

Session Number: Parallel Session 6B *Regional Measurement and Small Area Estimation*  
Time: Thursday, 28 August, AM

*Paper Prepared for the 30th General Conference of The International Association for  
Research in Income and Wealth*

**Portoroz, Slovenia, August 24-30, 2008**

**Income inequality and the effect of public policies in the  
European Union: what happens with enlargement?**

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# **Income inequality and the effect of public policies in the European Union: what happens with enlargement?**

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PRELIMINARY VERSION: not for citation, comments welcome

## ABSTRACT

We consider the European Union (EU) as an entity for which to measure inequality and the equalising effect of taxes and benefits. This provides indications of the degree of cohesion within the Union as a whole as well as the contribution that public policies make to reducing income inequality. Inequality and redistribution within countries is also of interest, in particular because the policies differ across national boundaries. This paper uses Generalised Entropy inequality indices to explore how these tax-benefit policies affect inequality at the EU level as well as within- and between- countries. Using EUROMOD, the EU tax-benefit microsimulation model, allows us to use measures of both gross primary incomes and disposable incomes (after taxes and benefits). Starting with the 15 pre-2004 countries of the EU it considers the size and direction of the EU-level effects with the addition of four New Member States (Estonia, Hungary, Poland and Slovenia) to the analysis. Building on the conceptual issues identified by Brandolini (2007) the paper provides an empirical exploration of the effects of a range of assumptions about how to measure income and assess the contribution of its components at a supra-national level.

JEL: C81, D31, H23, H55

Keywords: European Union, Income inequality, Redistribution, Microsimulation.

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## **Acknowledgements**

Some parts of this paper draw on “The Effects of Taxes and Benefits on Income Distribution in the enlarged EU” (Paulus et al., 2008) prepared as part of the I-CUE (Improving the Capacity and Usability of EUROMOD) project, financed by the Infrastructure programme of the European Commission (RIDS-CT-2004-011859). We are indebted to all past and current members of the EUROMOD consortium. The views expressed as well as any errors are the responsibilities of the authors and do not implicate the institutions to which they are affiliated. In particular, this applies to the interpretation of model results and any errors in its use.

This paper uses EUROMOD version D20 (June 2008). EUROMOD is continually being improved and updated and the results presented here represent the best available at the time of writing.

EUROMOD relies on micro-data from 17 different sources for 19 countries. These are the European Community Household Panel (ECHP) User Data Base and the EU Statistics in Incomes and Living Conditions (SILC) made available by Eurostat (under contract EU-SILC/2007/03); the Austrian version of the ECHP made available by the Interdisciplinary Centre for Comparative Research in the Social Sciences; the Panel Survey on Belgian Households (PSBH) made available by the University of Liège and the University of Antwerp; the Estonian Household Budget Survey (HBS) made available by Statistics Estonia; the Income Distribution Survey made available by Statistics Finland; the Enquête sur les Budgets Familiaux (EBF) made available by INSEE; the public use version of the German Socio Economic Panel Study (GSOEP) made available by the German Institute for Economic Research (DIW), Berlin; the Greek Household Budget Survey (HBS) made available by the National Statistical Service of Greece; the Living in Ireland Survey made available by the Economic and Social Research Institute; the Survey of Household Income and Wealth (SHIW95) made available by the Bank of Italy; the Socio-Economic Panel for Luxembourg (PSELL-2) made available by CEPS/INSTEAD; the Socio-Economic Panel Survey (SEP) made available by Statistics Netherlands through the mediation of the Netherlands Organisation for Scientific Research - Scientific Statistical Agency; the Polish Household Budget Survey (HBS) made available by the Economic Department of Warsaw University; the Slovenian Household Budget Survey (HBS) and Personal Income Tax database made available by the Statistical Office of Slovenia; the Income Distribution Survey made available by Statistics Sweden; and the Family Expenditure Survey (FES), made available by the UK Office for National Statistics (ONS) through the Data Archive. Material from the FES is Crown Copyright and is used by permission. Neither the ONS nor the Data Archive bear any responsibility for the analysis or interpretation of the data reported here. An equivalent disclaimer applies for all other data sources and their respective providers cited in this acknowledgement.

## 1. Introduction and motivation

The process of enlargement in 2004 from 15 to 25 (and then 27) countries was commonly understood to involve a lowering of average incomes in the European Union (EU): the “new” countries had lower income levels than those of the “old”. At the same time many of the new countries were still in transition from a communist past and had less unequal distributions of income than many of the old. Therefore the impact of enlargement on income inequality in the EU as a whole is a question that must be addressed empirically. Brandolini (2007) shows that while enlargement increased the income inequality of the “EU” as measured by the Gini index by three percentage points,<sup>2</sup> it remains lower than that of the USA, when some purchasing power differences within the entities are accounted for. As Brandolini (2007) spells out in his conclusion, income inequality at the level of the EU matters because it is one clear measurable aspect of social cohesion. Falling inequality in each of the Member States could be consistent with rising inequality in the Union as a whole if between-country income differences were rising. Social cohesion is a high-level goal of EU policy since the Lisbon summit and it is important not only to monitor its indicators (such as income inequality and relative poverty) but also to understand their robustness to assumptions. Particularly important is the role of policies because these are the “handles” that national governments – sometimes under the influence of EU processes such as the Open Method of Coordination of social inclusion policies – have at their disposal to influence the outcome.

Here we consider the role of national policies in the area of taxes and benefits that have direct and indirect impacts on the within-country disposable income distribution. The question we explore is the extent to which the role of policies in increasing the degree of cohesion is enhanced or reduced by enlargement. We refer to income inequality and relative poverty rates as two of the commonly used indicators to assess the degree of social inclusion in the European Union (Atkinson et al. 2002), exploring the direct effect of public support on the level and the distribution of resources available to individuals.

In doing so, we extend the well-established analyses on living conditions in European countries (see Atkinson et al. (1995) and Eurostat (2007) among others) focusing on the relative size of the so-called redistributive systems and their equalising effects within and between countries. We consider which types of policy have the most effect and examine the extent to which our conclusions are robust to various assumptions that must be made about

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<sup>2</sup> Brandolini’s 2007 analysis excludes four small countries – Cyprus, Latvia Lithuania and Malta – but nevertheless covers 98.5 per cent of the 2000 population of the EU25.

the equivalence of incomes across countries and across households (and, to some extent, through time).

We make use of EUROMOD, the tax-benefit microsimulation model of the EU which allows us to estimate personal direct tax liabilities as well as cash benefit entitlements and which facilitates the categorisation of benefit payments by type in a comparable way across countries. Our illustration of “enlargement” is the effect of adding to the original EU-15 countries modelled in EUROMOD, four new countries: Estonia, Hungary, Poland and Slovenia. We refer to the 19 countries together as the “EU-19”.

The next section describes the methods and data that are employed. It explains the breakdown of income concepts used and the implications of using simulated values from EUROMOD. It discusses analytical assumptions such as the choice of equivalence scale, how monetary values are combined through time and across country and the choice of inequality measures. Section 3 starts by describing how taxes and benefits reduce inequality focussing on the differences between the EU-15 countries and the four new countries and then comparing the EU-15 and the EU-19 as a whole. After that, sensitivities of these measures to various analytical choices are explored (section 3.2) and the role of tax-benefit systems in modifying within- and between- country components of inequality in the EU-15 and EU-19 is examined (section 3.3). Section 4 focuses on the composition of disposable income at household level to disentangle which components of the tax-benefit systems make a difference in the redistribution of resources across countries. Section 5 provides a complementary analysis of the extent to which benefits of different types contribute to achieving a greater degree of social cohesion by looking at their roles in reducing the risk of relative poverty faced by individuals. A summary of the main results and conclusions is presented in Section 6.

## **2. Methodology and data**

This paper makes use of EUROMOD, the multi-country European wide tax-benefit model covering the 15 pre-2004 European Union member states plus Estonia, Hungary, Poland and Slovenia. EUROMOD is a static microsimulation model that provides measures of direct taxes, social contributions, cash benefits as well as market incomes in a comparable way across countries. EUROMOD simulates cash benefit entitlements and direct tax and social insurance contribution liabilities on the basis of the tax-benefit rules in place and information

available in the underlying datasets. Instruments which are not simulated are taken directly from the data. See Sutherland (2007) for further information.

The analyses in this paper refer to all nineteen countries included in EUROMOD as well as the EU-15 and the “EU-19” as a whole. The latter is in one sense a good approximation of the EU-25, on the basis that the nineteen countries considered account for 95.1% of the 2003 population of the EU-25 (Eurostat, 2007). The underlying datasets used are listed in Table A1. The tax-benefit systems simulated in this paper refer to different years across countries ranging from 2001 to 2005 (see Table A1 for details) and monetary values have been adjusted to 2003 prices by using national per capita GDP growth (at market prices).<sup>3</sup>

In order to cope with both differences in national currencies and price levels we follow a quite common – although not free of criticism – approach of converting monetary values into Purchasing Power Standard (PPS), using the Purchasing Power Parity (PPP) indexes for GDP that are used by Eurostat to derive national account variables. Brandolini (2007) also uses the PPP index for household final consumption expenditure and shows that inequality at the European level is slightly higher using the latter.

Given the main interest in inequality and poverty reduction achieved through taxes and benefits, the definition of both pre- and post- tax-benefit incomes is crucial. We use two different pre- tax-benefit income concepts as our starting points as in Immervoll et al. (2006). The first starting point is “market income” which includes gross earnings (pre-tax and not including employer social insurance contributions), self-employment income, capital income, private pensions and private transfers. Market income here does not include lump sum payments or capital gains. Public pensions can be interpreted as deferred earnings or compulsory savings, and on this basis they would not be considered as part of the redistributive system.<sup>4</sup> Moreover in some countries private pensions can substitute for public pensions. For these reasons and considering that for some households public pensions are the only income source, our second starting point is a broader measure of market income that includes also public pensions (i.e. “market income plus public pensions”).

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<sup>3</sup> The national per capita GDP growth between 2001 and 2003 is as follows: Denmark 1.045, France 1.049, Ireland 1.152, Italy 1.059, Sweden 1.088. The ratio of national per capita GDP in 2003 to 2005 is as follows: Greece 0.866, Spain 0.89, Estonia 0.771, Hungary 0.841, Poland 0.781, Slovenia 0.901 (Eurostat, 2007).

<sup>4</sup> The term “public pensions” is used in a broad sense to include retirement and other insurance pensions received by people aged 65 or more (67 or more in Denmark) including survivors’ pensions, invalidity pensions and pension top-ups while excluding separate means-tested old-age benefits. Pension incomes paid to younger people are considered in our decompositions as non means-tested benefits.

To assess the resources available to individuals we consider the disposable income simulated by EUROMOD that corresponds to market income and public pensions after taxes and social insurance contributions are deducted and cash benefits added. EUROMOD does not take into account non take-up of benefits or tax evasion. It is assumed, therefore, that the legal rules are universally respected and that the costs of compliance and claiming are zero. This can result in the over-estimation of taxes and benefits and give rise to differences between EUROMOD estimates of disposable income and income values recorded in the underlying datasets (see Mantovani and Sutherland, 2003, and Corak, Lietz and Sutherland, 2005). At the same time one can consider the role of taxes and benefits that is captured here to be that *intended* by the design of tax-benefit policies even if their performance diverges to some extent in practice.

Another relevant issue in a cross-country comparison and for an analysis at a supranational level, as when we consider the European Union as a whole, is the choice of the equivalence scale(s). The different assumptions about economies of scale inherent in each equivalence scale affect the overall picture of income distribution at the EU level, in particular after the inclusion of countries with different shares of expenditures on primary goods. Brandolini (2007) shows the differences in inequality using a per capita adjustment, the original OECD scale, a “mixed OECD” scale (original OECD scale for Eastern countries and modified OECD scale for the others) and the modified OECD scale. In order to deal with two extreme assumptions about economies of scale (not necessarily with extreme effects on the income distribution), we adopt the modified OECD equivalence scale as one of the most commonly used scales and we carry out a sensitivity analysis using per capita adjustment (see Annex C).

The inequality measures we present in the following sections, are based on equivalised monetary values which are top and bottom coded using established conventions as in the Luxembourg Income Study,<sup>5</sup>. Values are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes (see Gottschalk and Smeeding, 1997).<sup>6</sup> This is to avoid extreme outliers influencing the inequality measures but also to enable us to include income values that would be otherwise equal to zero or negative when we consider the Generalized Entropy class indices. The latter are used in order to extend our analyses in two directions. First, they enable us to consider redistributive

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<sup>5</sup> <http://www.lisproject.org/>

<sup>6</sup> We apply the same rules to market income and “market income plus private pensions”. This is not particularly well-established practice but is done for reasons of simplicity. It does however have implications for the coherence of analysis where we decompose by type of benefit and tax. The components need to add up to the total and in these cases we use uncoded data.

effects using inequality measures more sensitive to income differences in different parts of the distribution. Second, they enable us to analyse the decomposition of overall inequality at EU level into within- and between- country components.

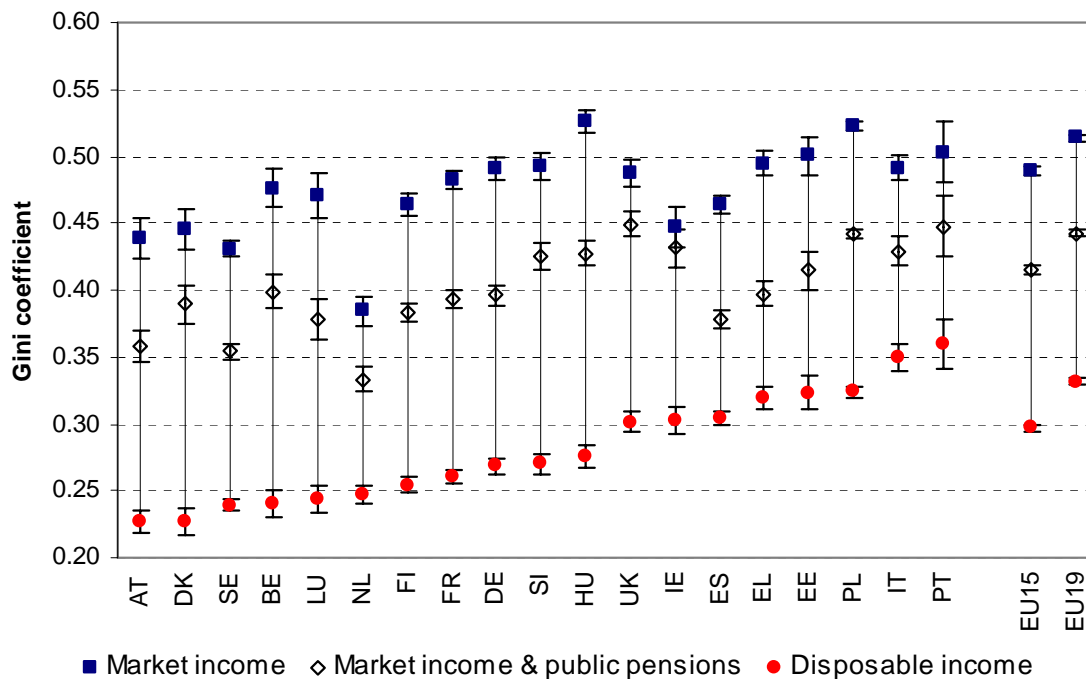
Statistical reliability of the inequality measures is shown by confidence intervals significant at the 5% level derived by nonparametric bootstrap. This involved resampling the observations from the data 1000 times for each country and 250 times for the EU as a whole.

### 3. Income inequality

#### 3.1. Inequality reduction through taxes and benefits

The equalising effect of tax-benefit systems is summarised in Figure 1 depicting the Gini coefficient for market income, market income with public pensions and disposable income.

**Figure 1: Income inequality before and after taxes and benefits - Gini coefficient**



Source: EUROMOD

Note: Gini coefficients are based on equivalised monetary values of household income allocated to individuals. They are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised using the modified OECD equivalence scale and expressed in PPS - 2003. Confidence intervals are derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.



Countries are ordered by the Gini of disposable income which indicates low income inequality in the continental countries (Austria, Belgium, France, Germany, Luxembourg and the Netherlands) and the Nordic countries (Denmark, Finland and Sweden) - with Gini coefficients of between 0.22 and 0.28. In contrast there is high inequality in the Southern European (Greece, Italy, Portugal and Spain) and the Anglo-Saxon countries (the UK and Ireland) with a Gini of between 0.30 and 0.36. Hungary and Slovenia belong to the first group in this respect while Poland and Estonia to the second.

Tax-benefit systems as whole reduce income inequality substantially although to different extents. The Netherlands, the Southern European countries and the Anglo-Saxon countries together with Estonia redistribute incomes the least, also helping to explain their high disposable income inequality. The Netherlands has low redistribution as market income inequality is already much lower than in other countries, most likely due to its labour market institutions. When comparing the effect of public pensions against other benefit-tax instruments then the latter dominate in terms of inequality reduction absolute size (except in Greece and Spain), however, the equalising effect from public pensions is also important for most countries except Ireland, the Netherlands and the UK where private pension incomes are more widespread (and also Denmark).

The EU-15 as a whole shows a Gini of market income equal to 0.49, summarising a level of inequality that is relatively high compared with most of the individual member states and reflecting the differences in income levels across countries. Taking into account the redistributive effect of the national tax-benefit systems, the Gini for overall inequality in disposable income at the EU-15 level reduces to 0.30. This equalising effect is lower both in absolute and relative terms than that in each of the Nordic countries and the continental countries (except the Netherlands) which are characterised by a high level of inequality reduction achieved through their tax-benefit systems. It is higher than in each of the Anglo Saxon and Southern European countries.

The enlargement of the Europe has a negative effect on inequality when considering both market and disposable incomes. In fact, the distribution of disposable income is more unequal in the EU-19 than in the individual member states with the exception only of Italy and Portugal. The redistributive effect of the tax-benefit systems is also lower than that observed for the EU-15, reducing inequality by 35% relative to market income inequality, compared to a reduction of 39% in the old Europe (see Table 1 for Gini coefficients with confidence intervals). However it should be noted that the redistributive effects of the tax-benefit systems

of the new member states (NMS) are in line with some of the old Europe, making it clear that differences in income levels across countries play an important role when considering the EU as a whole.

### **3.2. Sensitivities and alternative measures**

Although the estimates are not fully comparable due to differences in the underlying data, reference years and selected countries, our Gini coefficients of disposable income in EU-15 and in the larger EU are in line with those shown in Brandolini (2007). However, as stressed by Brandolini, when the analysis of income distribution refers to a supra-national level it is necessary to consider the implications of a number of analytical assumptions that, while relevant are less important in an equivalent analysis at country level. O'Donoghue et al. (2000) consider a similar set of issues with empirical illustrations using a prototype version of EUROMOD.

First, correction for Purchasing Power Parity is a critical issue, in particular in the case of the enlarged Union. Considering the EU-15 as a whole, the Gini coefficient for disposable income expressed in euro is equal to 0.31, only 0.01 points higher than that expressed in PPS. However, at the EU-19 level the Gini coefficient for disposable income expressed in euro is equal to 0.36 which is 0.03 points higher than that expressed in PPS, reflecting the larger differences in price levels among the European countries when the new member states are included.

Second, we find that the top and bottom coding procedure applied to the data does not affect the Gini coefficients in a significant way (Table B1 in the Annex). As expected they do not differ much in particular for the disposable income distribution (i.e. around the third decimal digit) from those presented above because Gini coefficients are most sensitive to income differences about the mode of the distribution.

Third, as a spot check on the sensitivity of our results to the choice of equivalence scale we consider the effect of using income per capita rather than equivalised using the modified OECD scale.<sup>7</sup> The results are set out in Annex C and show that on a per capita basis inequality is higher and there is some re-ranking of countries compared to the disposable income inequality shown in Figure 1. While the scale of inequality reduction is slightly less: for the EU15 – tax benefit systems reduce inequality by 37% using per capita adjustment

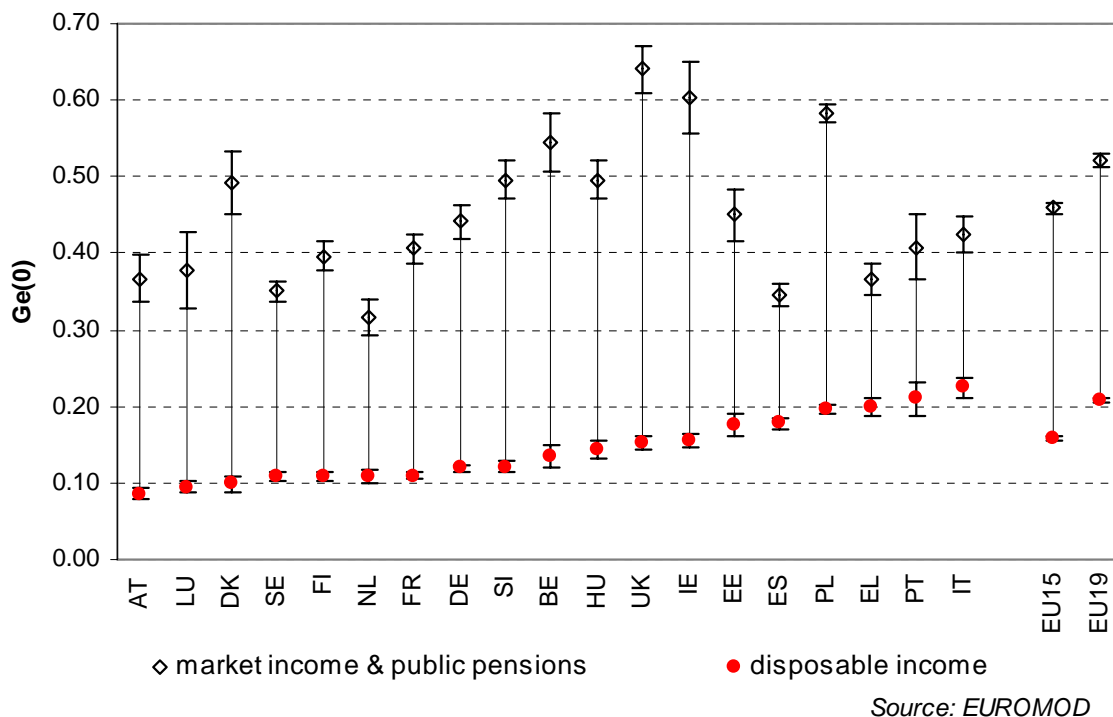
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<sup>7</sup> Such a “spot check” is not sufficient for us to be sure that other plausible scales would not lead us to different conclusions (Buhmann et al., 1988; Coulter et al., 1992).

compared with 39% using the OECD scale – the effect of enlargement is very similar using the two alternative adjustments: a reduction of 4 percentage points in both cases (from 37% to 33% using per capita incomes, compared with 39% to 35% using the modified OECD scale).

Given our main interest in the effect of public policies on disposable incomes, it is relevant to check the sensitivity of the redistributive effects across the income distribution, by adopting alternatives inequality measures that give more weight to disparities at different income levels. In particular, we look at the differences in inequality between the distribution of market income plus public pensions and the distribution of disposable income by using the Generalized Entropy class of indices (i.e.  $Ge(a)$ ). These can be parameterised to be more sensitive to different parts of the income distribution: the larger  $a$  is, the more sensitive  $Ge(a)$  is to income differences at the top of the distribution. Figures 2 and 3 provide illustrations for  $Ge(0)$  and  $Ge(1)$  respectively and Tables 2a and 2b show the corresponding results also for  $Ge(-1)$  which is particularly sensitive to very low incomes and  $Ge(2)$ , more sensitive to the top of the income distribution.

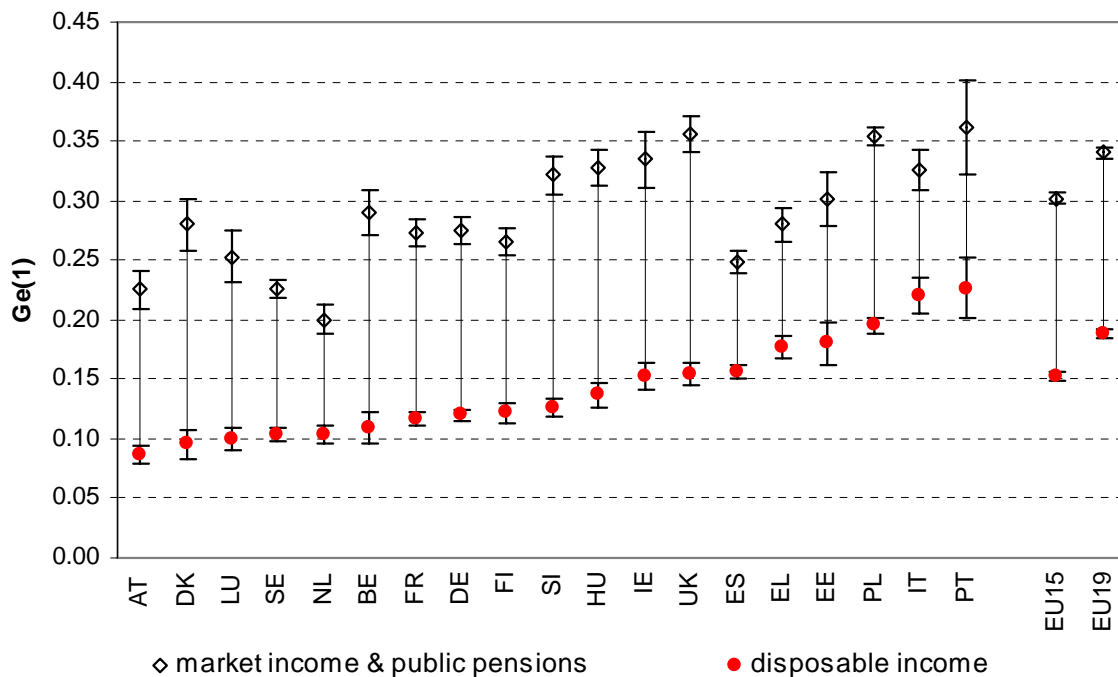
**Figure 2: Income inequality before and after taxes and benefits –  $Ge(0)$  index**



Note:  $Ge(a)$  indices are based on equivalised monetary values of household income allocated to individuals. They are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised using the modified OECD equivalence scale and expressed in PPS - 2003. Confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

As expected, the redistributive effects measured by the difference between  $Ge(a)$  indices of the two income distributions considered decreases when the indices are more sensitive to income differences at the top of the distribution, showing the extent to which the redistribution occurs at the bottom of the distribution. Although the ranking of countries according to these indices is different from the one derived using Gini coefficient (Figure 1),  $Ge(a)$  indices confirm that Southern countries, Poland and Estonia show the highest level of inequality. Regardless of the sensitivity of the indices, the EU-15 always shows lower inequality than the EU-19. Moreover old Europe shows higher redistributive effects (relative to inequality in market income plus public pensions) in particular considering indices that are more sensitive to the middle part of the distribution. According to  $Ge(0)$  taxes and benefits in the EU-15 reduce inequality by 66%, and by 49% according to  $Ge(1)$ . This compares with lower reductions for the EU-19: redistributive effects of 60% and 45% for  $Ge(0)$  and  $Ge(1)$  respectively (see Figures 2 and 3).

**Figure 3: Income inequality before and after taxes and benefits –  $Ge(1)$  index**



Source: EUROMOD

Note:  $Ge(a)$  indices are based on equivalised monetary values of household income allocated to individuals. They are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised using the modified OECD equivalence scale and expressed in PPS - 2003. Confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

### **3.3. Inequality decomposition by country**

The degree of cohesion within the Union depends both on the inequality at national level and the differences among member states. Although only the former is strictly related to the redistributive effects of national policies, differences among countries play an important role in explaining the overall picture of social cohesion of the Union. Exploiting the decomposability property of the Generalised Entropy indices, we show the inequality and redistributive effects prevailing within and between national populations when we consider the Union before and after the enlargement (see Table 3).

Taking the EU-15 as a whole, most of the inequality in market income plus public pensions is explained within countries (around 96-100% depending on the index). Taxes and benefits reduce both within and between country inequality in absolute terms, but proportionally the reduction in the within country component is greater and, therefore, the share of total inequality due to inequality between countries is higher for disposable income (around 3% to 5%). Thus public policies reduce inequality and increase social cohesion within countries, to a greater extent than they do between the countries.

At the EU-19 level, a greater share of total inequality of market income plus public pensions is explained by inequality between countries (between 2% and 14% of the total inequality depending on the index). It is also clear that between country inequality is higher in absolute terms for the EU-19 than for the EU-15 while the within country component is around the same magnitude in each case. The contribution of between country inequality is even larger for the distribution of the disposable income (around 15% to 26%), particularly for the measures more sensitive to income differences at the middle of the distribution, such as  $Ge(0)$  and  $Ge(1)$ . Thus enlargement reduces EU social cohesion, mainly due to differences in the level of market income but also because the set of 19 national policies do less to increase EU-19 cohesion than the set of 15 national policies do to increase EU-15 cohesion. Much lower income levels in at least three of the four countries (Estonia, Hungary and Poland) mean that the policies have a relatively minor effect on a European scale. It would be infeasible for national policies to redistribute sufficiently in such cases to make significant inroads into between country inequality within the EU. Nevertheless it remains of interest to consider the components of tax-benefit systems and this is the subject of the next section.

#### **4. Which tax and benefit components make a difference?**

In order to capture the role played by different tax-benefit components in the redistribution of resources we consider taxes and benefits separately and divide each into two further groups. Social benefits are split into means-tested benefits and non means-tested benefits. The former have an explicit redistributive role given that they are targeted at those with lowest resources while non means-tested benefits are normally based on contingencies such as childhood, disability or unemployment status and may depend on having made social contributions in the past. The following analysis is instructive to show how the latter perform in terms of their vertical redistributive effect even if this is not seen as their primary function.

Taxes are divided into income taxes (including other personal direct taxes) and social insurance contributions levied on persons (employer contributions are not considered). While the main function of social contributions is not redistribution (except over the individual's lifecycle), redistribution is usually considered to be among the functions of income tax. The extent the two types of deduction do each reduce income inequality in practice is the question we consider here.

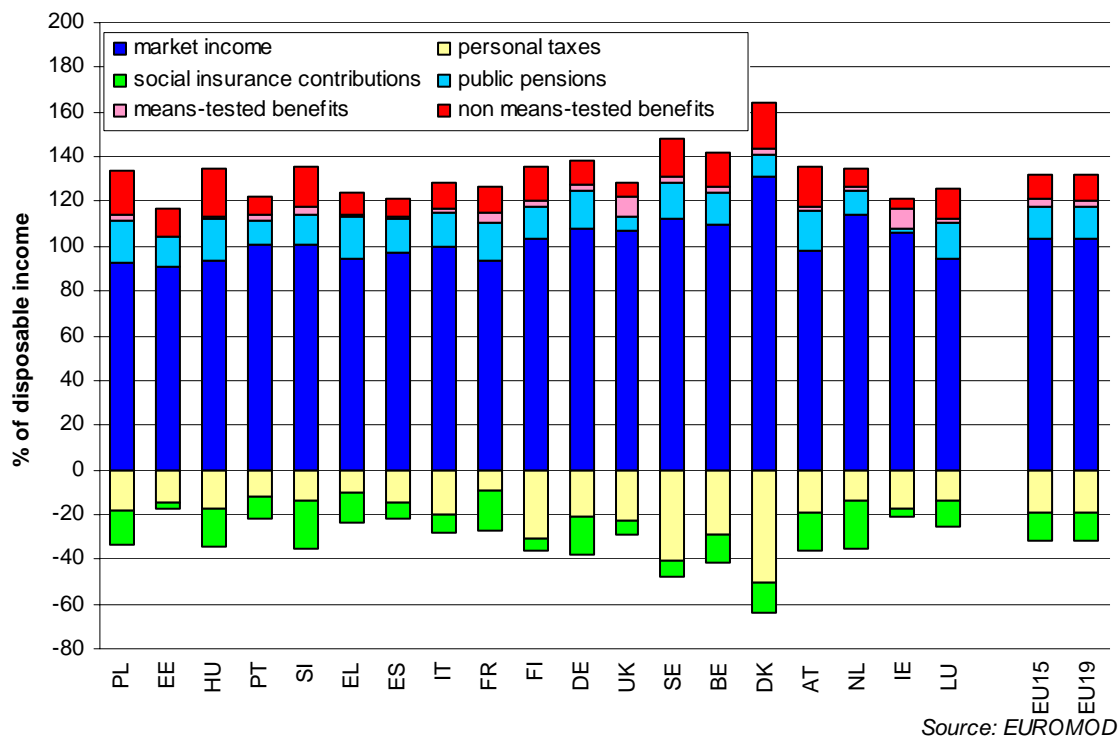
We examine the composition of disposable incomes at the household level. Figure 4a shows the average size of each income component as a percentage of average household disposable income.<sup>8</sup> It is important to note that while the graph reflects the composition of incomes that households have available to spend, it does not represent the overall budgetary balance at the government level nor the balance of resources available to households. Other taxes (e.g. VAT, excise, corporate income tax) and other public expenditures (publicly provided health care, education, housing subsidies and so on) are not included. However, it is still instructive to show how much market income is necessary on average to achieve given level of disposable income, and how much is added as (cash) benefits and deducted as (direct) taxes. Furthermore, the measure of household disposable income that is used corresponds to the income concept commonly used in the calculation of income inequality and risk of poverty (Eurostat, 2007). It is therefore highly relevant to understand differences in its composition across countries. Nevertheless it is also useful to be reminded that household disposable income does not capture all dimensions necessary to understand differences across (or within) countries in households' economic resources: indirect taxes have an impact on purchasing

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<sup>8</sup> These calculations are carried out at the household level: summing the elements across all households would in principle correspond to the aggregate amount of tax and contribution liability and benefit entitlement in each country.

power and non-cash benefits (or the “social wage”) through, for example, publicly provided health care and education acting as a supplement to cash. Both may vary in scale and structure across countries.

**Figure 4a: Household income composition: whole population**



Source: EUROMOD

Note: countries ranked by per capita GDP expressed in PPS – 2003 in ascending order.

Overall, market income at 100% of disposable income in Figure 4a means that direct taxes and cash benefits balance each other. While there are only few EU-15 countries with market income below disposable income on average, it seems more common for the NMS, occurring in three out of four, with Slovenia being the exception. In these countries, spending on cash benefits exceeds revenue from income taxes and contributions – possibly reflecting greater reliance on other taxes, particularly indirect taxes. On the deduction side generally, income taxes dominate social insurance contributions, except in Greece, France, the Netherlands and Slovenia. Denmark and Sweden tax incomes the most, while the Southern European countries, the UK, Ireland and Estonia tax the least.

In terms of benefits, the bulk is made up of public pensions and non means-tested benefits, except in the UK and Ireland where means-tested benefits are most important compared to other countries. Public pensions are noticeably low in Denmark, Ireland, the Netherlands and

the UK where a relatively large proportion of pensions is provided through the private sector in the latter three countries, as mentioned earlier. The UK, Ireland, the Netherlands, the Southern European countries and Estonia have the smallest shares of income from non means-tested benefits, while the Nordic countries, Austria and other three NMS have the largest shares. Southern European countries and Estonia also demonstrate the least reliance on means-tested benefits together with Luxemburg, Austria and Hungary.

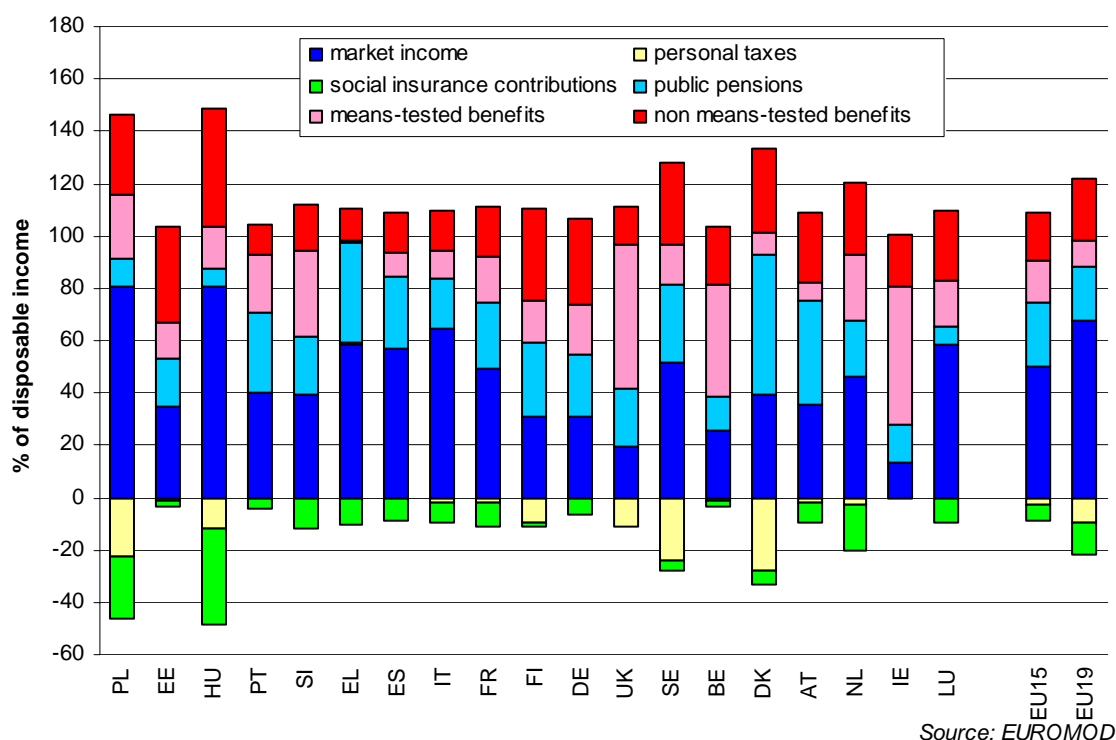
Countries are ranked by per capita GDP in ascending order and in general, at the country level the role played by the market income increases with the level of per capita GDP with the exception of four richest countries (Austria, the Netherlands, Ireland and Luxemburg).

Considering the European Union as a whole, the composition of disposable income does not vary in a significant way moving from the old Europe to the EU-19 level (see Figure 4a). On average market income makes up slightly more than 100% of disposable income meaning that deductions due to income taxes and social insurance contributions are slightly higher than the contribution of public pensions and benefits.

Of course the situation at different points in the income distribution is not the same as the average shown in Figure 4a. The income composition of households in the bottom decile group – based on household equivalised disposable income using the modified OECD scale – is different after enlargement (see Figure 4b). At the EU-19 level, market income accounts for 68% of disposable income compared to 50% in the old Europe, with a larger incidence of income taxes and social insurance contributions. Public pensions and means-tested benefits form a smaller share of household income in the bottom decile while the share represented by non means-tested benefit is larger than in the EU-15. This is to a large extent due to the country composition of the bottom decile group changing dramatically on enlargement. Most of these effects of enlargement are driven by Hungary and Poland due to the structure of their tax-benefit systems and their relatively large national populations (together about 11% of the EU-19 population), combined – critically – with the relative low income in these countries compared with the EU-15. More than 60% of the bottom decile group is made up of Poles and Hungarians after enlargement with the next highest shares being Spanish people (9% compared with 21% of the EU-15 bottom decile group) and Italians (8% compared with 21%). See Table B2 for more information about country composition of the EU bottom decile group. This shows how, during the enlargement process, a couple of countries can have a substantial effect on the overall social cohesion of the European Union.



**Figure 4b: Household income composition: bottom decile group**



Note: countries ranked by per capita GDP expressed in PPS - 2003 in ascending order.

The positions of Hungary and Poland are partly due to particular taxes which are not strongly correlated to the components of disposable income (Paulus et al., 2008). In case of Poland (see Levy and Morawski, 2008) there is an agricultural tax which is based on imputed earnings from farm land and many of those paying it end up with low disposable income simply because imputed farming income itself is not included in the concept of disposable income. While this tax accounts for 10% of total personal taxes, 20% of it is concentrated in the first decile group. Similarly, there is a ‘simplified business tax’ in Hungary (see Hegedus et al., 2008) based on business turnover rather than income and, therefore again, income is not taken into account for disposable income while the tax is included (accounting for 2% of total personal taxes but 67% of it concentrated in the first decile group). That is also the reason why there is significant tax liability for the bottom decile group in those two countries.<sup>9</sup>

<sup>9</sup> Excluding agricultural tax from calculations for Poland lowers the share of market income for the bottom decile group from 80% to 67%, personal taxes 23% to 6% and contribution 23% to 20%. Excluding business tax for Hungary lowers the share of market income for the bottom decile group from 81% to 74%, personal taxes 12% to 6% and contributions 37% to 33%.

## 5. Relative poverty

A complementary way to analyse the extent to which benefits contribute to achieving a greater degree of social cohesion is to look at the role played by the public transfers in reducing the risk of relative poverty, as measured using a poverty line set at 60% of median equivalised household income. Following a static approach that does not take into account any interactions between elements of the system, we show how much higher poverty rates would be if there were no means-tested benefits, non means-tested benefits or the two together (i.e. all benefits except public pensions).<sup>10</sup> We exclude these three sets of policy instruments from disposable income in turn while keeping the poverty lines constant at 60% of median equivalised disposable income.

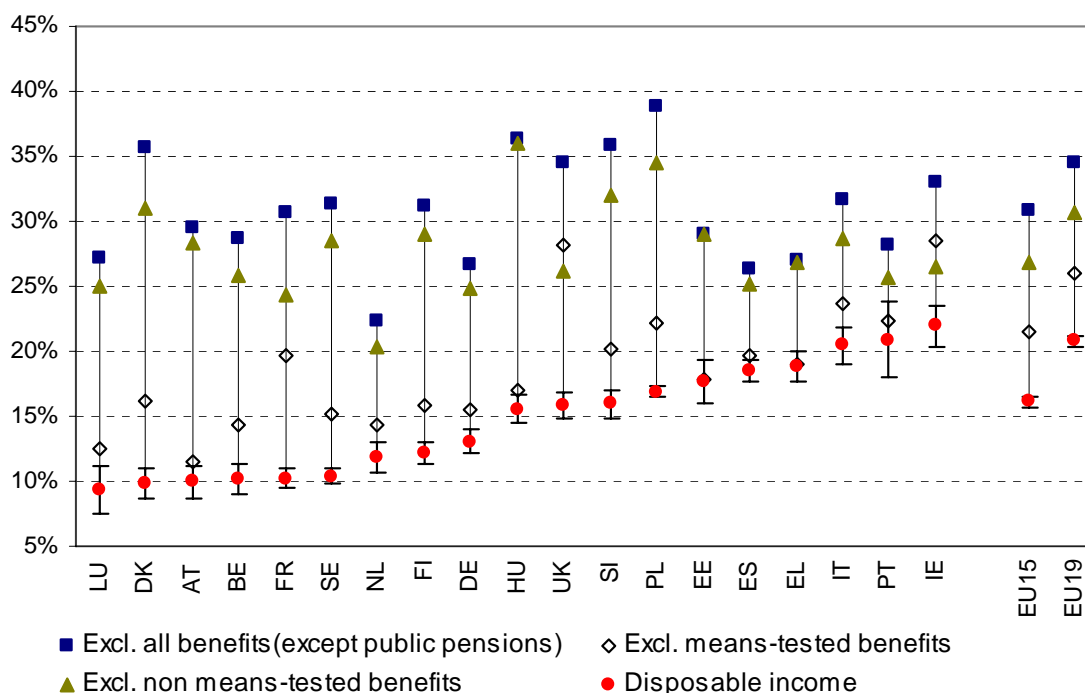
Figure 5 shows countries ranked in ascending order of poverty rate using disposable income. First we consider national poverty rates using national poverty lines. Poverty rates range from 9.3% in Luxembourg and 9.8% in Denmark to 21.9% in Ireland and 20.9% in Portugal. Apart from these countries, the lowest poverty rates are generally in the Nordic and the continental countries and highest in the Southern European countries, while NMS are in this case clustered between these two groups.

In general, means-tested benefits have relatively little effect on poverty rates, except in Denmark, France, the UK and Ireland. It is only in the latter two countries that the effect exceeds that of non means-tested benefits. However, relative to their size overall means-tested benefits generally have a larger impact on poverty than non means-tested benefits, as one might expect. While in Poland and Slovenia means-tested payments have a clear role in reducing the poverty rate, in Hungary and even more so in Estonia their role in this respect is negligible. This is not necessarily because such benefits are non-existent or poorly targeted. Figure 4b above shows that households in the bottom decile group do receive means-tested benefits in Estonia. However, they may not be paid at a high enough level sufficient to bring incomes above the poverty line. Table 4b and 4c provide the other Foster-Greer-Thorbecke family indices which show that the poverty gap and poverty intensity are both reduced by these benefits.

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<sup>10</sup> In practice if non means-tested were abolished means-tested benefit entitlements might rise to compensate income loss to some extent. In addition we do not, in this exercise, examine the effect of taxes, in contrast to our analysis above of the contribution of public policies to inequality. Not only do some non-pension benefits attract income taxes or contributions, some people with incomes below poverty thresholds may be paying significant taxes on market incomes. This has particular relevance when we consider incomes below poverty thresholds derived at the EU level where in some countries people on middle (national) incomes may be below the threshold.

**Figure 5: Income poverty before and after taxes and benefits – Poverty rates**



Source: EUROMOD

Note: Poverty rates are based on equivalised monetary values of household income allocated to individuals using the modified OECD equivalence scale and expressed in PPS - 2003. The poverty line for all the distributions is 60% of median of the national equivalised disposable income distribution (or EU distribution in the case of EU15 and EU19). Confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

Overall, all benefits together (excluding public pensions) reduce poverty rates by between 7 and 26 percentage points. The reduction in poverty risk as a result of benefit payments is largest in countries such as Denmark, France and Sweden which end up with a poverty risk in terms of disposable income among the lowest. Among the new member states, in Poland, Hungary and Slovenia the size of the effect is relatively large (between 20 and 22 percentage points). This is commensurate with the reduction in France or Sweden but leaves the new countries with disposable income poverty risk around 50% higher than in these relatively low risk countries. In Estonia, on the other hand the scale of reduction is lower (11 percentage points), similar to that in Italy and Ireland. Nevertheless, this leaves Estonia with a poverty risk after benefits that is only slightly higher than that of the other three “new” countries: poverty risk based on income before the effects of non-pension benefits in Estonia is the second lowest of all the countries that we consider.

Instead of considering the population-weighted average of the national poverty rates as is usually done to measure the risk of poverty in the EU (Eurostat, 2007), we consider the European Union as a single entity and therefore define a European-wide poverty line (see Atkinson, 1998; Atkinson et al., 2005; Brandolini, 2007) set at the 60% of median of equivalised disposable income, respectively in the EU-15 and EU-19 as a whole. The proportion of European citizens at risk of poverty shifts from 16% in the old Europe to 21% in the enlarged Europe in spite of the fact that the EU-19 poverty line is lower (by about 50 PPS per month for a single person or 8% of the EU-15 poverty line). See Table 4a for figures with confidence intervals. The overall reduction due to the different categories of benefits is very similar in EU-15 and EU-19. In absolute terms both versions of the EU poverty rate is reduced by about 5 percentage points by means-tested benefits and by about double that through non means-tested benefits (slightly lower for the enlarged EU). A very similar pattern is found for other poverty indicators (see Tables 4b and 4c). However, in proportional terms, due to the higher EU-19 poverty rate before benefits, the reductions due to benefits of both types are lower than those achieved in the EU-15.

Of course the composition of the people below the two EU poverty lines is very different. When considering the EU-19 poverty line around 80% to 85% of the populations of Hungary, Estonia and Poland are at risk of poverty. In the EU-15 countries the poverty rate is naturally lower using the EU-19 line rather than the EU-15 line but remains high in the lower income countries: the rate is 45% in Portugal and around 20% to 28% in the other Southern countries, similar to Slovenia (see Table B3). These figures are driven by the relative low incomes in these countries (even when corrected for PPP) compared to the incomes in the other member states, rather than the income dispersion in each country. Such a concentration of the lowest income European citizens in particular areas of the European Union is one of the indications that very high differences in living standards between people in the European Union cannot be smoothed by relying only on highly redistributive national policies.

## **6. Conclusion**

In this paper we have analysed to which extent public policies increase the degree of social cohesion in the European Union, considering each country separately and the Union as a whole, both pre- and post- the enlargement occurred in the 2004.

We have focused on the impact of the tax-benefit systems on income inequality and relative poverty rates. First, we have shown evidence of the redistributive effect within each country, as a direct consequence of policies implemented by national governments. Second, given the differences between countries in the market income distributions – due to different population characteristics, labour market institutions and macroeconomic circumstances – we have extended our analysis to consider whether public policies enhance or reduce such differences and their overall effect on the income distributions of the Union.

Considering the EU as a whole, the differences in average incomes across countries make the level of inequality in market incomes relatively high compared with most of the individual member states, in particular considering the enlarged Union. Moreover enlargement has a negative effect on inequality when considering both market and disposable incomes, with the redistributive effect of the tax-benefit systems lower than that observed for the EU-15. Old Europe shows higher relative redistributive effects particularly when considering indices that are more sensitive to the middle part of the income distribution.

The variation in size and structure of direct taxes and cash benefits is one of the main determinants of differences in inequality within each country and the new member states show redistributive effects of their tax-benefit systems in line with some of the countries of old Europe, although not the most redistributive ones. However in the enlarged EU the differences between countries are much larger than they are in the old Europe. As a consequence the national public policies implemented in the enlarged Europe have a smaller effect on increasing the EU cohesion than does the overall effect of national policies in the old Europe.

The composition of disposable income at household level by type of tax and benefit shows that at the EU-19 level, the poorest households must rely much more on market income and less on public pensions and means-tested benefits than in the old Europe.

We have shown that the reduction of poverty rate due to benefits is lower in the EU-19 than that achieved in the EU-15. In the enlarged Europe, due to the concentration of the poorest European citizens in particular areas of the Union, the very large differences in living standards across countries cannot be smoothed by relying only on highly redistributive national policies.

The analysis presented in this paper raises both conceptual and methodological issues to be explored in further work. First of all, no account has been taken of non take-up of benefits or

tax evasion, either of which would generally serve to reduce the redistributive properties of tax-benefit systems and would have differential effects across systems. Secondly, in comparing and combining income across households, across countries and through time our treatment of market income (and market incomes plus public pensions) follows practices that are well-established for analysis of disposable incomes as a whole. However, in respect of choice of equivalence scale, PPP correction and top and bottom coding of incomes it is not certain that these choices and practices are the most appropriate. Thirdly, the relative importance of taxes and benefits in household income depends to some extent on macro economic conditions. For example, a high level of economic activity may contribute to a small role for unemployment and other non pension non means-tested benefits as much as lack of generosity in the unemployment benefits that are paid.

Finally, the use of EU-wide indicators is justified by the increasing perception of the European Union as a single entity. However if the contribution of redistributive policies (and national government intervention in general) to reducing inequality is to be properly accounted for it is necessary to also examine within country effects. Our analysis shows that indicators at country level can demonstrate the role of the size and design of each tax-benefit instrument. When aggregated across countries at supra-national level it is the between-country differences in income level that dominate. Both need to be considered.

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**Table 1: Income inequality – Gini coefficient**

	Market income			Market income & public pensions			Disposable income		
		<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>	
AT	0.4389	0.4242	0.4537	0.3578	0.3455	0.3701	0.2267	0.2178	0.2355
BE	0.4762	0.4618	0.4905	0.3989	0.3866	0.4112	0.2406	0.2303	0.2509
DE	0.4913	0.4829	0.4997	0.3959	0.3881	0.4038	0.2681	0.2630	0.2732
DK	0.4454	0.4300	0.4609	0.3896	0.3751	0.4041	0.2274	0.2173	0.2376
EE	0.5005	0.4861	0.5149	0.4144	0.4005	0.4284	0.3228	0.3101	0.3356
EL	0.4947	0.4852	0.5041	0.3972	0.3883	0.4061	0.3197	0.3116	0.3277
ES	0.4635	0.4565	0.4705	0.3785	0.3721	0.3849	0.3046	0.2994	0.3099
FI	0.4646	0.4562	0.4729	0.3835	0.3763	0.3907	0.2546	0.2485	0.2606
FR	0.4826	0.4753	0.4898	0.3932	0.3862	0.4003	0.2603	0.2554	0.2653
HU	0.5258	0.5169	0.5347	0.4270	0.4177	0.4363	0.2753	0.2669	0.2836
IE	0.4467	0.4317	0.4617	0.4317	0.4176	0.4458	0.3024	0.2929	0.3118
IT	0.4913	0.4816	0.5010	0.4294	0.4191	0.4397	0.3498	0.3396	0.3599
LU	0.4708	0.4546	0.4869	0.3786	0.3637	0.3935	0.2434	0.2337	0.2531
NL	0.3841	0.3737	0.3946	0.3333	0.3238	0.3428	0.2468	0.2401	0.2536
PL	0.5227	0.5190	0.5264	0.4421	0.4381	0.4460	0.3237	0.3199	0.3275
PT	0.5027	0.4799	0.5256	0.4474	0.4245	0.4702	0.3601	0.3416	0.3785
SE	0.4309	0.4252	0.4365	0.3540	0.3484	0.3596	0.2393	0.2346	0.2440
SI	0.4930	0.4828	0.5033	0.4247	0.4147	0.4347	0.2704	0.2629	0.2778
UK	0.4871	0.4775	0.4967	0.4490	0.4396	0.4583	0.3015	0.2943	0.3087
EU15	0.4886	0.4854	0.4918	0.4155	0.4125	0.4185	0.2972	0.2946	0.2998
EU19	0.5137	0.5109	0.5165	0.4428	0.4399	0.4458	0.3316	0.3291	0.3340

Source: EUROMOD D20. Note: Gini coefficients are based on equivalised monetary values which are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised using the modified OECD equivalence scale and expressed in PPS - 2003. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.



**Table 2a: Income inequality – Generalized entropy indices**

	<b>Ge(-1)</b>						<b>Ge(0)</b>					
	Market income & public pensions			Disposable income			Market income & public pensions			Disposable income		
	<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>		
AT	2.6179	2.2750	2.9607	0.1121	0.0810	0.1433	0.3675	0.3377	0.3972	0.0858	0.0789	0.0927
BE	4.8335	4.3797	5.2872	0.6644	0.5153	0.8135	0.5447	0.5073	0.5821	0.1349	0.1203	0.1495
DE	2.9795	2.7092	3.2498	0.1496	0.1336	0.1656	0.4408	0.4175	0.4640	0.1197	0.1150	0.1244
DK	3.9664	3.4822	4.4506	0.2080	0.1451	0.2708	0.4928	0.4519	0.5336	0.0982	0.0879	0.1085
EE	2.9988	2.6107	3.3869	0.2710	0.1913	0.3506	0.4503	0.4162	0.4845	0.1769	0.1624	0.1913
EL	1.9901	1.7683	2.2119	0.5401	0.4373	0.6429	0.3665	0.3470	0.3860	0.1989	0.1866	0.2111
ES	2.0026	1.8329	2.1724	0.4446	0.3816	0.5076	0.3467	0.3319	0.3615	0.1776	0.1700	0.1852
FI	2.3725	2.1599	2.5851	0.1165	0.1109	0.1221	0.3964	0.3776	0.4151	0.1093	0.1038	0.1148
FR	2.4726	2.2624	2.6827	0.1178	0.1123	0.1233	0.4061	0.3878	0.4245	0.1097	0.1055	0.1140
HU	3.3983	3.1185	3.6781	0.3507	0.2598	0.4417	0.4956	0.4710	0.5202	0.1438	0.1331	0.1545
IE	5.1578	4.5773	5.7383	0.2135	0.1824	0.2445	0.6031	0.5558	0.6504	0.1549	0.1454	0.1644
IT	1.9309	1.7214	2.1405	0.5029	0.4121	0.5938	0.4247	0.4021	0.4473	0.2247	0.2111	0.2383
LU	2.4513	1.9108	2.9919	0.1078	0.0876	0.1281	0.3770	0.3274	0.4266	0.0948	0.0869	0.1026
NL	2.1909	1.9081	2.4737	0.2336	0.1543	0.3129	0.3155	0.2923	0.3387	0.1096	0.1009	0.1184
PL	4.6740	4.5347	4.8132	0.4916	0.4469	0.5362	0.5823	0.5708	0.5938	0.1967	0.1914	0.2021
PT	1.4382	1.1273	1.7492	0.2345	0.2095	0.2595	0.4076	0.3648	0.4504	0.2099	0.1888	0.2311
SE	2.1543	2.0016	2.3069	0.2443	0.2028	0.2858	0.3507	0.3370	0.3643	0.1090	0.1038	0.1142
SI	3.4321	3.1359	3.7283	0.1340	0.1273	0.1408	0.4964	0.4706	0.5221	0.1214	0.1149	0.1278
UK	5.3944	5.0283	5.7605	0.2649	0.1844	0.3454	0.6406	0.6101	0.6711	0.1530	0.1438	0.1622
EU15	2.9243	2.8234	3.0251	0.3053	0.2829	0.3277	0.4584	0.4498	0.4670	0.1578	0.1546	0.1609
EU19	3.9481	3.8554	4.0407	0.4631	0.4430	0.4832	0.5216	0.5135	0.5298	0.2075	0.2045	0.2104

Source: EUROMOD D20. Note: Ge(a) indices are based on equivalised monetary values which are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised using the modified OECD equivalence scale and expressed in PPS - 2003. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

**Table 2b: Income inequality – Generalized entropy indices**

	<b>Ge(1)</b>						<b>Ge(2)</b>					
	Market income & public pensions			Disposable income			Market income & public pensions			Disposable income		
	<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>		
AT	0.2251	<i>0.2094</i>	<i>0.2408</i>	0.0865	<i>0.0790</i>	<i>0.0940</i>	0.2354	<i>0.2128</i>	<i>0.2579</i>	0.0980	<i>0.0870</i>	<i>0.1089</i>
BE	0.2895	<i>0.2709</i>	<i>0.3082</i>	0.1091	<i>0.0960</i>	<i>0.1222</i>	0.3060	<i>0.2733</i>	<i>0.3387</i>	0.1330	<i>0.1047</i>	<i>0.1613</i>
DE	0.2744	<i>0.2631</i>	<i>0.2856</i>	0.1200	<i>0.1148</i>	<i>0.1252</i>	0.2983	<i>0.2813</i>	<i>0.3152</i>	0.1397	<i>0.1310</i>	<i>0.1485</i>
DK	0.2797	<i>0.2576</i>	<i>0.3019</i>	0.0954	<i>0.0829</i>	<i>0.1079</i>	0.3124	<i>0.2719</i>	<i>0.3528</i>	0.1194	<i>0.0930</i>	<i>0.1458</i>
EE	0.3015	<i>0.2790</i>	<i>0.3240</i>	0.1800	<i>0.1625</i>	<i>0.1974</i>	0.3576	<i>0.3137</i>	<i>0.4016</i>	0.2316	<i>0.1940</i>	<i>0.2692</i>
EL	0.2798	<i>0.2659</i>	<i>0.2937</i>	0.1772	<i>0.1671</i>	<i>0.1874</i>	0.3529	<i>0.3263</i>	<i>0.3794</i>	0.2131	<i>0.1955</i>	<i>0.2307</i>
ES	0.2482	<i>0.2391</i>	<i>0.2572</i>	0.1560	<i>0.1500</i>	<i>0.1620</i>	0.2875	<i>0.2720</i>	<i>0.3029</i>	0.1763	<i>0.1665</i>	<i>0.1860</i>
FI	0.2652	<i>0.2544</i>	<i>0.2760</i>	0.1219	<i>0.1132</i>	<i>0.1306</i>	0.3131	<i>0.2921</i>	<i>0.3341</i>	0.1734	<i>0.1512</i>	<i>0.1956</i>
FR	0.2730	<i>0.2624</i>	<i>0.2835</i>	0.1173	<i>0.1117</i>	<i>0.1229</i>	0.3162	<i>0.2974</i>	<i>0.3349</i>	0.1463	<i>0.1351</i>	<i>0.1575</i>
HU	0.3279	<i>0.3127</i>	<i>0.3431</i>	0.1366	<i>0.1260</i>	<i>0.1472</i>	0.4044	<i>0.3758</i>	<i>0.4331</i>	0.1712	<i>0.1511</i>	<i>0.1913</i>
IE	0.3347	<i>0.3113</i>	<i>0.3581</i>	0.1527	<i>0.1416</i>	<i>0.1638</i>	0.3725	<i>0.3294</i>	<i>0.4155</i>	0.1811	<i>0.1621</i>	<i>0.2001</i>
IT	0.3253	<i>0.3088</i>	<i>0.3418</i>	0.2210	<i>0.2061</i>	<i>0.2359</i>	0.4142	<i>0.3835</i>	<i>0.4449</i>	0.3022	<i>0.2724</i>	<i>0.3320</i>
LU	0.2528	<i>0.2308</i>	<i>0.2748</i>	0.0995	<i>0.0902</i>	<i>0.1088</i>	0.2913	<i>0.2568</i>	<i>0.3257</i>	0.1175	<i>0.1024</i>	<i>0.1325</i>
NL	0.2000	<i>0.1875</i>	<i>0.2125</i>	0.1036	<i>0.0965</i>	<i>0.1108</i>	0.2200	<i>0.1953</i>	<i>0.2447</i>	0.1196	<i>0.1064</i>	<i>0.1328</i>
PL	0.3543	<i>0.3473</i>	<i>0.3613</i>	0.1949	<i>0.1889</i>	<i>0.2010</i>	0.4378	<i>0.4224</i>	<i>0.4533</i>	0.2770	<i>0.2625</i>	<i>0.2915</i>
PT	0.3608	<i>0.3213</i>	<i>0.4004</i>	0.2262	<i>0.2009</i>	<i>0.2515</i>	0.5009	<i>0.4274</i>	<i>0.5744</i>	0.3014	<i>0.2580</i>	<i>0.3447</i>
SE	0.2265	<i>0.2187</i>	<i>0.2343</i>	0.1029	<i>0.0975</i>	<i>0.1083</i>	0.2489	<i>0.2356</i>	<i>0.2621</i>	0.1233	<i>0.1130</i>	<i>0.1336</i>
SI	0.3216	<i>0.3057</i>	<i>0.3376</i>	0.1262	<i>0.1178</i>	<i>0.1347</i>	0.3844	<i>0.3549</i>	<i>0.4139</i>	0.1543	<i>0.1388</i>	<i>0.1698</i>
UK	0.3554	<i>0.3402</i>	<i>0.3705</i>	0.1540	<i>0.1449</i>	<i>0.1630</i>	0.3845	<i>0.3610</i>	<i>0.4080</i>	0.1881	<i>0.1720</i>	<i>0.2042</i>
EU15	0.3017	<i>0.2969</i>	<i>0.3065</i>	0.1528	<i>0.1495</i>	<i>0.1560</i>	0.3477	<i>0.3390</i>	<i>0.3564</i>	0.1875	<i>0.1814</i>	<i>0.1936</i>
EU19	0.3405	<i>0.3355</i>	<i>0.3454</i>	0.1881	<i>0.1848</i>	<i>0.1914</i>	0.3970	<i>0.3879</i>	<i>0.4060</i>	0.2250	<i>0.2185</i>	<i>0.2315</i>

Source: EUROMOD D20. Note: Ge(a) indices are based on equivalised monetary values which are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised using the modified OECD equivalence scale and expressed in PPS - 2003. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

**Table 3: Income inequality decomposition**

		Ge(-1)		Ge(0)		Ge(1)		Ge(2)	
		Market income & public pensions	Disposable income	Market income & public pensions	Disposable income	Market income & public pensions	Disposable income	Market income & public pensions	Disposable income
EU15	Within	2.911	0.297	0.446	0.150	0.290	0.145	0.336	0.180
	Between	0.013	0.009	0.012	0.008	0.012	0.008	0.011	0.008
	Total	2.924	0.305	0.458	0.158	0.302	0.153	0.348	0.188
EU19	Within	3.861	0.388	0.460	0.154	0.292	0.146	0.357	0.190
	Between	0.087	0.075	0.062	0.054	0.048	0.042	0.040	0.035
	Total	3.948	0.463	0.522	0.207	0.341	0.188	0.397	0.225

Source: EUROMOD D20. Note: Ge(a) indices are based on equivalised monetary values which are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised using the modified OECD equivalence scale and expressed in PPS - 2003.

**Table 4a: Income poverty – FGT(0)**

	Disposable income			Excl. means-tested benefits			Excl. non means-tested benefits			Excl. all benefits (except public pensions)		
		<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>	
AT	0.0995	<i>0.0872</i>	<i>0.1119</i>	0.1153	<i>0.1013</i>	<i>0.1293</i>	0.2835	<i>0.2619</i>	<i>0.3050</i>	0.2956	<i>0.2742</i>	<i>0.3170</i>
BE	0.1014	<i>0.0902</i>	<i>0.1126</i>	0.1435	<i>0.1305</i>	<i>0.1565</i>	0.2589	<i>0.2414</i>	<i>0.2764</i>	0.2870	<i>0.2685</i>	<i>0.3056</i>
DE	0.1304	<i>0.1211</i>	<i>0.1398</i>	0.1551	<i>0.1451</i>	<i>0.1651</i>	0.2482	<i>0.2368</i>	<i>0.2596</i>	0.2673	<i>0.2549</i>	<i>0.2796</i>
DK	0.0979	<i>0.0862</i>	<i>0.1097</i>	0.1622	<i>0.1474</i>	<i>0.1769</i>	0.3098	<i>0.2900</i>	<i>0.3296</i>	0.3573	<i>0.3373</i>	<i>0.3773</i>
EE	0.1766	<i>0.1603</i>	<i>0.1930</i>	0.1777	<i>0.1616</i>	<i>0.1938</i>	0.2895	<i>0.2700</i>	<i>0.3090</i>	0.2899	<i>0.2706</i>	<i>0.3091</i>
EL	0.1887	<i>0.1771</i>	<i>0.2004</i>	0.1905	<i>0.1784</i>	<i>0.2026</i>	0.2688	<i>0.2558</i>	<i>0.2818</i>	0.2700	<i>0.2568</i>	<i>0.2831</i>
ES	0.1850	<i>0.1762</i>	<i>0.1938</i>	0.1974	<i>0.1884</i>	<i>0.2063</i>	0.2522	<i>0.2425</i>	<i>0.2620</i>	0.2635	<i>0.2533</i>	<i>0.2738</i>
FI	0.1224	<i>0.1140</i>	<i>0.1308</i>	0.1589	<i>0.1489</i>	<i>0.1689</i>	0.2907	<i>0.2791</i>	<i>0.3024</i>	0.3124	<i>0.3001</i>	<i>0.3247</i>
FR	0.1023	<i>0.0952</i>	<i>0.1094</i>	0.1968	<i>0.1871</i>	<i>0.2064</i>	0.2429	<i>0.2323</i>	<i>0.2535</i>	0.3060	<i>0.2949</i>	<i>0.3170</i>
HU	0.1556	<i>0.1449</i>	<i>0.1662</i>	0.1698	<i>0.1585</i>	<i>0.1811</i>	0.3596	<i>0.3457</i>	<i>0.3734</i>	0.3627	<i>0.3487</i>	<i>0.3768</i>
IE	0.2195	<i>0.2035</i>	<i>0.2356</i>	0.2858	<i>0.2677</i>	<i>0.3040</i>	0.2652	<i>0.2478</i>	<i>0.2826</i>	0.3299	<i>0.3102</i>	<i>0.3495</i>
IT	0.2043	<i>0.1901</i>	<i>0.2184</i>	0.2373	<i>0.2231</i>	<i>0.2516</i>	0.2873	<i>0.2724</i>	<i>0.3022</i>	0.3174	<i>0.3023</i>	<i>0.3325</i>
LU	0.0931	<i>0.0749</i>	<i>0.1114</i>	0.1242	<i>0.1044</i>	<i>0.1440</i>	0.2508	<i>0.2277</i>	<i>0.2740</i>	0.2711	<i>0.2487</i>	<i>0.2935</i>
NL	0.1187	<i>0.1072</i>	<i>0.1303</i>	0.1428	<i>0.1300</i>	<i>0.1555</i>	0.2025	<i>0.1867</i>	<i>0.2183</i>	0.2240	<i>0.2087</i>	<i>0.2392</i>
PL	0.1688	<i>0.1643</i>	<i>0.1733</i>	0.2215	<i>0.2163</i>	<i>0.2267</i>	0.3456	<i>0.3401</i>	<i>0.3511</i>	0.3877	<i>0.3819</i>	<i>0.3934</i>
PT	0.2089	<i>0.1800</i>	<i>0.2378</i>	0.2232	<i>0.1953</i>	<i>0.2511</i>	0.2568	<i>0.2266</i>	<i>0.2869</i>	0.2823	<i>0.2490</i>	<i>0.3155</i>
SE	0.1041	<i>0.0985</i>	<i>0.1097</i>	0.1510	<i>0.1446</i>	<i>0.1575</i>	0.2854	<i>0.2768</i>	<i>0.2940</i>	0.3139	<i>0.3050</i>	<i>0.3228</i>
SI	0.1592	<i>0.1480</i>	<i>0.1705</i>	0.2016	<i>0.1890</i>	<i>0.2143</i>	0.3197	<i>0.3053</i>	<i>0.3341</i>	0.3578	<i>0.3426</i>	<i>0.3730</i>
UK	0.1585	<i>0.1481</i>	<i>0.1690</i>	0.2819	<i>0.2694</i>	<i>0.2944</i>	0.2613	<i>0.2482</i>	<i>0.2745</i>	0.3445	<i>0.3314</i>	<i>0.3575</i>
EU15	0.1610	<i>0.1569</i>	<i>0.1651</i>	0.2153	<i>0.2110</i>	<i>0.2196</i>	0.2688	<i>0.2642</i>	<i>0.2733</i>	0.3089	<i>0.3044</i>	<i>0.3135</i>
EU19	0.2079	<i>0.2041</i>	<i>0.2116</i>	0.2593	<i>0.2553</i>	<i>0.2632</i>	0.3069	<i>0.3032</i>	<i>0.3105</i>	0.3456	<i>0.3410</i>	<i>0.3501</i>

Source: EUROMOD D20. Note: FGT(a) indices are based on equivalised monetary values using the modified OECD equivalence scale and expressed in PPS - 2003. The poverty line for all the distributions is 60% of median of equivalised disposable income distribution. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

**Table 4b: Income poverty – FGT(1)**

	Disposable income			Excl. means-tested benefits			Excl. non means-tested benefits			Excl. all benefits (except public pensions)		
		<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>	
AT	0.0173	<i>0.0143</i>	<i>0.0203</i>	0.0253	<i>0.0208</i>	<i>0.0298</i>	0.1354	<i>0.1200</i>	<i>0.1509</i>	0.1486	<i>0.1331</i>	<i>0.1642</i>
BE	0.0350	<i>0.0305</i>	<i>0.0394</i>	0.0694	<i>0.0614</i>	<i>0.0774</i>	0.1274	<i>0.1168</i>	<i>0.1381</i>	0.1678	<i>0.1551</i>	<i>0.1805</i>
DE	0.0274	<i>0.0248</i>	<i>0.0299</i>	0.0512	<i>0.0468</i>	<i>0.0556</i>	0.1096	<i>0.1032</i>	<i>0.1160</i>	0.1377	<i>0.1295</i>	<i>0.1458</i>
DK	0.0216	<i>0.0178</i>	<i>0.0255</i>	0.0434	<i>0.0359</i>	<i>0.0509</i>	0.1884	<i>0.1720</i>	<i>0.2047</i>	0.2254	<i>0.2069</i>	<i>0.2438</i>
EE	0.0452	<i>0.0398</i>	<i>0.0507</i>	0.0566	<i>0.0495</i>	<i>0.0637</i>	0.1288	<i>0.1176</i>	<i>0.1400</i>	0.1402	<i>0.1278</i>	<i>0.1526</i>
EL	0.0600	<i>0.0551</i>	<i>0.0649</i>	0.0609	<i>0.0556</i>	<i>0.0661</i>	0.1172	<i>0.1098</i>	<i>0.1246</i>	0.1182	<i>0.1106</i>	<i>0.1258</i>
ES	0.0560	<i>0.0524</i>	<i>0.0596</i>	0.0657	<i>0.0615</i>	<i>0.0699</i>	0.1043	<i>0.0991</i>	<i>0.1096</i>	0.1160	<i>0.1100</i>	<i>0.1220</i>
FI	0.0217	<i>0.0199</i>	<i>0.0234</i>	0.0434	<i>0.0397</i>	<i>0.0470</i>	0.1363	<i>0.1290</i>	<i>0.1435</i>	0.1649	<i>0.1566</i>	<i>0.1732</i>
FR	0.0159	<i>0.0144</i>	<i>0.0173</i>	0.0625	<i>0.0586</i>	<i>0.0664</i>	0.0838	<i>0.0794</i>	<i>0.0881</i>	0.1478	<i>0.1410</i>	<i>0.1546</i>
HU	0.0423	<i>0.0382</i>	<i>0.0463</i>	0.0568	<i>0.0516</i>	<i>0.0620</i>	0.1718	<i>0.1633</i>	<i>0.1804</i>	0.1898	<i>0.1806</i>	<i>0.1989</i>
IE	0.0551	<i>0.0498</i>	<i>0.0603</i>	0.1479	<i>0.1366</i>	<i>0.1593</i>	0.0897	<i>0.0815</i>	<i>0.0978</i>	0.1865	<i>0.1721</i>	<i>0.2009</i>
IT	0.0611	<i>0.0553</i>	<i>0.0669</i>	0.0785	<i>0.0717</i>	<i>0.0854</i>	0.1317	<i>0.1233</i>	<i>0.1401</i>	0.1514	<i>0.1416</i>	<i>0.1611</i>
LU	0.0110	<i>0.0068</i>	<i>0.0153</i>	0.0307	<i>0.0195</i>	<i>0.0420</i>	0.1061	<i>0.0946</i>	<i>0.1177</i>	0.1303	<i>0.1139</i>	<i>0.1467</i>
NL	0.0237	<i>0.0201</i>	<i>0.0274</i>	0.0503	<i>0.0439</i>	<i>0.0568</i>	0.0888	<i>0.0799</i>	<i>0.0978</i>	0.1165	<i>0.1065</i>	<i>0.1265</i>
PL	0.0521	<i>0.0497</i>	<i>0.0545</i>	0.0855	<i>0.0824</i>	<i>0.0886</i>	0.1987	<i>0.1944</i>	<i>0.2030</i>	0.2418	<i>0.2372</i>	<i>0.2464</i>
PT	0.0475	<i>0.0403</i>	<i>0.0546</i>	0.0774	<i>0.0631</i>	<i>0.0916</i>	0.0803	<i>0.0698</i>	<i>0.0908</i>	0.1126	<i>0.0954</i>	<i>0.1298</i>
SE	0.0295	<i>0.0264</i>	<i>0.0327</i>	0.0527	<i>0.0491</i>	<i>0.0564</i>	0.1441	<i>0.1382</i>	<i>0.1501</i>	0.1735	<i>0.1667</i>	<i>0.1802</i>
SI	0.0336	<i>0.0309</i>	<i>0.0364</i>	0.0729	<i>0.0668</i>	<i>0.0790</i>	0.1346	<i>0.1269</i>	<i>0.1424</i>	0.1820	<i>0.1722</i>	<i>0.1919</i>
UK	0.0297	<i>0.0268</i>	<i>0.0327</i>	0.1433	<i>0.1354</i>	<i>0.1512</i>	0.0730	<i>0.0682</i>	<i>0.0778</i>	0.2076	<i>0.1977</i>	<i>0.2175</i>
EU15	0.0421	<i>0.0406</i>	<i>0.0435</i>	0.0811	<i>0.0790</i>	<i>0.0832</i>	0.1098	<i>0.1073</i>	<i>0.1123</i>	0.1581	<i>0.1550</i>	<i>0.1613</i>
EU19	0.0738	<i>0.0724</i>	<i>0.0753</i>	0.1092	<i>0.1073</i>	<i>0.1112</i>	0.1445	<i>0.1425</i>	<i>0.1465</i>	0.1900	<i>0.1870</i>	<i>0.1929</i>

Source: EUROMOD D20. Note: FGT(a) indices are based on equivalised monetary values using the modified OECD equivalence scale and expressed in PPS - 2003. The poverty line for all the distributions is 60% of median of equivalised disposable income distribution. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

**Table 4c: Income poverty – FGT(2)**

	Disposable income			Excl. means-tested benefits			Excl. non means-tested benefits			Excl. all benefits (except public pensions)		
	<i>0.0054</i>	<i>0.0039</i>	<i>0.0069</i>	<i>0.0115</i>	<i>0.0084</i>	<i>0.0147</i>	<i>0.1387</i>	<i>0.1075</i>	<i>0.1698</i>	<i>0.1522</i>	<i>0.1223</i>	<i>0.1822</i>
AT	<i>0.0054</i>	<i>0.0039</i>	<i>0.0069</i>	<i>0.0115</i>	<i>0.0084</i>	<i>0.0147</i>	<i>0.1387</i>	<i>0.1075</i>	<i>0.1698</i>	<i>0.1522</i>	<i>0.1223</i>	<i>0.1822</i>
BE	<i>0.0206</i>	<i>0.0171</i>	<i>0.0240</i>	<i>0.0559</i>	<i>0.0486</i>	<i>0.0632</i>	<i>0.1029</i>	<i>0.0920</i>	<i>0.1139</i>	<i>0.1483</i>	<i>0.1351</i>	<i>0.1614</i>
DE	<i>0.0097</i>	<i>0.0085</i>	<i>0.0110</i>	<i>0.0272</i>	<i>0.0242</i>	<i>0.0302</i>	<i>0.0751</i>	<i>0.0697</i>	<i>0.0804</i>	<i>0.1058</i>	<i>0.0985</i>	<i>0.1132</i>
DK	<i>0.0106</i>	<i>0.0080</i>	<i>0.0132</i>	<i>0.0280</i>	<i>0.0199</i>	<i>0.0361</i>	<i>0.1830</i>	<i>0.1630</i>	<i>0.2031</i>	<i>0.2383</i>	<i>0.2136</i>	<i>0.2630</i>
EE	<i>0.0201</i>	<i>0.0150</i>	<i>0.0252</i>	<i>0.0325</i>	<i>0.0253</i>	<i>0.0396</i>	<i>0.0896</i>	<i>0.0780</i>	<i>0.1011</i>	<i>0.1064</i>	<i>0.0931</i>	<i>0.1196</i>
EL	<i>0.0312</i>	<i>0.0277</i>	<i>0.0348</i>	<i>0.0321</i>	<i>0.0283</i>	<i>0.0358</i>	<i>0.0857</i>	<i>0.0782</i>	<i>0.0932</i>	<i>0.0867</i>	<i>0.0790</i>	<i>0.0945</i>
ES	<i>0.0279</i>	<i>0.0254</i>	<i>0.0304</i>	<i>0.0455</i>	<i>0.0261</i>	<i>0.0649</i>	<i>0.0782</i>	<i>0.0693</i>	<i>0.0871</i>	<i>0.0987</i>	<i>0.0764</i>	<i>0.1211</i>
FI	<i>0.0063</i>	<i>0.0056</i>	<i>0.0070</i>	<i>0.0193</i>	<i>0.0171</i>	<i>0.0214</i>	<i>0.1109</i>	<i>0.1029</i>	<i>0.1189</i>	<i>0.1418</i>	<i>0.1326</i>	<i>0.1509</i>
FR	<i>0.0045</i>	<i>0.0039</i>	<i>0.0051</i>	<i>0.0334</i>	<i>0.0307</i>	<i>0.0361</i>	<i>0.0548</i>	<i>0.0508</i>	<i>0.0588</i>	<i>0.1104</i>	<i>0.1041</i>	<i>0.1167</i>
HU	<i>0.0211</i>	<i>0.0177</i>	<i>0.0245</i>	<i>0.0326</i>	<i>0.0279</i>	<i>0.0373</i>	<i>0.1232</i>	<i>0.1153</i>	<i>0.1312</i>	<i>0.1468</i>	<i>0.1378</i>	<i>0.1559</i>
IE	<i>0.0185</i>	<i>0.0162</i>	<i>0.0208</i>	<i>0.1076</i>	<i>0.0979</i>	<i>0.1173</i>	<i>0.0445</i>	<i>0.0389</i>	<i>0.0501</i>	<i>0.1473</i>	<i>0.1335</i>	<i>0.1610</i>
IT	<i>0.0295</i>	<i>0.0258</i>	<i>0.0332</i>	<i>0.0403</i>	<i>0.0358</i>	<i>0.0448</i>	<i>0.0952</i>	<i>0.0880</i>	<i>0.1025</i>	<i>0.1113</i>	<i>0.1025</i>	<i>0.1201</i>
LU	<i>0.0025</i>	<i>0.0012</i>	<i>0.0038</i>	<i>0.0151</i>	<i>0.0061</i>	<i>0.0242</i>	<i>0.0789</i>	<i>0.0682</i>	<i>0.0895</i>	<i>0.1026</i>	<i>0.0861</i>	<i>0.1191</i>
NL	<i>0.0120</i>	<i>0.0077</i>	<i>0.0163</i>	<i>0.0392</i>	<i>0.0322</i>	<i>0.0462</i>	<i>0.0797</i>	<i>0.0692</i>	<i>0.0901</i>	<i>0.1125</i>	<i>0.1006</i>	<i>0.1244</i>
PL	<i>0.0454</i>	<i>0.0231</i>	<i>0.0676</i>	<i>0.0696</i>	<i>0.0485</i>	<i>0.0907</i>	<i>0.1971</i>	<i>0.1744</i>	<i>0.2198</i>	<i>0.2397</i>	<i>0.2173</i>	<i>0.2621</i>
PT	<i>0.0140</i>	<i>0.0116</i>	<i>0.0164</i>	<i>0.0403</i>	<i>0.0304</i>	<i>0.0501</i>	<i>0.0414</i>	<i>0.0341</i>	<i>0.0486</i>	<i>0.0715</i>	<i>0.0580</i>	<i>0.0850</i>
SE	<i>0.0267</i>	<i>0.0115</i>	<i>0.0419</i>	<i>0.0407</i>	<i>0.0260</i>	<i>0.0555</i>	<i>0.1311</i>	<i>0.1125</i>	<i>0.1498</i>	<i>0.1630</i>	<i>0.1436</i>	<i>0.1824</i>
SI	<i>0.0103</i>	<i>0.0093</i>	<i>0.0112</i>	<i>0.0430</i>	<i>0.0383</i>	<i>0.0478</i>	<i>0.0934</i>	<i>0.0831</i>	<i>0.1036</i>	<i>0.1405</i>	<i>0.1285</i>	<i>0.1526</i>
UK	<i>0.0105</i>	<i>0.0083</i>	<i>0.0126</i>	<i>0.1044</i>	<i>0.0975</i>	<i>0.1113</i>	<i>0.0331</i>	<i>0.0299</i>	<i>0.0364</i>	<i>0.1736</i>	<i>0.1638</i>	<i>0.1835</i>
EU15	<i>0.0191</i>	<i>0.0181</i>	<i>0.0202</i>	<i>0.0496</i>	<i>0.0472</i>	<i>0.0519</i>	<i>0.0766</i>	<i>0.0742</i>	<i>0.0791</i>	<i>0.1257</i>	<i>0.1224</i>	<i>0.1290</i>
EU19	<i>0.0388</i>	<i>0.0378</i>	<i>0.0397</i>	<i>0.0673</i>	<i>0.0650</i>	<i>0.0696</i>	<i>0.1042</i>	<i>0.1021</i>	<i>0.1063</i>	<i>0.1509</i>	<i>0.1475</i>	<i>0.1542</i>

Source: EUROMOD D20. Note: FGT(a) indices are based on equivalised monetary values using the modified OECD equivalence scale and expressed in PPS - 2003. The poverty line for all the distributions is 60% of median of equivalised disposable income distribution. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

## Annex A: EUROMOD source data and tax-benefit systems

**Table A1: EUROMOD (version D20) datasets and tax-benefit systems simulated**

<i>Country</i>	<i>Dataset</i>	<i>Date of collection</i>	<i>Tax-Benefit System</i>
AT	Austrian version of ECHP	1999	2003
BE	Panel Survey on Belgian Households	2002	2003
DE	German Socio-Economic Panel	2002	2003
DK	European Community Household Panel	1995	2001
EE	Household Budget Survey	2005	2005
EL	Household Budget Survey	2004/5	2005
ES	EU-SILC	2005	2005
FI	Income distribution survey	2001	2003
FR	Budget de Famille (HBS)	2000/1	2001
HU	EU-SILC	2005	2005
IE	Living in Ireland Survey	1994	2001
IT	Survey of Households Income and Wealth	1996	2001
LU	PSELL-2	2001	2003
NL	Sociaal-economisch panelonderzoek	2000	2003
PL	Household Budget Survey	2005	2005
PT	European Community Household Panel	2001	2003
SE	Income distribution survey	2001	2001
SI	Household Budget Survey / Personal Income Tax database	2005	2005
UK	Family Expenditure Survey (HBS)	2000/1	2003

Note: When the reference time period for income data differs from the simulated policy year, monetary values are updated to this date according to actual changes in prices and incomes. In general no adjustment is made for changes in population composition.

## Annex B

**Table B1: Income inequality – Gini coefficient**

	Market income	Market income & public pensions	Disposable income
AT	0.4407	0.3583	0.2267
BE	0.4856	0.4062	0.2453
DE	0.4936	0.3969	0.2682
DK	0.4574	0.4012	0.2317
EE	0.5090	0.4186	0.3237
EL	0.5021	0.3990	0.3197
ES	0.4667	0.3799	0.3050
FI	0.4841	0.4008	0.2689
FR	0.4868	0.3955	0.2609
HU	0.5501	0.4444	0.2781
IE	0.4588	0.4435	0.3091
IT	0.5063	0.4417	0.3585
LU	0.4723	0.3790	0.2434
NL	0.3858	0.3346	0.2473
PL	0.5453	0.4568	0.3321
PT	0.5069	0.4495	0.3610
SE	0.4371	0.3585	0.2425
SI	0.4992	0.4278	0.2704
UK	0.4960	0.4569	0.3058
EU15	0.4952	0.4205	0.3001
EU19	0.5205	0.4480	0.3345

Source: EUROMOD D20. Note: Gini coefficients are based on equivalised monetary values using the modified OECD equivalence scale and expressed in PPS - 2003.



**Table B2: Share of national households in the bottom decile group at EU level**

	EU15	EU19
AT	0.53	0.21
BE	2.31	0.93
DK	0.87	0.37
FI	1.23	0.23
FR	10.25	2.00
DE	17.03	5.49
EL	6.40	3.05
IE	1.04	0.06
IT	21.24	7.54
LU	0	0
NL	1.14	0.59
PT	7.74	4.29
ES	21.32	8.66
SE	2.08	1.04
UK	6.83	2.11
EE	---	2.26
HU	---	11.09
PL	---	49.62
SI	---	0.45

Source: EUROMOD D20. Share of national households in the bottom decile group based on household equivalised disposable income at the EU level. Monetary values are equivalised using the modified OECD scale.

**Table B3: Share of national population with income below the EU poverty line**

	EU-19 poverty line	EU-15 poverty line
AT	2.98	4.31
BE	6.69	7.58
DE	6.83	9.74
DK	4.49	6.28
EE	83.21	---
EL	27.63	32.37
ES	24.02	28.69
FI	7.54	11.03
FR	8.40	13.25
HU	79.11	---
IE	12.06	15.51
IT	20.48	24.46
LU	0.13	0.16
NL	3.55	5.17
PL	85.77	---
PT	44.08	49.13
SE	6.65	9.08
SI	27.63	---
UK	6.47	10.06

Source: EUROMOD D20. Share of national population with income below the poverty line defined at the EU level, as 60% of the median of the equivalised disposable income distribution. To derive the poverty lines monetary values are equivalised using the modified OECD scale, weighted by the number of persons in the household and expressed in PPS - 2003. In these terms the poverty line (for a single person) in the EU-15 is €680.75 per month and in the EU-19, €627.11 per month.

## Annex C: Inequality and poverty measures based on per capita monetary values

**Table C1: Income inequality – Gini coefficient**

	Market income			Market income & public pensions			Disposable income		
		<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>	
AT	0.4732	0.4585	0.4879	0.3894	0.3767	0.4020	0.2644	0.2552	0.2736
BE	0.5003	0.4872	0.5134	0.4162	0.4042	0.4282	0.2645	0.2545	0.2745
DE	0.5221	0.5137	0.5305	0.4219	0.4140	0.4299	0.2994	0.2937	0.3052
DK	0.4704	0.4551	0.4856	0.4047	0.3899	0.4195	0.2464	0.2358	0.2569
EE	0.5146	0.4997	0.5294	0.4184	0.4037	0.4331	0.3261	0.3126	0.3396
EL	0.5055	0.4958	0.5151	0.4040	0.3952	0.4128	0.3327	0.3247	0.3407
ES	0.4814	0.4742	0.4886	0.3918	0.3852	0.3985	0.3206	0.3149	0.3263
FI	0.4892	0.4811	0.4972	0.4016	0.3943	0.4089	0.2753	0.2688	0.2818
FR	0.5056	0.4986	0.5127	0.4168	0.4096	0.4239	0.2930	0.2879	0.2981
HU	0.5476	0.5385	0.5568	0.4457	0.4357	0.4556	0.3053	0.2974	0.3133
IE	0.4758	0.4605	0.4911	0.4578	0.443	0.4726	0.3275	0.3172	0.3379
IT	0.5020	0.4921	0.5118	0.4409	0.4306	0.4513	0.3671	0.3572	0.3771
LU	0.5079	0.4918	0.5240	0.4165	0.4013	0.4316	0.2850	0.2747	0.2954
NL	0.4209	0.4108	0.4310	0.3706	0.3611	0.3801	0.2901	0.2827	0.2974
PL	0.5419	0.5381	0.5458	0.4631	0.4593	0.4668	0.3548	0.3510	0.3585
PT	0.5144	0.4935	0.5352	0.4559	0.435	0.4767	0.3749	0.3576	0.3921
SE	0.4587	0.4535	0.4640	0.3800	0.3745	0.3855	0.2642	0.2599	0.2685
SI	0.5064	0.4960	0.5168	0.4313	0.4214	0.4413	0.2824	0.2750	0.2897
UK	0.5093	0.5000	0.5187	0.4671	0.4580	0.4762	0.3300	0.3231	0.3368
EU15	0.5134	0.5100	0.5167	0.4378	0.4347	0.4409	0.3253	0.3226	0.3280
EU19	0.5372	0.5344	0.5400	0.4641	0.4612	0.4671	0.3578	0.3552	0.3603

Source: EUROMOD D20. Note: Gini coefficients are based on equivalised monetary values which are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised by the number of household components and expressed in PPS - 2003. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

**Table C2a: Income inequality – Generalized entropy indices**

	<b>Ge(-1)</b>						<b>Ge(0)</b>					
	Market income & public pensions			Disposable income			Market income & public pensions			Disposable income		
	<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>		
AT	2.6619	2.3125	3.0114	0.1422	0.1105	0.1740	0.4014	0.3706	0.4322	0.1139	0.1057	0.1222
BE	4.8313	4.3813	5.2812	0.6754	0.5309	0.8198	0.5616	0.5249	0.5983	0.1523	0.1376	0.1669
DE	3.0131	2.7370	3.2892	0.1792	0.1629	0.1955	0.4703	0.4465	0.4941	0.1476	0.1416	0.1535
DK	3.9232	3.4340	4.4124	0.2093	0.1486	0.2699	0.5037	0.4622	0.5453	0.1108	0.0997	0.1218
EE	3.0408	2.6493	3.4324	0.2790	0.1990	0.3590	0.4621	0.4268	0.4975	0.1831	0.1672	0.1989
EL	2.0022	1.7804	2.2240	0.5922	0.4820	0.7023	0.3758	0.3561	0.3954	0.2146	0.2018	0.2274
ES	2.0291	1.8591	2.1991	0.4810	0.4153	0.5467	0.3639	0.3489	0.3790	0.1958	0.1874	0.2041
FI	2.3535	2.1409	2.5660	0.1343	0.1278	0.1408	0.4142	0.3951	0.4334	0.1264	0.1199	0.1330
FR	2.5022	2.2909	2.7135	0.1501	0.1445	0.1558	0.4375	0.4187	0.4563	0.1386	0.1337	0.1434
HU	3.5039	3.2040	3.8037	0.3890	0.2970	0.4811	0.5288	0.5027	0.5550	0.1724	0.1618	0.1830
IE	5.1858	4.5964	5.7752	0.2424	0.2106	0.2743	0.6332	0.5851	0.6812	0.1801	0.1687	0.1915
IT	1.9456	1.7343	2.1569	0.5453	0.4527	0.6379	0.4420	0.4185	0.4655	0.2478	0.2338	0.2619
LU	2.5287	1.9530	3.1044	0.1513	0.1300	0.1726	0.4267	0.3758	0.4776	0.1315	0.1218	0.1412
NL	2.2185	1.9348	2.5021	0.2761	0.1953	0.3568	0.3509	0.3274	0.3744	0.1462	0.1363	0.1561
PL	4.7463	4.6137	4.8789	0.5496	0.5055	0.5936	0.6157	0.6047	0.6267	0.2328	0.2271	0.2384
PT	1.5062	1.1915	1.8209	0.2631	0.2362	0.2900	0.4255	0.3830	0.4681	0.2297	0.2088	0.2506
SE	2.1766	2.0232	2.3301	0.2528	0.2120	0.2935	0.3758	0.3619	0.3897	0.1260	0.1208	0.1312
SI	3.4125	3.1180	3.7070	0.1428	0.1355	0.1500	0.5039	0.4776	0.5302	0.1310	0.1242	0.1377
UK	5.4833	5.1102	5.8565	0.3028	0.2221	0.3836	0.6657	0.6348	0.6965	0.1832	0.1738	0.1926
EU15	2.9806	2.8785	3.0826	0.3506	0.3269	0.3742	0.4883	0.4796	0.4970	0.1869	0.1834	0.1905
EU19	4.0858	3.9913	4.1804	0.5264	0.5052	0.5476	0.5549	0.5465	0.5632	0.2395	0.2361	0.2428

Source: EUROMOD D20. Note: Ge(a) indices are based on equivalised monetary values which are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised by the number of household components and expressed in PPS - 2003. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

**Table C2b: Income inequality – Generalized entropy indices**

	<b>Ge(1)</b>						<b>Ge(2)</b>					
	Market income & public pensions			Disposable income			Market income & public pensions			Disposable income		
	<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>		
AT	0.2652	0.2475	0.283	0.1172	0.1083	0.1262	0.3010	0.2722	0.3298	0.1378	0.1243	0.1514
BE	0.3153	0.2962	0.3344	0.1290	0.1155	0.1426	0.3582	0.3222	0.3942	0.1616	0.1302	0.1930
DE	0.3134	0.3003	0.3266	0.1513	0.1443	0.1583	0.3734	0.3475	0.3993	0.1852	0.1721	0.1983
DK	0.3051	0.2797	0.3305	0.1134	0.0991	0.1278	0.3809	0.3225	0.4394	0.1515	0.1188	0.1841
EE	0.3156	0.2892	0.3421	0.1908	0.1684	0.2131	0.4070	0.3340	0.4800	0.2711	0.1994	0.3428
EL	0.2933	0.2786	0.3080	0.1938	0.1830	0.2046	0.3885	0.3547	0.4224	0.2431	0.2213	0.2649
ES	0.2696	0.2594	0.2797	0.1759	0.1685	0.1834	0.3319	0.3106	0.3532	0.2110	0.1950	0.2270
FI	0.2907	0.2781	0.3034	0.1430	0.1317	0.1544	0.3691	0.3346	0.4036	0.2174	0.1782	0.2565
FR	0.3077	0.2960	0.3194	0.1485	0.1419	0.1551	0.3806	0.3552	0.4059	0.1922	0.1762	0.2082
HU	0.3607	0.3426	0.3787	0.1653	0.1547	0.1760	0.4762	0.4316	0.5208	0.2120	0.1899	0.2342
IE	0.3772	0.3488	0.4056	0.1830	0.1685	0.1975	0.4705	0.3969	0.5440	0.2355	0.2029	0.2681
IT	0.3472	0.3292	0.3652	0.2447	0.2292	0.2602	0.4690	0.4304	0.5075	0.3477	0.3139	0.3814
LU	0.3064	0.2814	0.3314	0.1380	0.1260	0.1501	0.3836	0.3333	0.4338	0.1705	0.1468	0.1941
NL	0.2428	0.2280	0.2577	0.1428	0.1336	0.1519	0.2920	0.2517	0.3322	0.1732	0.1532	0.1933
PL	0.3893	0.3815	0.3971	0.2290	0.2221	0.2359	0.5179	0.4923	0.5435	0.3360	0.3127	0.3594
PT	0.3748	0.3395	0.4101	0.2463	0.2225	0.2702	0.5270	0.4637	0.5903	0.3349	0.2929	0.3769
SE	0.2550	0.2467	0.2634	0.1221	0.1168	0.1273	0.2930	0.2770	0.3090	0.1490	0.1378	0.1602
SI	0.3364	0.3198	0.3530	0.1386	0.1298	0.1474	0.4267	0.3922	0.4613	0.1755	0.1584	0.1926
UK	0.3846	0.3690	0.4002	0.1846	0.1757	0.1934	0.4408	0.4141	0.4675	0.2296	0.2141	0.2452
EU15	0.3375	0.3321	0.3430	0.1832	0.1797	0.1868	0.4185	0.4063	0.4308	0.2329	0.2261	0.2398
EU19	0.3779	0.3724	0.3833	0.2200	0.2163	0.2236	0.4739	0.4614	0.4863	0.2742	0.2666	0.2818

Source: EUROMOD D20. Note: Ge(a) indices are based on equivalised monetary values which are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised by the number of household components and expressed in PPS - 2003. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

**Table C3: Income inequality decomposition**

		<b>Ge(-1)</b>		<b>Ge(0)</b>		<b>Ge(1)</b>		<b>Ge(2)</b>	
		Market income & public pensions	Disposable income	Market income & public pensions	Disposable income	Market income & public pensions	Disposable income	Market income & public pensions	Disposable income
EU15	Within	2.962	0.338	0.471	0.175	0.321	0.172	0.402	0.222
	Between	0.019	0.013	0.018	0.012	0.017	0.011	0.016	0.011
	Total	2.981	0.351	0.488	0.187	0.338	0.183	0.419	0.233
EU19	Within	3.988	0.444	0.485	0.180	0.323	0.173	0.427	0.235
	Between	0.098	0.083	0.070	0.060	0.055	0.047	0.047	0.039
	Total	4.086	0.527	0.555	0.239	0.378	0.220	0.474	0.274

Source: EUROMOD D20. Note: Ge(a) indices are based on equivalised monetary values which are bottom coded at one percent of equivalised mean income and top coded at ten times the median of non-equivalised household incomes. Monetary values are equivalised by the number of household components and expressed in PPS - 2003.

**Table C4a: Income poverty – FGT(0)**

	Disposable income			Excl. means-tested benefits			Excl. non means-tested benefits			Excl. all benefits (except public pensions)		
		<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>	
AT	0.1106	<i>0.0941</i>	<i>0.1270</i>	0.1242	<i>0.1071</i>	<i>0.1414</i>	0.2979	<i>0.2761</i>	<i>0.3197</i>	0.3077	<i>0.2863</i>	<i>0.3291</i>
BE	0.1271	<i>0.1128</i>	<i>0.1414</i>	0.1537	<i>0.1383</i>	<i>0.1691</i>	0.2897	<i>0.2706</i>	<i>0.3088</i>	0.3139	<i>0.2944</i>	<i>0.3334</i>
DE	0.1552	<i>0.1444</i>	<i>0.1660</i>	0.1803	<i>0.1689</i>	<i>0.1917</i>	0.2787	<i>0.2658</i>	<i>0.2917</i>	0.3006	<i>0.2879</i>	<i>0.3134</i>
DK	0.0803	<i>0.0670</i>	<i>0.0936</i>	0.1097	<i>0.0951</i>	<i>0.1243</i>	0.3068	<i>0.2856</i>	<i>0.3280</i>	0.3242	<i>0.3039</i>	<i>0.3445</i>
EE	0.1730	<i>0.1559</i>	<i>0.1901</i>	0.1745	<i>0.1582</i>	<i>0.1908</i>	0.2898	<i>0.2699</i>	<i>0.3096</i>	0.2917	<i>0.2720</i>	<i>0.3114</i>
EL	0.2003	<i>0.1872</i>	<i>0.2133</i>	0.2022	<i>0.1896</i>	<i>0.2147</i>	0.2842	<i>0.2705</i>	<i>0.2980</i>	0.2860	<i>0.2721</i>	<i>0.2998</i>
ES	0.1947	<i>0.1851</i>	<i>0.2044</i>	0.2061	<i>0.1959</i>	<i>0.2164</i>	0.2613	<i>0.2508</i>	<i>0.2718</i>	0.2712	<i>0.2608</i>	<i>0.2816</i>
FI	0.1160	<i>0.1061</i>	<i>0.1259</i>	0.1520	<i>0.1415</i>	<i>0.1625</i>	0.2925	<i>0.2810</i>	<i>0.3040</i>	0.3104	<i>0.2981</i>	<i>0.3228</i>
FR	0.1493	<i>0.1395</i>	<i>0.1592</i>	0.2162	<i>0.2058</i>	<i>0.2266</i>	0.2709	<i>0.2596</i>	<i>0.2821</i>	0.3183	<i>0.3066</i>	<i>0.3299</i>
HU	0.1898	<i>0.1773</i>	<i>0.2023</i>	0.1950	<i>0.1827</i>	<i>0.2073</i>	0.3833	<i>0.3688</i>	<i>0.3978</i>	0.3856	<i>0.3713</i>	<i>0.3998</i>
IE	0.1934	<i>0.1765</i>	<i>0.2103</i>	0.2878	<i>0.2686</i>	<i>0.3070</i>	0.2475	<i>0.2284</i>	<i>0.2666</i>	0.3341	<i>0.3150</i>	<i>0.3533</i>
IT	0.2171	<i>0.2016</i>	<i>0.2325</i>	0.2451	<i>0.2301</i>	<i>0.2602</i>	0.3021	<i>0.2863</i>	<i>0.3179</i>	0.3278	<i>0.3117</i>	<i>0.3438</i>
LU	0.1459	<i>0.1236</i>	<i>0.1683</i>	0.1663	<i>0.1440</i>	<i>0.1886</i>	0.2937	<i>0.2688</i>	<i>0.3186</i>	0.3122	<i>0.2877</i>	<i>0.3366</i>
NL	0.1341	<i>0.1198</i>	<i>0.1484</i>	0.1523	<i>0.1378</i>	<i>0.1668</i>	0.2224	<i>0.2059</i>	<i>0.2389</i>	0.2371	<i>0.2210</i>	<i>0.2531</i>
PL	0.2060	<i>0.2007</i>	<i>0.2112</i>	0.2510	<i>0.2455</i>	<i>0.2564</i>	0.3767	<i>0.3709</i>	<i>0.3826</i>	0.4092	<i>0.4033</i>	<i>0.4151</i>
PT	0.2232	<i>0.1883</i>	<i>0.2582</i>	0.2356	<i>0.2002</i>	<i>0.2710</i>	0.2720	<i>0.2355</i>	<i>0.3084</i>	0.2854	<i>0.2508</i>	<i>0.3200</i>
SE	0.1242	<i>0.1171</i>	<i>0.1312</i>	0.1515	<i>0.1441</i>	<i>0.1589</i>	0.3179	<i>0.3089</i>	<i>0.3270</i>	0.3377	<i>0.3291</i>	<i>0.3463</i>
SI	0.1607	<i>0.1481</i>	<i>0.1732</i>	0.2031	<i>0.1896</i>	<i>0.2167</i>	0.3244	<i>0.3089</i>	<i>0.3399</i>	0.3608	<i>0.3456</i>	<i>0.3760</i>
UK	0.1872	<i>0.1755</i>	<i>0.1990</i>	0.2857	<i>0.2721</i>	<i>0.2992</i>	0.2762	<i>0.2630</i>	<i>0.2893</i>	0.3524	<i>0.3381</i>	<i>0.3667</i>
EU15	0.1799	<i>0.1753</i>	<i>0.1844</i>	0.2223	<i>0.2178</i>	<i>0.2269</i>	0.2879	<i>0.2828</i>	<i>0.2931</i>	0.3209	<i>0.3161</i>	<i>0.3256</i>
EU19	0.2252	<i>0.2217</i>	<i>0.2287</i>	0.2651	<i>0.2612</i>	<i>0.2690</i>	0.3232	<i>0.3190</i>	<i>0.3275</i>	0.3550	<i>0.3509</i>	<i>0.3592</i>

Source: EUROMOD D20. Note: FGT(a) indices are based on monetary values equivalised by the number of household components and expressed in PPS - 2003. The poverty line for all the distributions is 60% of median of equivalised disposable income distribution. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.

**Table C4a: Income poverty – FGT(1)**

	Disposable income			Excl. means-tested benefits			Excl. non means-tested benefits			Excl. all benefits (except public pensions)		
		<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>	
AT	0.0202	<i>0.0165</i>	<i>0.0239</i>	0.0293	<i>0.0240</i>	<i>0.0346</i>	0.1503	<i>0.1349</i>	<i>0.1657</i>	0.1637	<i>0.1478</i>	<i>0.1795</i>
BE	0.0373	<i>0.0323</i>	<i>0.0423</i>	0.0725	<i>0.0640</i>	<i>0.0809</i>	0.1368	<i>0.1260</i>	<i>0.1476</i>	0.1777	<i>0.1646</i>	<i>0.1908</i>
DE	0.0332	<i>0.0300</i>	<i>0.0363</i>	0.0567	<i>0.0519</i>	<i>0.0616</i>	0.1209	<i>0.1139</i>	<i>0.1280</i>	0.1481	<i>0.1399</i>	<i>0.1564</i>
DK	0.0205	<i>0.0161</i>	<i>0.0250</i>	0.0408	<i>0.0330</i>	<i>0.0487</i>	0.1964	<i>0.1801</i>	<i>0.2127</i>	0.2326	<i>0.2139</i>	<i>0.2513</i>
EE	0.0492	<i>0.0432</i>	<i>0.0553</i>	0.0601	<i>0.0528</i>	<i>0.0674</i>	0.1355	<i>0.1236</i>	<i>0.1475</i>	0.1468	<i>0.1341</i>	<i>0.1594</i>
EL	0.0640	<i>0.0583</i>	<i>0.0697</i>	0.0650	<i>0.0595</i>	<i>0.0704</i>	0.1228	<i>0.1153</i>	<i>0.1304</i>	0.1239	<i>0.1162</i>	<i>0.1316</i>
ES	0.0599	<i>0.0559</i>	<i>0.0640</i>	0.0704	<i>0.0653</i>	<i>0.0754</i>	0.1093	<i>0.1037</i>	<i>0.1150</i>	0.1217	<i>0.1153</i>	<i>0.1281</i>
FI	0.0236	<i>0.0210</i>	<i>0.0263</i>	0.0438	<i>0.0397</i>	<i>0.0479</i>	0.1445	<i>0.1373</i>	<i>0.1516</i>	0.1728	<i>0.1642</i>	<i>0.1814</i>
FR	0.0262	<i>0.0240</i>	<i>0.0284</i>	0.0757	<i>0.0711</i>	<i>0.0803</i>	0.1012	<i>0.0962</i>	<i>0.1063</i>	0.1623	<i>0.1548</i>	<i>0.1698</i>
HU	0.0530	<i>0.0483</i>	<i>0.0578</i>	0.0676	<i>0.0617</i>	<i>0.0735</i>	0.1890	<i>0.1802</i>	<i>0.1978</i>	0.2046	<i>0.1947</i>	<i>0.2145</i>
IE	0.0491	<i>0.0435</i>	<i>0.0546</i>	0.1457	<i>0.1335</i>	<i>0.1580</i>	0.0864	<i>0.0775</i>	<i>0.0953</i>	0.1870	<i>0.1724</i>	<i>0.2016</i>
IT	0.0695	<i>0.0628</i>	<i>0.0761</i>	0.0880	<i>0.0807</i>	<i>0.0954</i>	0.1399	<i>0.1305</i>	<i>0.1493</i>	0.1606	<i>0.1504</i>	<i>0.1708</i>
LU	0.0278	<i>0.0222</i>	<i>0.0335</i>	0.0466	<i>0.0341</i>	<i>0.0591</i>	0.1297	<i>0.1166</i>	<i>0.1428</i>	0.1519	<i>0.1347</i>	<i>0.1690</i>
NL	0.0308	<i>0.0262</i>	<i>0.0353</i>	0.0555	<i>0.0489</i>	<i>0.0620</i>	0.1004	<i>0.0913</i>	<i>0.1094</i>	0.1275	<i>0.1171</i>	<i>0.1380</i>
PL	0.0656	<i>0.0631</i>	<i>0.0681</i>	0.1003	<i>0.0970</i>	<i>0.1035</i>	0.2170	<i>0.2126</i>	<i>0.2214</i>	0.2590	<i>0.2541</i>	<i>0.2639</i>
PT	0.0556	<i>0.0445</i>	<i>0.0667</i>	0.0846	<i>0.0677</i>	<i>0.1014</i>	0.0901	<i>0.0770</i>	<i>0.1032</i>	0.1203	<i>0.1014</i>	<i>0.1391</i>
SE	0.0330	<i>0.0300</i>	<i>0.0361</i>	0.0499	<i>0.0463</i>	<i>0.0534</i>	0.1610	<i>0.1548</i>	<i>0.1673</i>	0.1858	<i>0.1792</i>	<i>0.1924</i>
SI	0.0347	<i>0.0315</i>	<i>0.0380</i>	0.0763	<i>0.0696</i>	<i>0.0829</i>	0.1371	<i>0.1291</i>	<i>0.1450</i>	0.1857	<i>0.1759</i>	<i>0.1955</i>
UK	0.0421	<i>0.0384</i>	<i>0.0459</i>	0.1463	<i>0.1376</i>	<i>0.1550</i>	0.0854	<i>0.0799</i>	<i>0.0910</i>	0.2085	<i>0.1978</i>	<i>0.2192</i>
EU15	0.0499	<i>0.0482</i>	<i>0.0516</i>	0.0878	<i>0.0854</i>	<i>0.0903</i>	0.1206	<i>0.1181</i>	<i>0.1232</i>	0.1666	<i>0.1633</i>	<i>0.1698</i>
EU19	0.0805	<i>0.0791</i>	<i>0.0818</i>	0.1155	<i>0.1134</i>	<i>0.1175</i>	0.1545	<i>0.1523</i>	<i>0.1566</i>	0.1978	<i>0.1951</i>	<i>0.2006</i>

Source: EUROMOD D20. Note: FGT(a) indices are based on monetary values equivalised by the number of household components and expressed in PPS - 2003. The poverty line for all the distributions is 60% of median of equivalised disposable income distribution. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.



**Table C4a: Income poverty – FGT(2)**

	Disposable income			Excl. means-tested benefits			Excl. non means-tested benefits			Excl. all benefits (except public pensions)		
		<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>			<i>95% Confidence Intervals</i>	
AT	0.0063	<i>0.0047</i>	<i>0.0080</i>	0.0132	<i>0.0098</i>	<i>0.0166</i>	0.1548	<i>0.1245</i>	<i>0.1852</i>	0.1690	<i>0.1386</i>	<i>0.1994</i>
BE	0.0208	<i>0.0170</i>	<i>0.0245</i>	0.0572	<i>0.0498</i>	<i>0.0647</i>	0.1112	<i>0.0991</i>	<i>0.1233</i>	0.1567	<i>0.1425</i>	<i>0.1710</i>
DE	0.0114	<i>0.0100</i>	<i>0.0129</i>	0.0298	<i>0.0264</i>	<i>0.0331</i>	0.0808	<i>0.0750</i>	<i>0.0866</i>	0.1109	<i>0.1033</i>	<i>0.1186</i>
DK	0.0100	<i>0.0071</i>	<i>0.0128</i>	0.0284	<i>0.0202</i>	<i>0.0367</i>	0.1964	<i>0.1758</i>	<i>0.2171</i>	0.2557	<i>0.2304</i>	<i>0.2809</i>
EE	0.0227	<i>0.0176</i>	<i>0.0277</i>	0.0352	<i>0.0285</i>	<i>0.0419</i>	0.0953	<i>0.0833</i>	<i>0.1072</i>	0.1117	<i>0.0990</i>	<i>0.1243</i>
EL	0.0333	<i>0.0293</i>	<i>0.0374</i>	0.0341	<i>0.0302</i>	<i>0.0381</i>	0.0908	<i>0.0823</i>	<i>0.0993</i>	0.0918	<i>0.0831</i>	<i>0.1006</i>
ES	0.0304	<i>0.0277</i>	<i>0.0332</i>	0.0609	<i>0.0171</i>	<i>0.1047</i>	0.0839	<i>0.0736</i>	<i>0.0943</i>	0.1172	<i>0.0718</i>	<i>0.1627</i>
FI	0.0073	<i>0.0063</i>	<i>0.0083</i>	0.0201	<i>0.0176</i>	<i>0.0225</i>	0.1220	<i>0.1135</i>	<i>0.1304</i>	0.1547	<i>0.1447</i>	<i>0.1646</i>
FR	0.0070	<i>0.0063</i>	<i>0.0078</i>	0.0409	<i>0.0378</i>	<i>0.0440</i>	0.0649	<i>0.0599</i>	<i>0.0698</i>	0.1221	<i>0.1147</i>	<i>0.1294</i>
HU	0.0259	<i>0.0220</i>	<i>0.0299</i>	0.0389	<i>0.0336</i>	<i>0.0441</i>	0.1354	<i>0.1272</i>	<i>0.1436</i>	0.1578	<i>0.1480</i>	<i>0.1676</i>
IE	0.0184	<i>0.0158</i>	<i>0.0210</i>	0.1074	<i>0.0969</i>	<i>0.1178</i>	0.0458	<i>0.0397</i>	<i>0.0518</i>	0.1479	<i>0.1339</i>	<i>0.1619</i>
IT	0.0345	<i>0.0304</i>	<i>0.0387</i>	0.0466	<i>0.0417</i>	<i>0.0515</i>	0.1014	<i>0.0931</i>	<i>0.1097</i>	0.1184	<i>0.1091</i>	<i>0.1277</i>
LU	0.0073	<i>0.0054</i>	<i>0.0092</i>	0.0214	<i>0.0114</i>	<i>0.0314</i>	0.0940	<i>0.0820</i>	<i>0.1060</i>	0.1176	<i>0.1004</i>	<i>0.1347</i>
NL	0.0144	<i>0.0102</i>	<i>0.0186</i>	0.0424	<i>0.0354</i>	<i>0.0494</i>	0.0921	<i>0.0805</i>	<i>0.1038</i>	0.1263	<i>0.1124</i>	<i>0.1403</i>
PL	0.0490	<i>0.0328</i>	<i>0.0652</i>	0.0758	<i>0.0591</i>	<i>0.0924</i>	0.2146	<i>0.1966</i>	<i>0.2325</i>	0.2579	<i>0.2399</i>	<i>0.2759</i>
PT	0.0187	<i>0.0140</i>	<i>0.0234</i>	0.0456	<i>0.0332</i>	<i>0.0580</i>	0.0473	<i>0.0390</i>	<i>0.0557</i>	0.0780	<i>0.0628</i>	<i>0.0932</i>
SE	0.0250	<i>0.0143</i>	<i>0.0356</i>	0.0378	<i>0.0277</i>	<i>0.0478</i>	0.1443	<i>0.1306</i>	<i>0.1579</i>	0.1763	<i>0.1633</i>	<i>0.1894</i>
SI	0.0100	<i>0.0088</i>	<i>0.0111</i>	0.0451	<i>0.0400</i>	<i>0.0503</i>	0.0942	<i>0.0840</i>	<i>0.1045</i>	0.1430	<i>0.1308</i>	<i>0.1551</i>
UK	0.0151	<i>0.0127</i>	<i>0.0174</i>	0.1094	<i>0.1019</i>	<i>0.1169</i>	0.0397	<i>0.0360</i>	<i>0.0434</i>	0.1761	<i>0.1655</i>	<i>0.1866</i>
EU15	0.0225	<i>0.0214</i>	<i>0.0236</i>	0.0553	<i>0.0513</i>	<i>0.0593</i>	0.0842	<i>0.0817</i>	<i>0.0866</i>	0.1342	<i>0.1298</i>	<i>0.1387</i>
EU19	0.0428	<i>0.0419</i>	<i>0.0438</i>	0.0737	<i>0.0702</i>	<i>0.0772</i>	0.1124	<i>0.1102</i>	<i>0.1146</i>	0.1602	<i>0.1555</i>	<i>0.1648</i>

Source: EUROMOD D20. Note: FGT(a) indices are based on monetary values equivalised by the number of household components and expressed in PPS - 2003. The poverty line for all the distributions is 60% of median of equivalised disposable income distribution. Figures in italics are confidence intervals derived by nonparametric bootstrap with 1000 replications for each country and 250 replications for EU15 and EU19.