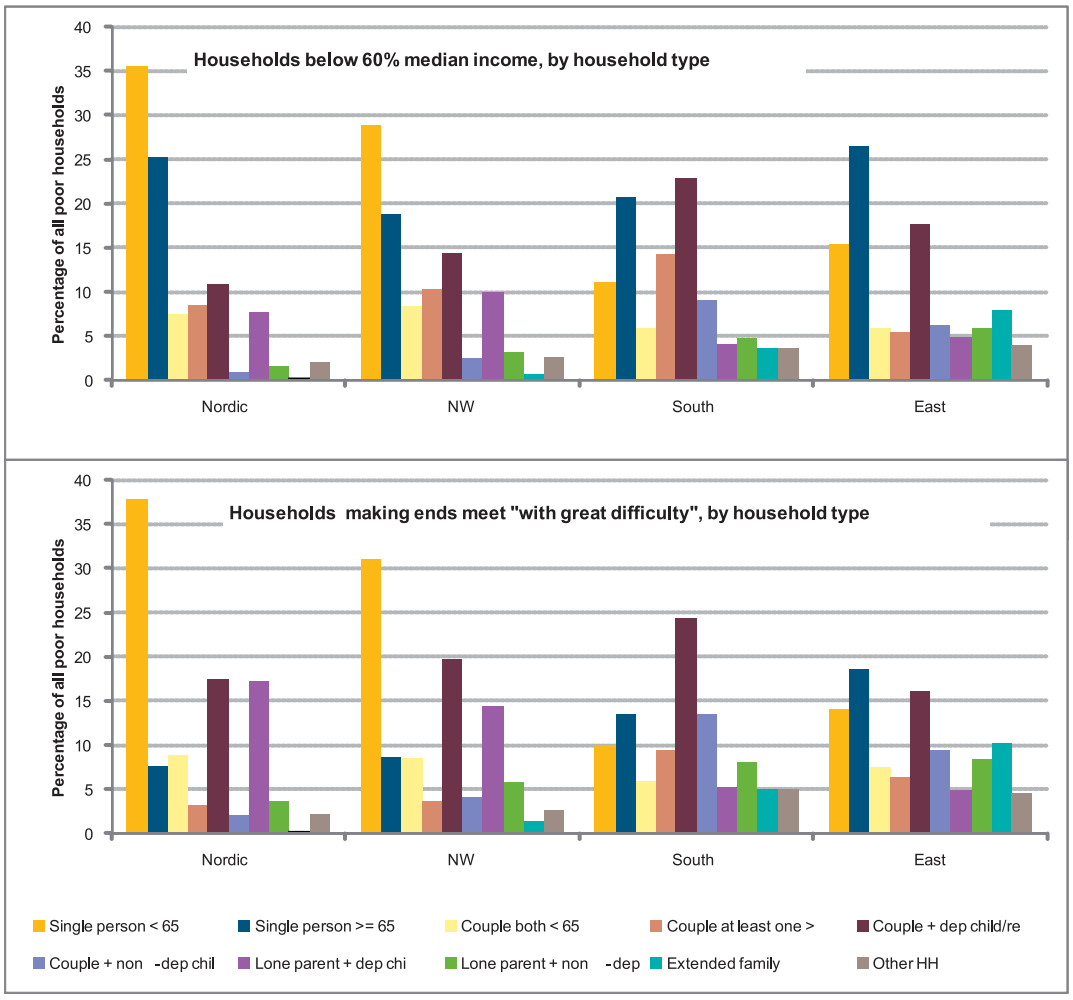
Source: EU-SILC cross-sectional files release 2009-3

4.4 The composition of the poor population

The previous analysis has shown that there are large disparities between household types in terms of the risk of poverty, with certain groups, notably the single elderly and lone parent families, at a much higher risk of poverty than other groups. However, these groups are not particularly numerous among the population as a whole, and the households represented by these groups are relatively small; these high-risk groups may therefore form only relatively small proportion of all poor households.

In this section, therefore, we take as our starting point the sample of households and individuals which are poor or in hardship, and look at how different household types are represented within this group. We present our findings graphically for four country groups, and in table form for each country separately; we restrict the analysis to one indicator of poverty (the 60% threshold) and one indicator of hardship (getting by with great difficulty).

Figure 3: The poor population: percentage of poor households in each household type



Source: EU-SILC cross-sectional files release 2009-3

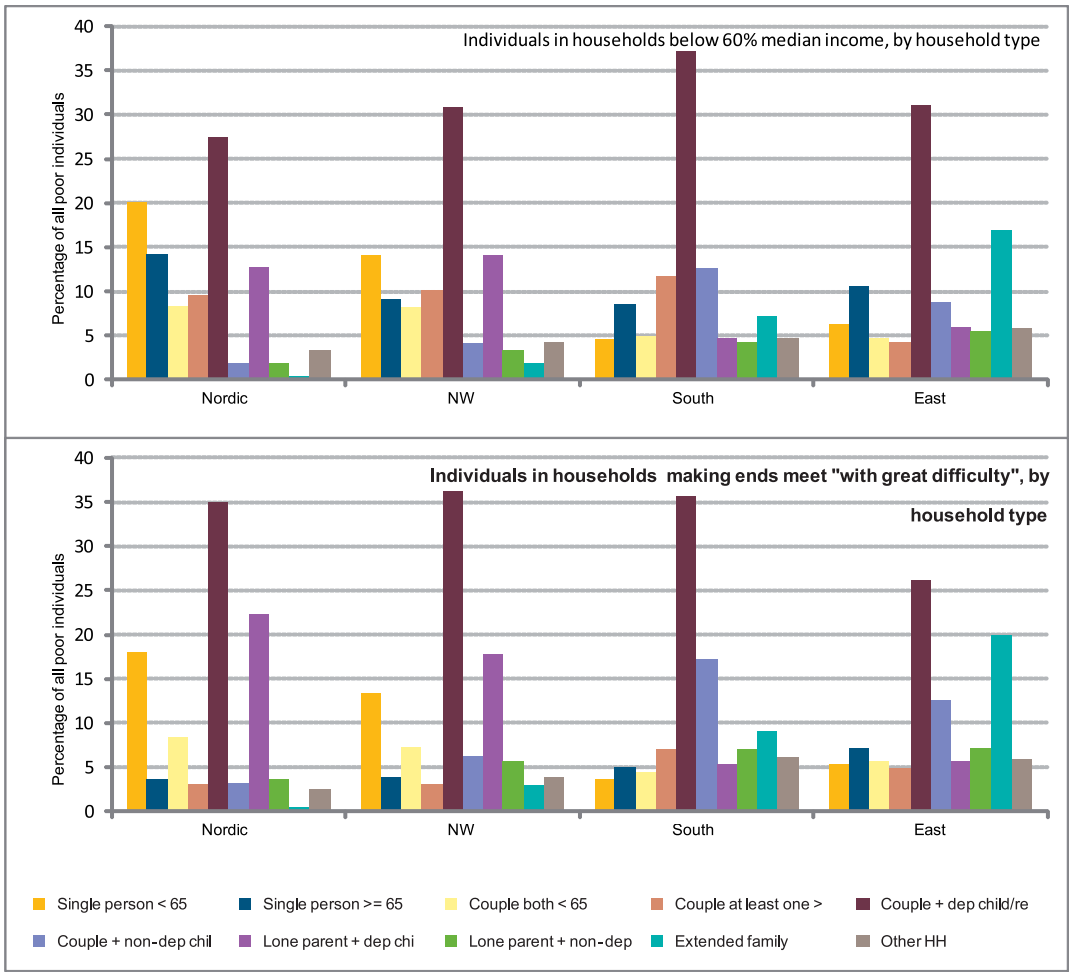
Figure 3 presents a breakdown of poor households, by household type. These results look very different from results in previous sections. The graphs are no longer dominated by lone-parent families, which, despite being at high risk of poverty and hardship, do not, because of their relatively small numbers, account for a high proportion of poor households. By contrast, we see that *couples* with dependent children, while at a relatively low risk of poverty, account for a much higher proportion of poor households: this proportion ranges from 11% in the Nordic countries, to 23% in the Southern countries if we consider the 60% poverty line, and from 16% in the Eastern countries to 24% in the Southern countries, if we consider the subjective poverty measure.

We also see the largest differences between groups of countries which we have so far seen in the course of this analysis, particularly in the case of single-adult households. When we considered the risk of poverty, single-adult households were at a higher-than-average risk of poverty and hardship in all country groups; however, they certainly did not dominate the statistics. In Figure 1, however, single adults under age 65 account for over 35% of poor households in the Nordic countries, and around 30% in the North-Western countries; these figures are much higher than the corresponding figures for the Southern and Eastern groups of countries, where single-adult households are far less numerous.

Turning now to Figure 4, which presents a breakdown of the poor population as *individuals*, rather than households, the picture changes once again. Both panels of Figure 4 are dominated with families with dependent children. When we consider the poor population as defined by households below 60% of median income, families with dependent children account for between 28% (Nordic countries) and 37% (Southern countries) of individuals in this situation. When we consider subjective hardship, families with dependent children account for over 35% of individuals in hardship.

In the Nordic and Northern groups of countries, single-adult and lone-parent households also make a substantial contribution to the pool of poor and/or disadvantaged people; in the Southern and Eastern groups of countries, these groups make less of a contribution due to their generally smaller size in these groups of countries. Instead, in Southern and Eastern countries, couples with adult children make a considerable contribution to the pool of poor people (accounting in the Southern countries for 12% and 17% of those in poverty and hardship, respectively). In the Eastern countries, people living in extended-family households form a large contribution to the numbers of poor (accounting for 17% and 20% of those in poverty and hardship). Although, across the Eastern group of countries, people in extended-family households are at only an average risk of poverty and hardship, extended-family households are fairly numerous across this region (see Iacovou and Skew, 2011), and they are on average larger than any other household type.

Figure 4: The poor population: percentage of poor individuals by household type



4.5 The composition of the population in poverty and hardship, by country

Tables 5 and 6 present the same information as previously, but at the level of individual countries rather than country groupings. Of the eight possible tables (four indicators, each at the household and individual levels), we present only two: poverty at the 60% income threshold, and hardship measured as getting by with great difficulty, both at the level of the individual.

While not all countries fall neatly into their regional groupings, there does appear to be a fairly high degree of homogeneity within regional groupings. For example, we have already noted that single adults under age 65 form a far higher percentage of the poor population in the Nordic cluster of countries than elsewhere, particularly the Southern and Eastern groups, (a) because they are at a relatively high risk of poverty in the Nordic countries, and (b) because single adult households are much more numerous in these countries. In Table 5, we see that in *every single country* in the Nordic cluster, single adults make a larger contribution to the poor population than in *any country* in the Southern or Eastern groups. Similar patterns are visible in other parts of the table; thus, while it is certainly not true to say that the country clusters we have identified are homogeneous, they do represent a degree of clustering of observed variables.

Table 5: The composition of the poor population, by country

	Single person aged under 65	Single person aged 65+	Couple both under 65	Couple, 1 or both aged 65+	Couple + dependent child/ren	Couple + adult child/ren	Lone parent + dependent child/ren	One parent + adult child/ren	Extended family	Other
Sweden	36.1	28.9	5.5	6.0	10.2	1.1	8.4	1.8	0.1	2.0
Finland	37.9	24.3	9.1	7.1	12.2	1.3	4.4	2.1	0.1	1.5
Denmark	24.6	28.2	6.4	21.0	9.9	0.4	6.3	0.7	0.1	2.4
Norway	44.3	18.6	9.0	2.4	9.6	0.6	12.0	1.1	0.1	2.5
Iceland	28.3	20.2	10.7	1.5	19.2	2.7	11.6	1.9	0.5	3.5
Nordic	35.5	25.2	7.5	8.5	10.9	1.0	7.7	1.5	0.1	2.1
Netherlands	33.6	11.0	6.5	12.4	21.5	1.2	9.7	2.0	0.0	2.0
UK	19.2	24.3	7.7	12.2	15.2	3.0	10.7	2.9	1.2	3.6
France	25.7	16.7	8.1	6.6	20.7	3.0	11.2	3.6	1.4	3.1
Germany	38.6	17.0	9.4	10.3	9.0	2.3	8.2	3.7	0.1	1.5
Austria	28.5	23.4	8.5	10.2	14.0	2.0	7.0	2.3	1.1	3.1
Belgium	24.5	18.4	8.6	15.3	12.5	2.6	11.6	2.8	0.6	3.1
Luxembourg	19.7	5.9	5.2	2.2	34.6	5.9	16.6	4.5	4.1	1.4
Ireland	26.4	19.9	9.0	6.1	14.2	2.0	14.3	3.8	0.2	4.2
N-W	28.9	18.8	8.4	10.4	14.5	2.5	10.0	3.2	0.7	2.7
Italy	13.7	25.2	4.0	11.3	22.6	8.4	4.8	4.6	2.7	2.7
Spain	9.4	15.9	5.7	15.6	26.1	10.5	3.5	5.2	3.7	4.6
Portugal	7.2	20.8	9.0	13.8	21.0	8.1	5.4	5.1	5.8	3.9
Greece	12.4	17.9	7.9	14.7	23.0	10.3	1.9	4.7	4.8	2.6
Cyprus	6.2	27.0	5.9	30.3	9.1	6.1	4.1	1.7	0.6	9.1
Malta	12.0	12.4	10.0	19.6	24.3	5.9	8.4	2.5	3.0	1.9
Southern	11.1	20.8	5.9	14.3	22.9	9.1	4.1	4.7	3.6	3.6
Czech Rep	26.3	25.9	5.1	1.4	15.8	2.0	14.6	5.9	1.8	1.2
Hungary	21.0	10.3	6.4	2.1	29.1	6.1	7.4	6.8	6.5	4.3
Estonia	20.1	35.6	5.0	1.1	11.8	3.9	7.3	7.8	4.6	2.9
Latvia	15.1	38.3	4.6	5.8	9.3	4.2	5.2	7.3	5.6	4.6
Lithuania	20.1	32.2	7.1	2.6	12.1	6.7	5.6	6.2	4.3	3.1
Slovenia	15.2	28.9	6.0	9.4	15.6	7.9	4.4	6.6	3.1	2.8
Slovakia	18.6	26.8	2.7	1.6	21.3	9.4	4.5	6.5	6.6	2.1
Poland	15.7	14.9	6.9	2.1	25.9	8.4	5.2	7.6	10.0	3.2
Bulgaria	8.5	37.2	5.2	15.3	7.4	4.9	1.5	3.9	12.7	3.5
Romania	11.0	24.3	6.8	6.6	21.1	6.9	2.3	4.4	9.6	7.2
Eastern	15.5	26.4	5.9	5.4	17.7	6.3	4.9	6.0	7.8	4.1
All	21.7	21.9	7.0	9.8	17.0	5.0	7.0	4.1	3.2	3.2

Source: EU-SILC cross-sectional files release 2009-3

Table 6: The composition of the population in hardship, by country

	Single person aged under 65	Single person aged 65+	Couple both under 65	Couple, 1 or both aged 65+	Couple + dependent child/ren	Couple + adult child/ren	Lone parent + dependent child/ren	One parent + adult child/ren	Extended family	Other
Sweden	21.1	16.9	6.4	7.0	26.2	2.1	14.5	2.2	0.3	3.4
Finland	21.8	13.9	10.4	8.2	31.0	2.5	7.2	2.7	0.3	2.1
Denmark	13.7	15.7	7.1	23.5	24.3	0.8	9.8	0.9	0.3	4.0
Norway	24.7	10.4	10.0	2.6	25.3	1.1	20.4	1.3	0.5	3.9
Iceland	13.3	9.5	10.1	1.4	39.9	4.0	13.7	2.0	1.4	4.7
Nordic	20.1	14.3	8.4	9.6	27.5	1.8	12.8	1.9	0.4	3.3
Netherlands	14.9	4.9	5.8	11.0	44.2	1.7	12.8	2.1	0.0	2.8
UK	8.9	11.2	7.1	11.3	31.1	4.4	15.0	2.9	2.8	5.4
France	10.8	7.0	6.8	5.6	39.5	4.3	14.4	3.6	3.0	5.0
Germany	22.6	10.0	11.0	12.0	20.8	4.5	12.0	4.6	0.2	2.3
Austria	14.8	12.2	8.8	10.6	30.6	3.9	9.4	2.4	2.9	4.4
Belgium	11.7	8.8	8.3	14.6	26.2	4.2	15.9	3.1	1.9	5.5
Luxembourg	6.7	2.0	3.5	1.5	49.4	7.4	17.3	3.4	7.3	1.5
Ireland	12.2	9.2	8.3	5.7	29.2	3.1	21.4	3.8	0.3	6.8
N-W	14.1	9.2	8.2	10.1	30.8	4.1	14.1	3.4	1.8	4.3
Italy	5.8	10.7	3.4	9.6	38.5	12.4	5.6	4.4	5.6	3.9
Spain	3.6	6.1	4.4	11.9	39.7	13.7	3.8	4.5	6.8	5.7
Portugal	2.8	8.2	7.1	10.8	33.3	10.3	6.7	4.4	11.3	5.3
Greece	5.1	7.3	6.5	12.0	36.2	14.3	2.2	4.5	8.8	3.2
Cyprus	3.1	13.4	5.8	29.9	18.2	10.1	5.9	1.8	1.4	10.4
Malta	4.7	4.9	7.9	15.4	40.2	7.7	9.1	2.1	5.6	2.6
Southern	4.5	8.5	4.8	11.6	37.1	12.6	4.8	4.3	7.1	4.7
Czech Rep	12.8	12.6	5.0	1.3	34.6	3.0	19.4	6.5	3.4	1.3
Hungary	7.3	3.6	4.5	1.4	44.7	7.4	7.7	5.5	12.5	5.5
Estonia	10.1	18.0	5.1	1.1	25.2	6.5	10.8	8.4	10.7	4.0
Latvia	7.7	19.4	4.7	5.8	20.3	7.1	7.0	7.8	13.7	6.7
Lithuania	9.8	15.7	6.9	2.5	25.2	10.9	7.6	6.6	10.2	4.7
Slovenia	7.0	13.4	5.6	8.7	29.8	12.2	5.5	6.5	7.1	4.2
Slovakia	6.7	9.7	1.9	1.1	36.0	12.7	5.1	6.2	17.4	3.1
Poland	5.3	5.1	4.7	1.4	38.6	9.9	6.5	6.0	18.2	4.1
Bulgaria	3.7	16.1	4.5	13.2	13.4	7.1	1.8	3.8	30.8	5.7
Romania	4.0	8.9	4.9	4.8	33.6	9.1	2.7	3.6	18.6	9.9
Eastern	6.2	10.6	4.8	4.4	31.1	8.8	6.0	5.5	17.0	5.8
All	9.7	9.8	6.3	8.8	32.3	7.6	9.1	4.1	7.5	4.7

Source: EU-SILC cross-sectional files release 2009-3

Conclusions

The analysis in this paper has documented (a) how the risk of poverty and hardship varies between different household types, and the members of different types of households, across Europe, and (b) how the composition of the pool of people and households living in poverty and hardship varies between the countries and regions of Europe.

When poverty is considered as a relative concept (that is, when we define poverty as a household falling below a percentage of national median incomes), we find that poverty rates do vary between regions and between countries within regions; however, these variations do not tend to be large, precisely because of the definition of poverty as a relative measure.

Using relative measures of poverty, we also find fairly small variations between countries in terms of the household types which are at risk of poverty, with lone parents, the single elderly, and other single-adult households at the highest risk of poverty.

The picture changes somewhat when we consider subjective hardship. Here, there are extremely large differences between countries and country groups in terms of the levels of subjective hardship reported, which reflect sharp differences in absolute income levels between countries. However, we observe that the same groups – lone parents and single-person households – tend to be at an elevated risk of hardship, as when we considered relative poverty.

Between-country differences in the rates of poverty and hardship may be driven by many factors, one of which may be differences in household composition. This paper has shown that to the extent that differences in household composition do affect poverty rates, this effect comes not via large differences in the relative risks of poverty between one household type and another, but via differences in household composition between countries.

The findings in this paper also raise some interesting issues of policy and methodology. We have already noted the distinction between groups at an elevated risk of poverty on the one hand, and groups making a large contribution to the pool of poor people on the other, and the tension this creates for policy.

The analysis in this paper also raises questions about the use of equivalence scales in the calculation of relative poverty indicators. These scales were developed with the nuclear family in mind, and are based on assumptions about income sharing within the nuclear family. These assumptions may be questioned in the context of the nuclear family and may be even more questionable in the context of non-nuclear extended families such as those which are prevalent across many countries of the new Europe.

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Appendix

Table A1: The distribution of household types: households of different types, as percentages of all households

	Single person aged under 65	Single person aged 65+	Couple both under 65	Couple, 1 or both aged 65+	Couple + dependent child/ren	Couple + adult child/ren	Lone parent + dependent child/ren	One parent + adult child/ren	Extended family	Other
Sweden	21.1	12.3	15.4	14.1	22.3	4.1	4.3	2.4	0.1	3.9
Finland	19.7	9.5	22.9	12.3	24.1	4.9	3.3	2.0	0.6	0.8
Denmark	17.1	10.4	20.4	14.4	26.0	3.1	4.7	1.6	0.2	2.2
Norway	23.1	8.9	17.9	11.8	25.8	3.4	5.8	1.9	0.3	1.2
Iceland	13.8	7.6	14.7	10.1	32.3	7.9	5.9	2.9	1.4	3.4
Netherlands	19.2	10.6	18.4	13.0	25.8	6.5	3.1	1.7	0.2	1.7
UK	15.7	15.0	15.6	12.1	21.4	6.3	6.1	3.5	1.5	2.9
France	18.3	13.4	16.3	12.2	22.8	6.3	4.7	3.1	1.0	1.9
Germany	24.5	12.6	15.0	16.2	16.7	6.9	3.7	3.2	0.3	1.0
Austria	21.5	13.6	12.9	11.5	20.6	8.4	3.6	3.4	2.5	2.3
Belgium	19.7	12.5	15.6	11.3	19.8	7.9	5.0	3.6	1.0	3.6
Luxembourg	16.7	8.7	14.7	11.0	28.6	9.1	4.2	3.0	2.6	1.6
Ireland	12.9	15.1	12.2	10.1	23.7	7.1	7.1	5.8	1.4	4.6
Italy	13.7	15.4	8.1	12.3	21.4	14.7	2.8	6.1	2.8	2.9
Spain	8.2	9.4	11.1	10.9	26.1	16.1	1.9	6.3	4.7	5.5
Portugal	6.3	12.6	9.8	14.3	22.3	15.8	2.9	6.4	5.9	3.8
Greece	11.0	11.4	8.6	15.0	22.6	17.0	1.5	5.9	4.1	3.1
Cyprus	7.8	9.5	9.4	15.3	28.5	16.4	3.1	3.8	1.8	4.5
Malta	7.7	11.1	9.0	10.4	26.3	19.6	2.7	5.9	3.9	3.5
Czech Rep	13.0	13.1	13.5	11.5	21.5	12.4	3.4	6.5	3.9	1.3
Hungary	12.2	13.1	11.6	9.7	20.6	11.5	3.3	7.7	7.0	3.3
Estonia	12.2	14.3	11.9	9.7	20.4	10.0	3.9	8.4	6.9	2.3
Latvia	13.5	14.8	8.7	7.5	15.6	9.6	4.3	8.8	11.1	6.1
Lithuania	11.2	16.0	10.7	11.5	16.1	13.7	3.3	6.6	7.9	3.0
Slovenia	6.3	8.0	8.5	10.9	23.6	22.5	2.1	7.0	8.5	2.7
Slovakia	11.1	11.7	8.5	8.2	20.7	19.7	2.0	7.4	8.3	2.4
Poland	9.9	12.9	11.0	7.8	22.7	13.9	2.3	5.9	11.1	2.5
Bulgaria	6.7	13.8	9.3	11.8	13.8	14.6	1.5	7.3	17.3	4.1
Romania	10.6	15.3	11.7	10.9	17.0	12.5	1.5	4.5	10.3	5.6
All	15.3	12.8	13.3	12.1	21.5	10.2	3.6	4.6	3.7	2.8

Source: EU-SILC cross-sectional files release 2009-3

Note: rows add to 100%

Table A2: The distribution of household types: individuals living in households of different types, as percentages of all individuals

	Single person aged under 65	Single person aged 65+	Couple both under 65	Couple, 1 or both aged 65+	Couple + dependent child/ren	Couple + adult child/ren	Lone parent + dependent child/ren	One parent + adult child/ren	Extended family	Other
Sweden	9.5	5.6	14.0	12.7	40.1	6.1	5.3	2.3	0.2	4.2
Finland	8.5	4.1	19.8	10.7	42.6	6.8	3.8	1.9	1.0	0.9
Denmark	7.3	4.5	17.4	12.3	44.0	4.2	5.3	1.4	0.4	3.3
Norway	10.0	3.8	15.5	10.2	45.5	4.7	6.7	1.7	0.5	1.4
Iceland	5.1	2.8	10.9	7.5	48.9	9.8	6.1	2.4	2.6	3.9
Netherlands	8.1	4.5	15.6	11.0	44.2	9.4	3.6	1.5	0.3	1.9
UK	6.7	6.4	13.4	10.3	36.5	9.0	7.7	3.4	2.8	3.8
France	7.9	5.8	14.1	10.6	39.5	9.0	5.6	3.0	1.8	2.7
Germany	11.8	6.1	14.5	15.6	31.2	11.0	4.5	3.3	0.6	1.5
Austria	9.4	5.9	11.2	10.0	35.5	12.3	4.2	3.2	5.3	3.0
Belgium	8.5	5.4	13.4	9.7	34.5	11.5	5.9	3.5	2.1	5.6
Luxembourg	6.5	3.4	11.5	8.6	43.9	12.0	4.8	2.7	4.7	2.0
Ireland	5.1	6.0	9.7	8.0	39.6	9.6	8.6	5.3	2.4	5.8
Italy	5.6	6.4	6.7	10.1	33.5	20.5	3.0	5.6	5.0	3.6
Spain	3.0	3.4	8.1	8.0	36.2	20.2	1.9	5.3	7.6	6.2
Portugal	2.4	4.7	7.4	10.7	31.8	19.7	3.0	5.4	10.2	4.6
Greece	4.3	4.4	6.7	11.7	33.4	22.6	1.5	5.2	6.8	3.4
Cyprus	2.8	3.4	6.8	10.9	40.7	21.3	3.3	3.2	2.9	4.8
Malta	2.7	3.9	6.4	7.4	37.1	24.6	2.8	4.8	6.9	3.4
Czech Rep	5.3	5.3	11.0	9.4	33.8	17.3	3.7	5.9	7.0	1.5
Hungary	4.8	5.1	9.0	7.5	31.9	15.0	3.6	6.6	12.4	4.1
Estonia	4.9	5.7	9.5	7.8	31.9	13.4	4.4	7.3	12.2	2.9
Latvia	5.3	5.8	6.8	5.9	23.4	12.5	4.3	7.5	20.5	8.0
Lithuania	4.5	6.4	8.6	9.3	25.1	18.4	3.5	5.9	14.6	3.8
Slovenia	2.1	2.7	5.7	7.3	31.7	26.3	1.9	5.3	14.1	3.1
Slovakia	3.8	4.0	5.9	5.7	29.4	24.5	2.0	6.0	15.6	3.0
Poland	3.5	4.5	7.7	5.5	31.8	16.8	2.6	4.8	19.8	3.3
Bulgaria	2.3	4.9	6.5	8.3	17.9	17.4	1.4	5.7	30.6	5.0
Romania	4.0	5.8	8.9	8.3	24.9	16.8	1.6	3.9	18.9	6.8

Source: EU-SILC cross-sectional files release 2009-3

Note: rows add to 100%

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