

Relative to What?
Cross-national Picture of European Poverty
Measured by Regional, National and European
Standards

Olli Kangas
Olli.Kangas@utu.fi
Veli-Matti Ritakallio
Veli-Matti.Ritakallio@utu.fi
Department of Social Policy, University of Turku

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Introduction¹:

The idea of the relativity of poverty and the social character of needs dates back to the writings of Adam Smith. Smith wrote in his *The Wealth of Nations* (1981, 869-870 [originally published in 1776]): “By necessity I understand, not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without.”² Thus, he argues, needs are highly socially determined. Therefore, needs and the content of poverty vary in time and place. He nicely continues: “Custom... has rendered leather shoes a necessary of life in England. The poorest creditable person of either sex would be ashamed to appear in publick without them. In Scotland, custom has rendered them a necessary of life to the lowest order of men; but not to the same order of women... In France they are necessaries neither to men nor to women...”

As a rule all international comparisons of poverty have been based on the relativist research strategy sketched by Smith: national states have been used as units of analysis. Poverty has been defined and operationalized within national boundaries and the criteria of relative poverty vis à vis income distribution have been determined separately for each country. The concept of poverty is thus by definition tied to the context of a national state.

This nation-based relativistic research strategy has both advantages and disadvantages. The advantages are obvious, as it has been the sovereign state and a specific nation-related political history that has traditionally produced social welfare for its citizens. Moreover, despite of the growing impact of globalization and all possible aspects attached to it, national states still are the locus of decision-making. They decide how to cope in changing global circumstances. Thus, various political and policy related reasons speak in favor of using national states as research units also in the era of globalization.

¹ The preliminary version of the paper was presented at the EU COST A15 meeting at Oslo, 4th of April 2002. We want to thank Jürgen Kohl, Johan Fritzell, Kåre Hagen, Karl Hinrichs, Karin Heintzman, Axel West Pedersen and all other participants of that meeting. We want also thank Mikko Niemelä for his careful criticism of the paper.

² Interestingly enough, the very same idea is used by Jon Rawls in his *The Law of Peoples* (1999, 114).

Using the state as the analytical unit is also motivated for practical reasons, as data is compiled using increasingly uniform national criteria, so that following changes through time produces fairly reliable picture on the development of inequality and poverty within a country.

The choice of nation bound relativistic approach is theoretically based on the reference group theory based on the notion that deprivation always has to be defined contextually (Runciman 1966). Tastes and preferences are context-bound and therefore, poverty equals to the lack of resources that leads to an inability to participate in the normal way of life of the surrounding society (Townsend 1979; Gordon & Townsend 2000). To apply Adam Smith's adage, the Englishmen need their leather shoes, whereas the French can very well manage without them. But, what is the right context to apply the reference group theory? How far the idea of relative poverty should be extended in international comparisons of poverty?

Thus there are growing problems connected to the nation-centered comparative strategies (for discussion, see e.g. Rainwater & al. 2001; Jesuit & al. 2002; Heidenreich 2003; Steward 2003). The relative poverty figures based on the income distribution of each country are, as the name states, highly relative, i.e., dependent on the shape of the income distribution of each country, not on the absolute amount of income. If the shape of income distribution for any two countries is the same, the relative degree of poverty will also be the same, when determined by, say, 50 % or 60 % of the median income. Yet one of the countries could be significantly more prosperous in terms of per capita national product, and the poor people of one country may even be classified as rich in the other. E.g. the relative poverty rates in the U.S and Estonia may be the same but those classified as poor in the former were in absolute terms prosperous in the latter country. The relative method thus easily loses sight of the connection between poverty and actual subsistence levels (for criticism of the relative poverty measure, see Sen 1981; Ringen 1987).

This problem of excessive relativization can be alleviated e.g. by composing comparative units that are larger than individual countries. We can, for example, set a common poverty line for all the Nordic countries (e.g. as in Kangas & Ritakallio 2000) or merge European nations together and apply a common standard for the constructed "Euroland" (e.g. as in Beblo & Knaus 2000) and then study if the picture of poverty is different compared to that produced by national poverty lines at the national level. The extension of the poverty lines to the European Union, in particular, is pertinent

today, as national states are losing their decision-making powers to the Union-level supra-national bodies, and the comparative perspectives of the growing number of people are extending beyond national boundaries. As well can be argued that western mass media has built a more uniform reference base for western people. At least, the Europeans are more explicitly comparing themselves and their standard of living with levels of living in the other member states of the European Union. This kind of intra-European comparisons are facilitated by the common European production of income and poverty statistics (e.g. European social statistics compiled by the Eurostat). In sum, the deepening European integration and intensifying cultural globalization create uniform standards of comparisons and common European yard-sticks for measurement of poverty and level of living in different areas of Europe. National standards will be replaced at least partially by EU-standards.

In a similar vein, while globalization can justify the use of reference units that are larger than national states (such as Scandinavia, Europe as a whole, or all of the OECD area), it is also justifiable to look for analytical units smaller than that of the national state. Visions of a Europe of regions, i.e., Europe that has been divided in terms of regional affiliations, for example, would motivate to use regional units in analysis, such as European capitals or European peripheries. Also this approach is politically well-motivated: the whole idea of structural funds in the European Union aims at eradicating or mitigating regional disparities in the Union. Or we could go further. Without doubt various occupational groups instead of comparing their salaries with the average wage level of their own country are more frequently comparing their income levels with incomes earned by the same occupational groups in other European countries.³ Thus, there may be substantial occupational and regional differences that are concealed in national level inspections. In this study we are going to touch upon income differences between regions, nations and the European union, or Euroland if you like.

The aim of this study is to try to play with different kind of relativizations and see what will happen if we, instead of using conventional nation state-based poverty lines, apply a common European poverty line or regional lines. Our starting point is the conventional approach where we will compare poverty rates in 13 member states of the European Union. Thereafter, in order to analyze poverty at the international level, we pool these 12 national data-sets together to form a larger suprana-

³ A good example is served e.g. by managers of multinational companies. They are comparing their salaries with earnings of their international colleagues living in richer countries not with the incomes of workers living in their own

tional Euroland data-set. Here we will shed some light on the incidence of overall European poverty. Since one of the central goals of the European Union policy making is to bridge the gap between advantaged and disadvantaged regions, we will divide Europe into capital areas – that usually are the most prosperous areas in a country – and poor peripheries. Thereafter, we will calculate separate poverty lines for these smaller supranational entities to see both the within-country and between country variation in poverty. Separate national sub-areas are thus compared first nationally and then internationally with each other. This kind of methodological exercise, we believe, will give a more nuanced picture of poverty as a regional, national and international problem. So far, only a handful of studies of this nature have been conducted. This approach also allows us to evaluate in more details the relevance of national median-based poverty measures.

The structure of the paper is as follows: in the subsequent section we shortly describe the data-base used and explain our methodological choices. Thereafter we discuss regional, national and international poverty lines that constitute the basis for our analyses on poverty levels presented in the third section. The penultimate section shortly assess who the European poor are. The final section discuss the findings at a more general level.

Data and Methods

The conditions for carrying out comparative research on income distribution have improved greatly with the development of the Luxembourg Income Study (LIS) project. The most pertinent achievement has been the databank made available to the research community (see Smeeding, O'Higgins & Rainwater 1990; Smeeding & Vleminckx 2001; Smeeding 2002) that contains commensurate information for 29 countries. Each country's data-set includes accurate information on two to fifty thousands households' income and income formation, i.e., how much of their income consists of salaries, capital or business income and various kinds of received and paid redistributive sources. Also, for each household, information is available on the essential structural features, such as the type of household, age of provider, number of children, and numbers of wage earners or recipients of other income, as well as educational attainment, profession and social group of the provider. For most countries, there is also a prodigious amount of cross-sectional data (for the United Kingdom, for example, there are cross-sectional data from the years 1969, 1974, 1979, 1986, 1991, 1995 and 1999). Here we will use the fourth wave of LIS that is for the mid/late 1990s. For some countries –

country. Interestingly enough, they do not apply the same strategy of comparison when it comes worker's wages that

like Finland, Germany, Italy, Luxembourg, Netherlands, Sweden and the U.K. – also data for 2000 or so would be available, whereas for some other countries – like Austria, Belgium, Denmark, France, and Ireland – the latest data is for the mid-1990s, (for Spain the data is for 1990), we decided to use the latest “complete” wave. Since data for Greece and Portugal are missing from the LIS, the number of countries included in our exercise is 13 instead of all the 15 EU-countries.

Data-sets cover all persons except those living in institutions. The flexibility of data allows us to manipulate and re-group data at national, regional and international levels. Thus, the micro-level data available in the LIS databank makes it possible to compare flexibly and accurately income distribution, poverty, and income equalizing effects of socio-political schemes between countries included in the data-base. It is worth to pinpoint here that we use here only income based poverty lines and do not employ consumption based poverty measures – what strictly speaking the “Smithian” approach had demanded – or subjective feelings of poverty. Such exercises are conducted elsewhere (see. e.g. Halleröd 1995; Kangas & Ritakallio 1998; Gordon & Townsend 2000; Berthoud 2003).

are usually contrasted against wage levels in poorer countries.

Table 1. Countries, data sets, sample sizes and populations for the European Union member states in LIS.

Country ⁴	Data-set and the year	Sample size ⁵	Weighted sample size, millions (population)
Austria	Austrian Microcensus 1995	47 753	6,3
Belgium	Panel Survey of the Centre for Social Policy 1997	11 340	10,1
Denmark	The Income Tax Survey 1995	25 834	5,2
Finland	The Income Distribution Survey, 1995	25 206	5,0
France	Family Budget Survey 1994	29 249	57,1
Germany	German Social Economic Panel Study (GSOEP) 1994	78 119	81,6
Ireland	European Community Household Panel 1995	2 670	3,1
Italy	The Bank of Italy Survey 1995	23 298	56,9
Luxembourg	The Luxembourg Social Economic Panel Study 1994	4 842	0,4
Netherlands	Socio-Economic Panel (SEP) 1994	12 963	15,4
Spain	Expenditure and Income Survey 1990	38 429	39,2
Sweden	Income Distribution Survey 1995	33 732	8,3
United Kingdom	The Family Expenditure Survey 1995	54 311	58,2
All together		387 746	346,8

Despite the efforts to make the different variables as uniform and commensurate as possible, the LIS data are by no means unproblematic. In the Swedish data, for example, a problem is that all people (children) over 18 years of age who live in their parents' homes have been accounted for as separate households. Because of this kind of households are often without personal income, the Swedish data overestimates the extent of Swedish poverty. In this study, we have corrected this by excluding the data on all persons under 30 years of age who live alone and whose income level is below 30 % of the median income of the population (half of our poverty threshold), which is well below the statutory minimum income security level for a person living alone. This adjustment removed 2 % of the cases, and consequently, the poverty situation in Sweden appears less dire (e.g. at the 60 % poverty line the Swedish poverty rate without the adjustment is 9,1 %, while it is 7,1 %

⁴ There is no data available from Greece and Portugal.

⁵ Data-sets cover all persons except people living in institutions. Number of persons living in households included in the sample.

with the aforementioned adjustment), and the Swedish data becomes more commensurate with those of the other countries.

Moreover, as a rule, the LIS data contain weights with which the samples of each country can be "raised" to the level of the total population. In the case of Belgium, Denmark, Germany, Italy, Luxembourg, the Netherlands, Spain, and the U.K. there are no such weights and therefore, we constructed ourselves the weights by dividing the total population by the sample size. When pooling the national data-sets into the common European data-set each country has been weighted by the size of its population. The most populous Germany with its 82 Million inhabitants has the biggest weight and the Luxembourgese the smallest one (0,4 Million). The other countries are in between these two extremes (see Table 1). By applying such a methodology we rose the original LIS sample size of 387 746 cases to represent 347 Million Europeans.

When constructing the common European poverty line, each national income data were, if necessary deflated to 1995 values by using national consumer price indices, where after data were converted to one single currency, i.e. *ECU* by using purchasing power parities⁶. Since the common currency became later to be called *EURO*, we use EUROS instead of ECUs in our subsequent presentation.

The income concept applied here includes wages/salaries plus income from self-employment and capital income (to all members of the household), which together comprise factor income for the household. Factor income plus all transfers paid to the household form gross income of the household and the concept of disposable income is gross income minus taxes and other transfers the household must pay. Our concept of disposable income does not include the value of social services; the value of which is hard to evaluate (for a closer discussion, see e.g. Saunders et al. 1992). The LIS-data for households were converted into data for individuals by entering the material for each household into the data as many times as the number of household members. So, the research unit used here is the individual and her income is the sum income of the household divided by the number of consumption units in her household (for a closer description of the methods see Gustafsson & Uusitalo 1990).

⁶ The ECU (as it was called) transformation is derived from the LIS files.

After the above-mentioned adjustments to the data, it was possible to apply the common methods of poverty research. For the sake of simplicity and space considerations, we restricted ourselves to the most commonly-used definition of poverty, defining as poor those persons whose disposable income falls below a certain level of the median equivalent income (using the OECD equivalence scale) of the population in any area being investigated. By utilizing these common methods we also share the advantages and disadvantages of such approaches (for a closer description, see Mitchell 1991; Saunders 1994). In order to test the sensitivity of our results, we measured poverty rates by using two poverty thresholds, i.e. 50% and 60% of median income. In some cases analyses are based on both methods. In principle there were only minor differences between the thresholds. Therefore, to make the tables more reader-friendly, we only display the 60% results, which also is in line with the Eurostat procedure⁷ (Atkinson, Cantillon, Marlier & Nolan 2001).

Regional, National and European poverty lines

In the previous sections a hypothesis was presented that the proceeding European integration will lead to a common European frame of reference in terms of the level of living. Therefore, the use of some kind of common European poverty line is warranted. However, there are also other processes that may lead to another direction. We can think that the Europeanization will gradually dissolve the powers of national states and regional units will grow in importance. If this “Europe of regions” will materialize, then we could think that instead of using a national state as a reference group, people living in the capital area will compare themselves with other people living in the same area, not with those living in national peripheries. Furthermore, we could think that people living in capitals in different European countries are more prone to compare themselves with other capital areas in Europe. Correspondingly, the people living in less advantaged regions may use their neighbors as a frame of references. The Scots women are happily going on as bar-footed.

In Table 2 we are playing with that kinds of relativizations and present national, regional and European poverty lines and European level rankings. For each country we first calculated the conventional national poverty lines (the upper number printed in bold in the second column from the left)

⁷ The shift from the previous 50% poverty line to the 60% line does not essentially change the rankings of countries. However, interesting changes do take place: poverty rates for the “low poverty countries” are doubled, whereas poverty in “high poverty countries” does not increase in the same pace. Consequently, the coefficient of variation between countries will diminish from .41 for 50% to .31 for 60% poverty lines. Thus, the increase of poverty line will squeeze differences between countries and display the poverty situation in European countries more similar. The higher the

and then – providing that a regional variable was available in LIS – we counted separate poverty lines for the richest (usually the capital areas) and the poorest areas. Thus the table also gives some hints how much there is within-country variation in income levels. Finally the national and regional poverty lines were related to the weighted overall European poverty line (the third column from the left) to indicatively see how sensitive countries are to shifts in poverty thresholds. Just to give a clue how to interpret the figures in table 2 let’s take a look at Austria. The national poverty line in Austria is E 6 456 or 106 percent of the weighted European common poverty line (E 6 081). The Austrian poverty line is the seventh (7) highest in Europe. The regional poverty line for Wien, that represents the rich area, is E 6 939 which is the ninth [9] highest of all regional poverty lines. For the poorer Tirol the corresponding indicators are E 5 650 and [17]. Differences in rank-orders can be used as preliminary indicators of income disparities within a nation. The bigger the gap in ranks between the rich and the poor areas, the bigger the within nation differences probably are.

The national poverty lines can be interpreted as indicators of the overall level of income in a country. At the national level the Luxembourgise in particular seem to enjoy an extremely high level of income followed by the Danes. The other rich countries are much closer to the European mean. The regional figures reveal interesting stories. There are only two exceptional – Ireland and Spain – where all the poverty lines, i.e. the national and regional lines are below the European level, whereas in all other countries at least the richest area exceeds the European mean value. In four countries (Belgium, Denmark, Luxembourg, and Sweden) all indicators are higher than the EU benchmark.

Table 2. National, Regional and European poverty lines (60% of median) in Euros and national Gini coefficients.

Country and rich and poor regions	National poverty line (rankings) and poverty line for rich and poor regions [rankings]	National and regional poverty lines % of the European line	National Coefficients (Ranking)	Gini
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poverty threshold, the more homogenous the European countries seem to be no matter what kind of social policies they do apply.

Austria	6456 (7)	106	27,7 (8)
Wien	6939 [9]	114	
Tirol	5650 [17]	93	
Belgium	6847 (3)	113	26,0 (6)
Flanders	7450 [6]	123	
Wallonia	6716 [12]	110	
Denmark	7459 (2)	123	23,6 (4)
Roskilde	8503 [3]	140	
Viborg	6754 [11]	111	
Finland	6382 (8)	105	22,6 (2)
Helsinki	6998 [8]	115	
Lapland	5710 [15]	94	
France	6595 (6)	108	28,8 (9)
Great Paris	8341 [4]	137	
Calais	5554 [18]	91	
Germany	6767 (4)	111	26,1 (7)
West Berlin	7986 [5]	131	
Saxony	5695 [16]	94	
Ireland	4846 (12)	80	34,9 (13)
Dublin	5486 [19]	90	
West-Ireland	3998 [22]	66	
Italy	5102 (11)	84	34,2 (11)
Milan	6776 [10]	111	
Sicily	3125 [24]	66	
Luxembourg	10518 (1)	173	23,5 (3)
Lux	11791 [1]	194	
Wiltz	8560 [2]	141	
Netherlands (no regional data available)	6312 (9)	104	25,3 (5)
Spain	3956 (13)	65	30,3 (10)
Catalonia	5002 [20]	82	
Andalusia	3301 [23]	54	
Sweden	6628 (5)	109	22,1 (1)
Stockholm	7231 [7]	119	
North Sweden	6213 [13]	102	
UK	6210 (10)	102	34,4 (12)
South-East England	6006 [14]	119	
Nothern Ireland	4283 [21]	85	
Overall weighted Europe	6081	100	31,0
Coefficient of Variation	Without Luxemb		
Between nation	.24	.16	
Between rich regions	.24	.16	
Between poor regions	.29	.25	
Within nations	.47	.47	

As can be seen, there are substantial differences in poverty lines between countries (cross-national differences) as well as between regions (within nation differences). The range of variation between nations reaches from the minimum Spanish value of 65% of the EU mean to the maximum Luxembourg value of 173%. Thus the between-country range is as much as 108 percentage points. The national poverty line for Luxembourg is 2.7 times higher than for Spain. The between-nation

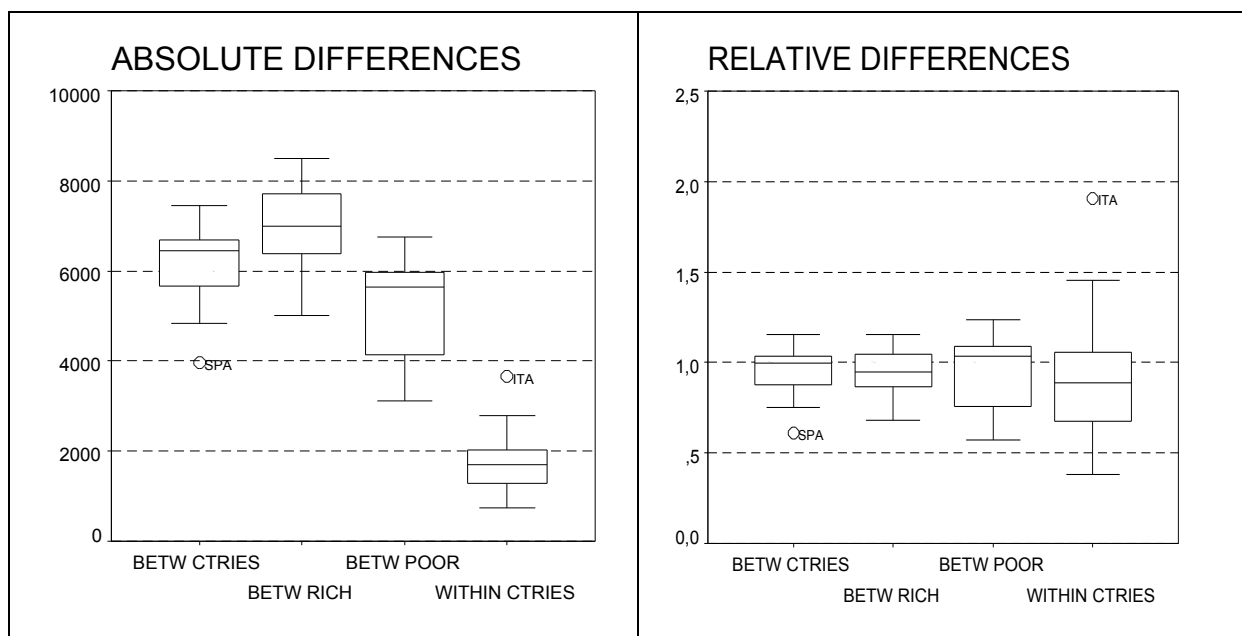
variation is very much contaminated by the extreme Luxembourgise figures and if we exclude that case, the national differences will diminish remarkably and the riches vs. poorest country ratio is 1.8. The figure for the variation between richest European regions is at the same magnitude (Roskilde vs. Catalonia 1.7), whereas the ratio for the poorest areas is a bit higher (Viborg to Sicily 2.2).

In some cases we can find substantial within nation variation. The within-country variation between the rich and the poor areas is the biggest in Italy (Milano to Sicily ratio = 2.2) followed by Spain (1.5), France (1.5), Ireland, Germany and the U.K. (1.4). Regional differences are the smallest ones in Belgium and Sweden (1.1) followed by Finland (1.2), Denmark and Austria (1.3). Among this latter group of countries all poverty lines hover around the European mean which indicates that these cases are the most robust ones and they are not as sensitive as the other countries to the choices of relativizations used.

The story told above can be read in a squeezed form out of the coefficients of variation (CV) presented in Table 2. The CVs are to some extent sensitive to the tiny Luxembourg: variation both between nations and between rich areas will decrease (from .24 to .16) if we omit this outlier. According to the CVs relative differences are bigger within nations than between nations, i.e. cross-national differences are smaller than national differences. This seems to speak in favor of our previous criticism against the use of national states as the only reference point. However, the picture is a bit more nuanced (Figure 1⁸). Our interpretation is dependent on the way we compare countries. If we apply the absolute comparative strategy, the differences are biggest between the riches areas and between nations. The smallest absolute differences are found between nations. The relativist way to compare (the right-hand side of the figure) will reverse the picture. If we standardize differences by dividing them by the respective means, our conclusion is the same as was given by the coefficients of variation: differences within nations are more pronounced than between nations.

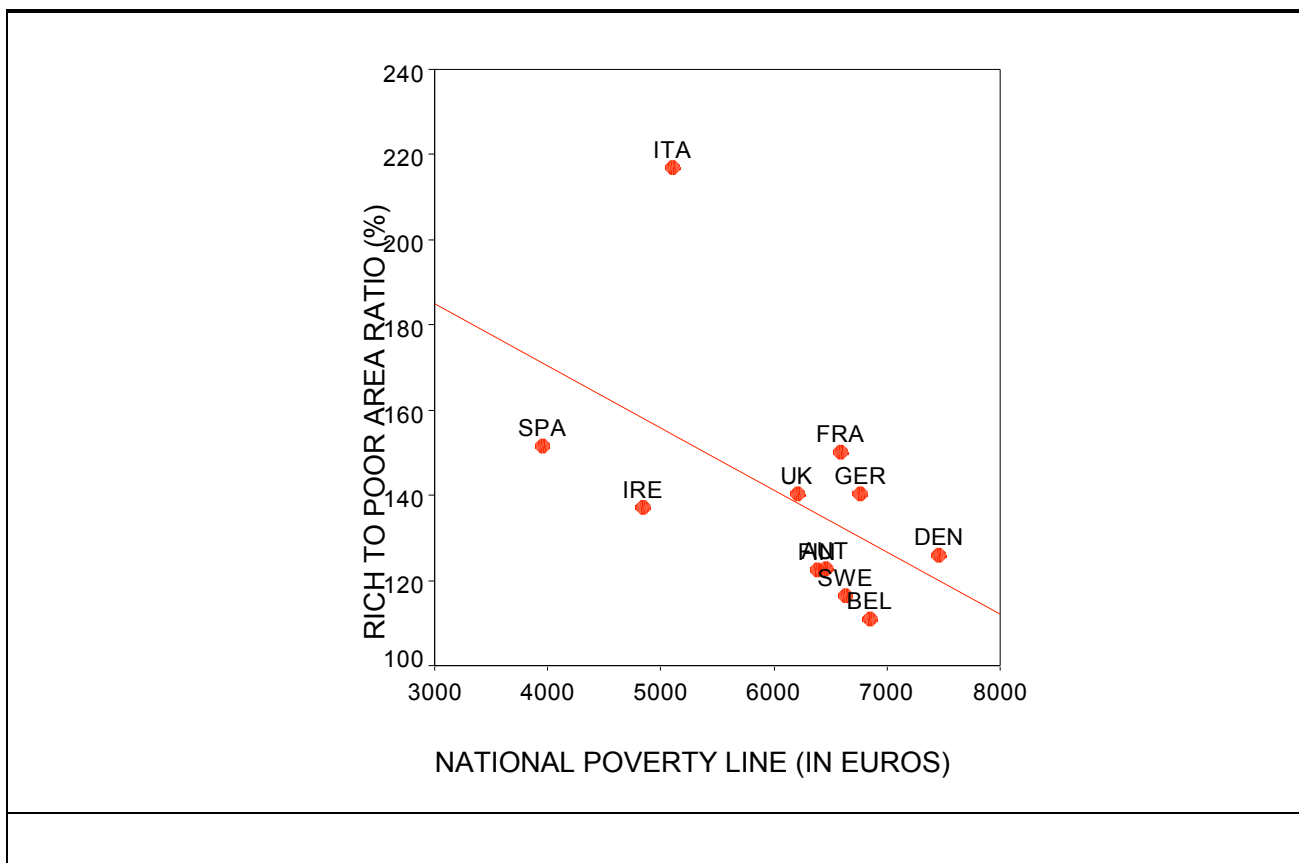
Figure 1. Variation in poverty lines between countries, between rich areas, between poor areas and within countries; absolute (in Euros) and relative (absolute differences / mean for the 11 countries).

⁸ The interpretation of the Tukey-boxes is as follows: The upper boundary of the box is set at the 75 percentile and the bottom boundary represents the 25 percentile. Thus, half of the cases are within the box (or if the variation is small all cases can be within the box). The median values are indicated by the horizontal lines inside the boxes. The lines (“whiskers”) drawn from the upper and lower edge of the percentile box represent cases that are not outliers, e.g. cases with values less than 1.5 box-lengths either form the upper or the lower boundary of the box. Cases deviating more than 1,5 lengths are classified as outliers and marked by circles (as Italy and Spain).



The crucial question is which comparison is the correct one. Are relative or absolute differences the “real” ones? How to compare? On the basis of LIS it is impossible to answer to this question but tentatively one could present a couple of hypotheses. First when it comes to comparisons within a nation, people usually use relative comparisons. The Swedes living in Northern Sweden compare themselves with the Swedes living in the southern part of the country. Second, when it comes to the international comparisons we usually use absolute measures. Third, we could think that people tolerate bigger differences on the cross-national level than on the within country level. People living in Northern Ireland are not perhaps that upset on the richness of the Luxembourgese but are much more sensitive to their income gaps in comparison to the rest of the U.K.

Figure 2. National poverty line (in Euros) and regional differences in poverty (poverty line in rich areas / poverty line in poor areas, %).



Poverty is always attached to the lack of money. Therefore, it is interesting to see to what extent regional differences in income are attached to the general income level of the country in question. In figure 2 we have used national poverty lines as proxies for national prosperity and plotted regional differences (in percentages) against this measure. Among the European countries (the extreme Luxembourg excluded) there is a strong correlation ($r = -.52$) between the income level of the country and the deepness of regional disparities within a country. The poorer the country, the bigger the regional differences are. In this inspection Italy is a clear outlier with its extremely high regional differences. The two other low-income countries, Spain and Ireland, display lower degree of disparity compared to Italy. On the other end of the continuum we find Denmark, Sweden and Belgium with high income levels and relatively small differences between regions. The exclusion of Italy, Spain and Ireland will decrease the correlation ($-.30$) but nevertheless there is a tendency that in rich countries regional disparities are smaller than in poorer countries. The same negative relationship is also evident when it comes to the overall income differences within a country and national prosperity. The correlation between national gini-coefficients (table 2) and national poverty lines is significantly negative ($-.60$). In poorer countries the overall income inequalities tend to be larger.

Regional, National and European Poverty

In table 3 we present results from measurements based on different poverty lines. First we calculated national poverty rates (presented in the second column from the left) based on national 60% poverty lines. The third column displays national poverty rates if the measurement is based on the European poverty line. The remaining columns depict regional figures. In the fourth column poverty lines are regional, i.e. for rich areas and poor areas are separate thresholds, and consequently, the poverty rates shown in the column are regionally relative. In the fifth column we apply the national poverty lines to regional units and, finally in the last column the figures indicate what the regional poverty rates were if we applied the common European poverty threshold for regional analyses.

According to the national poverty lines, the weighted European average is 15.5% (table 3, last row, second column from the left). The incidence of poverty varies from the 7.1% in Sweden to 20% in the U.K. Countries could be loosely merged into three groups: in Finland and Sweden the poverty rates are clearly below 10%. In the second group of countries the poverty rates vary between 10 and 15% (as in Luxembourg, Belgium, Netherlands, Denmark, France and Germany), whereas in the rest of countries the rates are higher: about 16% in Spain and about 18% in Ireland and Italy and 20% in the U.K.

Table 3. Regional, Poverty rates (%) by different relativizations in 13 EU-countries (60% poverty line; rankings in parenthesis).

	National poverty rates		Regional poverty rates		
	National poverty lines	Overall European poverty lines	Regional Poverty line	National Poverty line	Overall European Poverty line

Austria Wien Tirol	16,2 (9)	14,2 (9)	20,6 14,5	18,5 19,5	16,9 17,2
Belgium Flanders Wallonia	11,0 (4)	7,5 (5)	11,7 13,8	8,3 18,0	5,4 10,7
Denmark Roskilde county Viborg county	11,7 (6)	6,8 (4)	13,4 10,6	9,6 12,1	5,4 9,4
Finland Helsinki province Lapland	7,9 (2)	4,5 (2)	6,5 8,0	3,9 10,6	3,3 8,6
France Greater Paris Nord (Calais)	14,9 (8)	11,3 (8)	18,7 13,9	10,5 23,8	8,4 18,9
Germany West Berlin Saxony	13,1 (7)	9,4 (6)	19,1 7,3	12,0 15,0	9,5 10,0
Ireland Dublin West-Ireland	17,6 (11)	32,2 (12)	20,6 11,5	15,0 25,4	25,3 41,3
Italy Milan – Bologne Sicily	18,3 (12)	27,3 (11)	14,5 27,3	7,3 46,6	11,0 63,3
Luxembourg Lux city Wiltz	10,2 (3)	0,7 (1)	10,6 0	6,4 19,1	0,4 0
Netherlands	11,3 (5)	9,9 (7)			
Spain Catalonia Andalusia	16,2 (9)	43,7 (13)	17,5 17,9	6,7 27,3	28,7 58,1
Sweden Stockholm North Swe	7,1 (1)	5,1 (3)	9,8 6,1	7,7 7,9	6,0 6,0
UK SE England Nothern Ireland	20,0 (13)	19,0 (10)	20,4 16,9	14,6 29,3	13,7 28,9
Overall weighted Europe	15,5	18,2			

The huge differences in poverty lines presented in table 2 are naturally mirrored in poverty rates based on the European median income (the third column in table 3). Some countries are more sensitive than others. In poorer countries the shift from the national standard to the European measure

increases poverty. The shift from the national poverty lines to common European poverty line rises the overall weighted European poverty rate from 15,5 % to 18,2 % (table 3, last row). In Spain the use of the European threshold would almost three-fold the poverty rate. In Italy the poverty would increase by nine and in Ireland by 14.6 percent points. Belgium, Denmark, Finland, Germany, Luxembourg, and Sweden display an opposite pattern. In these countries the shift to the European measurement would decrease the poverty rates. For the rest of the countries the change has not big consequences. Perhaps the best pair-wise comparison to illuminate the importance of the poverty line used is offered by the comparison of Austria and Spain. If we apply the national poverty lines, these two countries are precisely the same, whereas the use of the European threshold will lead to tremendously higher poverty rates in Spain. Not that much happens in Austria.

We have applied three different poverty thresholds to regional analyses, each of them telling a bit different political story. The national poverty line will hint to the national policy makers if there are huge disparities between the rich and poor regions in a country. The inspection based on the European poverty line indicates whether there are some backward regions that are lagging behind the EU-development and are in need of structural subsidies. Finally the third approach is purely regional in that sense that we apply different thresholds for the prosperous and poor regions.

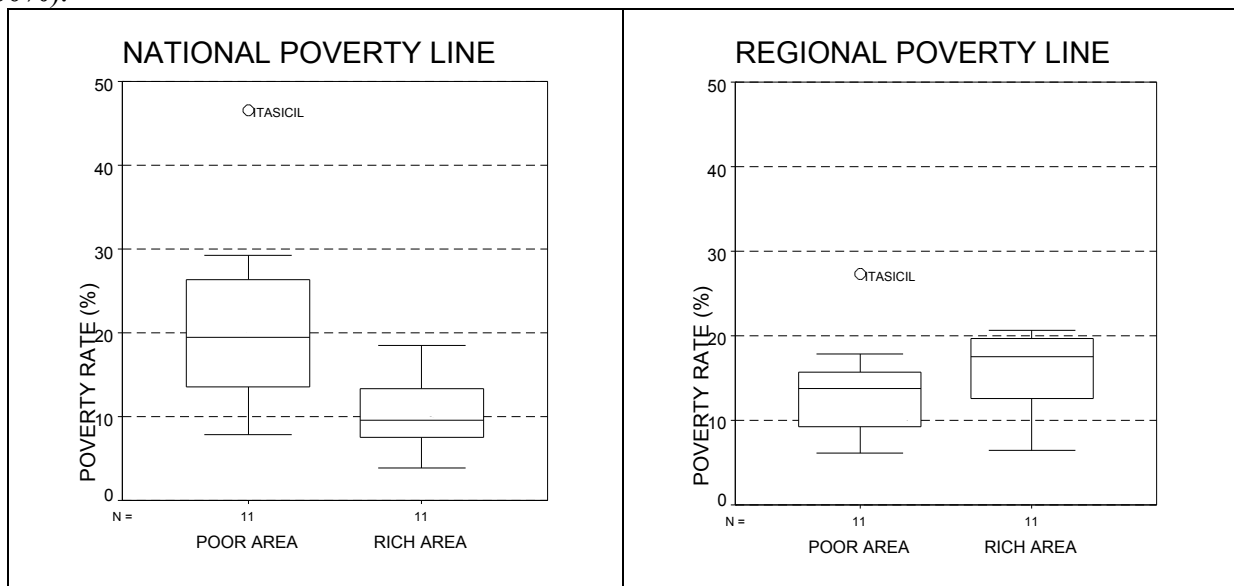
On the basis of national poverty thresholds we can see that areal discrepancies in the prevalence of poverty are widest in Italy. In Milan district the poverty rate is only 7.3%, whereas almost half of the Sicilians are classified as poor. The gap is expanded further if we use the European standard: now almost two thirds are poor in Sicily. The same kind of phenomenon is visible in Ireland and Spain, too. Sweden forms the other extreme. There are no substantial differences between the Swedish regions, used we the national or EU poverty thresholds. To some extent the same holds true for Austria, Germany and Denmark. In Austria and Sweden the overall national figures are higher than corresponding indicators for the two extreme areas. In all other countries poverty rates in the prosperous regions are lower than the national average.

Different relativisations lead to somewhat different conclusions on income gaps between rich and poor regions as indicated in Figure 3. If we use national poverty lines (or even more so if we used the European poverty lines), the dispersion of poverty rates between the poor areas is bigger than

between rich areas. Perhaps not surprising that the use of national poverty lines reveal the poverty rate to be higher in peripheries than in rich capital areas. (left hand panel in Figure 3).

The regional relativisations (poverty rates are calculated separate for each areas on the basis of regional poverty thresholds) in the right-hand panel in Figure 3 (or the fourth column in Table 3) indicate an interesting and perhaps a bit surprising result: *relatively* speaking there is less poverty in the poorer areas than in capitals. The poverty rate for peripheries is lower in Austria, Denmark, France, Germany, Ireland, Sweden, and the U.K. – something that indicates that incomes in poorer areas in these countries are generally speaking more evenly distributed than incomes in the most prosperous regions.

Figure 3. Poverty rates in rich and poor areas according to national and regional poverty thresholds (60%).



Our inspection above has some ramifications for comparative welfare state studies. Consequences for welfare regime-based interpretations given by Table 3 are pretty much the same as in Table 2. Results for the Scandinavian regime are the most robust ones against all kind of data-manipulation: regional differences are negligible and neither do the shifts from regional, to national and further to European poverty line affect the results. Only in the case of the three Nordic countries (fortified by Luxembourg) are the results based on national averages representative, while in the case of Italy and Spain results are the most contaminated. In Italy, for example, the average poverty rate at 60% level is about 21%, whereas the very same measure gives 7,9% for Milan and as much as 49 % for

Sicily. Thus at least in the Italian and Spanish cases we can wonder what is the national mean good for. The European level comparison yields even greater discrepancies.

The gaps between the lowest and biggest poverty measures given in Table 3 vary significantly between countries. On one hand we have Sweden (with a gap of 4.7 percent points), Austria (6.4), Finland (7.3), Denmark (8.0) and Germany (9.6) that display robust poverty rates regardless the measurements used. On the other hand we have Spain (51.4) and Italy (39.3) and Ireland (29.8) where results are highly sensitive to the measurement, which of course is due to the lower income levels in these countries. Luxembourg is also an instable case but of the opposite reason as the three former countries. The shift from the national poverty level to the European level would totally eradicate poverty in the rich Luxemburg. When it comes to the welfare state regimes the testimonies given by our two ways of comparing are pretty much the same for the Scandinavian and Central-European model, while more dramatic changes will occur in the Mediterranean regime. The poverty rates for the three Nordic countries are among the lowest ones regardless the relativization used. The same goes for the Central European countries

In the beginning we posed a question how warranted it really is to use national states as research units. Our inspection above has given some tentative answers. Some countries are more homogeneous than some others. One way to evaluate the homogeneity of countries is to calculate dissimilarity indices for our regions and see whether different areas within a country are more similar than areas in some other countries. The results from distance correlation (between cases and Euclidean distances; variables used in the analysis were: the poverty rates according to regional, national and EU-thresholds and regional poverty lines in Euros) analyses are presented in table 4 where the correlations are rescaled from 0 to 100. The former indicates the closest relationship and the latter the biggest distance. In a sense the table can be interpreted as a sociomatrix.

Table 4. Dissimilarity index for European regions (0 = the most similar cases; 100 the most dissimilar cases).

Area	Austria		Belgium		Denmark		Finland		France		Germany		Ireland		Italy		Spain		Swede
	Wie	Tir	Fla	Vall	Ros	Vib	Hel	Lap	Par	Cal	Ber	Sax	Dub	W-E	Mil	Sic	Cat	And	Sto
Wie	0																		
Tir	24	0																	
Fla	1	33	0																
Vall	1	20	13	0															
Ros	29	53	19	33	0														
Vib	0	20	13	0	32	0													
Hel	1	25	1	0	28	1	0												

Lap	23	1	32	19	52	14	24	0											
Par	26	50	16	30	0	29	25	49	0										
Cal	26	0	35	21	55	22	27	0	52	0									
Ber	19	43	1	23	1	23	18	42	1	45	0								
Sax	23	0	32	19	52	20	24	0	49	0	42	0							
Dub	27	0	36	23	56	23	24	0	53	0	46	0	0						
W-E	55	31	64	50	84	51	56	32	81	29	74	31	28	0					
Mil	0	21	12	1	32	0	0	20	29	23	22	20	23	52	0				
Sic	71	47	80	67	100	67	72	48	97	45	90	48	44	16	68	0			
Cat	32	12	45	32	65	32	37	13	62	100	55	13	1	18	33	35	0		
And	68	44	77	63	97	64	69	45	94	42	87	44	41	13	65	0	31	0	
Sto	1	29	0	1	23	1	0	28	20	31	14	28	32	60	1	76	41	73	0
Nor	13	10	23	1	42	1	14	1	39	12	33	1	13	41	10	57	22	54	19
S-E	17	1	27	13	46	14	18	1	43	1	37	1	1	37	14	53	18	50	23
N-Ir	49	25	59	45	78	45	50	26	75	23	69	26	22	1	46	21	13	18	55

As a rule, in all cases the closest case is not from the same country. For example in the Austrian case the distance measure between Wien and Tirol is 24, whereas Wien displays a much closer correlation with Belgian regions, Viborg, Helsinki, Milano and Stockholm. Tirol for its part has closest relationships to Calais, Saxon, Dublin, Lapland and South-East England. On the basis of dissimilarity indices there are three cases that deviate much from the rest of the cases: Sicily and Andalusia for their poverty and Roskilde for its wealth.

Who are the poor Europeans?

Conventional studies on poverty usually operate at two different levels. First, they inspect which cases, be they socio-economic groups, family types etc are the most exposed to poverty. The aim is to pick up the most poverty prone groups in society. Second, since some groups may be very poverty prone (e.g. the unemployed) but since they are small in numbers, their total contribution to the overall poverty rate is marginal, while some bigger groups (e.g. families with children) among which the incidence of poverty is much lower may contribute mostly to the overall poverty rate. The issue is socio-politically important: should we give priority to measure to help the most exposed group although this would not that much bring the overall poverty rate down or should we develop policy measures to help the bigger group (that might be better-off) in order to reduce poverty rates? In principle we have followed the same procedure in our analyses above and in principle the policy implications at the European level are the same as described above.

We have applied the first approach in Table 3 where we pointed out the countries that were the most poverty prone. We also conducted the analyses of the second type when we tried to see which

countries are the most responsible for the prevalence of poverty in the European Union. Results from this exercise are reported in table 5.

Table 5. Poverty head count in 13 EU countries by different relativizations, millions people

Country	National 60 % poverty line	Common European 60 % poverty line
Austria	1,0	0,9
Belgium	1,1	0,8
Denmark	0,6	0,4
Finland	0,4	0,2
France	8,5	6,4
Germany	10,7	7,6
Ireland	0,6	1,0
Italy	10,4	15,5
Luxembourg	0,0	0,0
Netherlands	1,7	1,5
Spain	6,4	17,1
Sweden	0,6	0,4
United Kingdom	11,6	11,1
All together	53,7	63,0

Here again the results are a bit different if we use national or European relativizations. According to the national 60 % poverty lines there are approximately 54 million poor people in Europe. The use of the European poverty line will increase the number of the destitute to 63 millions. When it comes to the contributions of individual countries, the biggest countries, the U.K, Germany, Italy, France and Spain contribute mostly to the overall European poverty (12 Mill, 11 Mill, 10 Mill, 9 Mill, and 6 Mill, respectively). If we instead of national poverty lines use the EU poverty line, the very same countries “explain” the incidence of the European poverty but now – not that surprisingly – the impact of our two Southern European countries is the most important: they comprise as much as 52 %

of the total European poverty, 33 Mill. By national standards the number of poor people in these two countries was half of that, 17 Mill. This is a visible evidence that the way to make the relativization matters. This is important to understand from the point of view of European social policy making. It makes a big difference if the biggest contributors to European poverty are the U.K. and Germany (as they are by using conventional standards) instead of Spain and Italy (as they are by using Common European Standard). Whom should the European Union help?

When it comes to the social policy decision-making the story told by table 3 gives some hints both to the domestic and European politicians. Relative national poverty lines help to detect the groups in society that are most in need of state intervention. To help those groups is in powers of national politics. When it comes to the EU the use of European standards depicts the regions in Europe that perhaps are most in need of help coming from EU funds.

Conclusions: Happy Scottish bar-footed women and happy Englishmen in their leather shoes?

We began with a quotation from Adam Smith who eloquently spoke about the relativity of needs. In this study we had not the possibility to go in details in the social determination of human needs. Instead, we tried to follow the path paved by Adam Smith by trying to shed some lights on to what the extent our picture of poverty will change if we accept a very relative concept of poverty. The first problem we encountered was the selection of the bench-mark. If needs and poverty are relative, which standards we should then apply. In our play with data, we selected couple of alternative ways to conduct relativizations. First, we applied the conventional poverty approach. Poor were those whose income remained below 60% of the national equivalent disposable income. Second, we collapsed European nations together into one data pool and calculated a common poverty line for the EU. This EU line was then applied in subsequent analyses. Here we tried to see if the Britons have their leather shoes and the French are walking in their wooden shoes. Finally, in order to see to what extent the Scotch and the Britons differ, as argued by Smith, we decomposed national states into smaller units representing the poorest and richest areas in respective countries.

Our substantial findings fortified the wisdom gotten from previous research: the Scandinavian countries display the lowest poverty rates, followed by the Central-European nations. The prevalence of poverty in the Mediterranean area is much higher than in the two other groups of nations. However, if we apply the conventional ways of operationalizing poverty, the cross-national varia-

tion of poverty is not that big. According to the national poverty lines and 60 percent poverty thresholds the poverty rate varies from 7,1% in Sweden to 20,5% in Italy. The shift to the common European poverty line will expand that gap. The variation is from 0,7% in Luxembourg to 43,1% in Spain.

Substantially and methodologically the most interesting issues are revealed when we compare regional, national and the EU level relativizations. Substantially there are huge regional disparities in Italy and Spain, while regional differences are much smaller in Scandinavia. Methodologically, we must ask what we are de facto comparing if we compare nations. Our exercise indicates that within-nation differences are often more pronounced than differences between nations. Therefore, very often national means tend to obscure more than reveal. The seriousness of the problem varies between groups of countries. In the egalitarian Nordic countries incomes between regions as well as between individuals are more evenly distributed and consequently, the national means can catch something more for these countries. Moreover, the Scandinavian cluster is more or less robust against our choice of ways to compare. The low poverty rates in the Nordic countries are not essentially changed even though we change from national to regional or cross-national poverty lines.

The change of ways of relativization does not alter our understanding on the Scandinavian poverty but it has a substantial impact upon our picture in the Mediterranean countries. The use of the European poverty line will lead to two to three times higher poverty rates than analyses based on purely national data. Also the regional variation in these countries is the widest one. Therefore, conclusions based on national means may in some cases be severely misleading. The results has some bearing also for our use of purchasing power parities. In societies with huge socio-economic and regional variation in income and consequently in consumption capacities purchasing power parities implicitly assuming homogenous consumption patterns over society may give a distorted picture of the price levels in a country in question.

When it comes to the Central European countries to some extent the same story as was told about the Scandinavian countries is valid. The countries are not that sensitive to changes in the calibration of the measurement instruments. Also the results for the U.K. are pretty robust but the main difference between the U.K. and Central-Europe is that the poverty rate is about 10 percentage points

higher in the former. In comparison to the French, the Britons seem to have nowadays problems with their shoes.

The play with different relativizations is not just for fun and academic acrobacy but it has important policy implications as well. The conventional nation-based relative measures have an important story to tell for the national policy makers: what are the groups of society that are the most exposed to low-income. What should be done to help these destitutes? From the national perspective regional analyses are useful especially in such cases where there are substantial differences in prices between regions. A lower income level in cheap areas may lead to higher living standard than higher income in a more expensive area. Unfortunately LIS cannot provide us tools to conduct such analyses, e.g. The European Household Panel Survey (ECHP) is better equipped in that sense. Analyses based on absolute European level poverty lines provide data on those areas that are most in need of subsidizes from the EU. In our analyses with the exception of Ireland and Spain at least the poverty line for the richest region exceeded the European poverty line, in many countries also the poorest region did it. The enlargement of the European Union will totally change this picture. The EU will get a substantial number of new countries (and substantial number of people) where also the richest regions lack clearly behind the European mean values. The researchers will have few additional questions on relativizations to solve – and the Eurocrats couple of relative and absolute political problems to handle.

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Figure 1. Variation in poverty lines between countries, between rich areas, between poor areas and within countries; absolute (in Euros) and relative (absolute differences / mean for the 11 countries).

Figure 3. Poverty rates in rich and poor areas according to national and regional poverty thresholds (60%).