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Baseline results from the EU28 EUROMOD: 2011-2016

Mattia Makovec and Miko Tammik

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Mattia Makovec[a] and Miko Tammik[a]

with

Silvia Avram[a], Paola De Agostini[a], Francesco Figari[b,a], Holguer Xavier Jara Tamayo[a], Katrin Gasior[a], Chrysa Leventi[a], Kostas Manios[a], Alari Paulus[a], Daria Popova[a], Olga Rastrigina[a], Pasquale Recchia[a], Iva Tasseva[a] and Holly Sutherland[a]

[a] ISER, University of Essex

[b] University of Insubria

Abstract

This paper presents baseline results from the latest version of EUROMOD (version G4.0+), the tax-benefit microsimulation model for the EU. First, we briefly report the process of updating EUROMOD. We then present indicators for income inequality and risk of poverty using EUROMOD and discuss the main reasons for differences between these and EU-SILC based indicators. We further compare EUROMOD distributional indicators across all EU 28 countries and over time between 2011 and 2016. Finally, we provide estimates of marginal effective tax rates (METR) for all 28 EU countries in order to explore the effect of tax and benefit systems on work incentives at the intensive margin. For a subset of countries for which 2014 EU-SILC data are available in EUROMOD, we also compare poverty and inequality indicators and METR across countries and over time between 2013 and 2016. Throughout the paper, we highlight both the potential of EUROMOD as a tool for policy analysis and the caveats that should be borne in mind when using it and interpreting results. This paper updates the work conducted in the EUROMOD Working Paper EM3/16.

JEL: C15, H24, H31, H55, I3

Keywords: microsimulation, redistribution, tax-benefit system, poverty, inequality, work incentives

Corresponding authors:

Mattia Makovec, mmakovec@essex.ac.uk
Miko Tammik, miko.tammik@essex.ac.uk

* The results presented here are based on EUROMOD version G4.0+. EUROMOD is maintained, developed and managed by the Institute for Social and Economic Research (ISER) at the University of Essex, in collaboration with national teams from the EU member states. We are indebted to the many people who have contributed to the development of EUROMOD. The process of extending and updating EUROMOD is financially supported by the European Union Programme for Employment and Social Innovation 'Easi' (2014-2020).
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1. Introduction

EUROMOD is the tax-benefit microsimulation model for the European Union (EU) that enables researchers and policy analysts to calculate, in a comparable manner and based on household micro-data, the effects of taxes and benefits on household incomes for the population of each country and for the EU as a whole. As well as calculating the effects of actual policies it is also used to evaluate the effects of tax-benefit policy reforms and other changes on poverty, inequality, incentives and government budgets.

The changes that it can be used to examine might be **actual changes in policy** over time, for example to show the extent to which reforms and other changes to public policies have contributed to reducing (or increasing) income poverty or inequality. Or they might be **alternative scenarios**, for tax-benefit policies and/or for the evolution of employment, hours of work etc. In particular, in the context of **Europe 2020**, EUROMOD can provide the capacity for assessing the distributional and budgetary effects of proposed and implemented policy changes in each member state, as well as for exploring the implications of alternative reform strategies or alternative economic or demographic scenarios for risk of poverty at national and EU levels. Furthermore, it can be used to explore the between- as well as within- country distributional implications of potential EU or eurozone social and fiscal policies.

EUROMOD is unusual in that it is **openly accessible**.[1] There are many applications and many potential users in both the scientific and policy monitoring/analysis communities. It is a highly flexible model, incorporating large amounts of complex information (Sutherland and Figari, 2013). For more information, see https://www.euromod.ac.uk/ .

This report presents baseline results for 28 EU countries from the latest version of EUROMOD (G4.0+) being constructed with support from DG-EMPL of the European Commission. It updates and extends the material reported in a 2016 EUROMOD Working Paper (Leventi and Vujackov, 2016).[2]

The next section provides a brief description of the EUROMOD project and its mode of working. This is followed, in section 3, by a presentation of estimates of poverty and income inequality for 28 EU countries, calculated using incomes simulated by EUROMOD for 2011-2016 tax/benefits policies, based on micro-data from the 2012 EU-SILC. The calculations for 2011 provide a '*baseline year*', in which policy rules on taxes and benefits coincide with the income year of the corresponding SILC survey. For a subset of 16 countries for which 2014 data were available, the same poverty and inequality indicators were calculated using 2013 as the baseline year. For Latvia, the set of estimates was also replicated using 2015 data (with 2014 as baseline year). Section 4 assesses the quality of the data, and discusses why EUROMOD results may differ from statistics calculated using directly EU-SILC data on household income. Section 5 discusses estimates of Marginal Effective Tax Rates (METR) and their main components using EUROMOD. Section 6 concludes and presents the next steps for EUROMOD.

2. The EUROMODupdate3 project

The EUROMODupdate3 project involved 4 key tasks: (1) updating the input database, (2) updating policy systems for 2016, (3) validating the baseline outputs and (4) documenting the work in Country Reports. These are described briefly in turn in the following paragraphs.

[1] Subject to permission to access the input micro-data (EU-SILC).
[2] https://www.euromod.ac.uk/publications/baseline-results-eu28-euromod-2011-2015

2.1 Updating input databases

The aim of this task is to build input databases for all countries from the most recent EU-SILC UDB.[3] However, in most countries, the UDB does not contain all the information needed to inform tax-benefit calculations. Where possible, and with the explicit permission of Eurostat, we have therefore explored the possibility of merging variables from the underlying national data (often referred to as the "national SILC") into the EUROMOD input database obtained from the UDB. However, access to the merged data for external EUROMOD users is subject to approval by Eurostat, by the National Statistical Office in each country, and requires negotiation between the EUROMOD team and the users on a bilateral basis. As documented in Appendix 2 in some cases this has been straightforward; in other cases the process is still ongoing.

In some countries, it is possible to use the "national SILC" as an alternative (rather than a supplement) to the UDB. We have only followed this route in cases where these data are provided for research uses under reasonable contract conditions; where they contain the necessary detailed variables; and where they yield the same results as the UDB for some of the key social indicators (e.g. median household disposable equivalised income; at-risk-of-poverty rates).

With only the UDB variables, the values for the individual components of many of the harmonised income variables used by EUROMOD must be imputed. The process depends on the specific components that have been aggregated (and a first step is to establish what these are: this information is not part of the standard UDB documentation). It obviously involves approximations and has implications for the results. In some countries, namely Bulgaria, Croatia, Malta, Spain, and Portugal, new disaggregated benefits variable became available for the first time in 2014 SILC. These variables allowed identifying at both the household and the individual level contributory vs. non-contributory and means-tested vs non-means-tested benefits, improving substantially the imputation of benefits in the 2014 input data.

As part of the EUROMODupdate3 project, Bulgaria, Greece, Spain, Italy, Cyprus, Lithuania, Croatia, Malta, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland have updated input databases to EU-SILC 2014. The baseline results presented in this report are based on:

(a) SILC 2012 for all EU-28 countries (Family Resources Survey (FRS) 2012/13 for the UK);
(b) SILC 2014 for 15 countries: Bulgaria, Greece, Spain, Italy, Cyprus, Lithuania, Croatia, Malta, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland (and FRS 2013/2014 for the UK);
(c) SILC 2015 for Latvia.

2.2 Updating policy systems until 2016

Based on detailed descriptions of policies provided by national teams, 2016 policies have been modelled using the EUROMOD tax-benefit modelling "language" for each country. Together with updating factors, to bring 2011 incomes from 2012 EU-SILC input data up to the level corresponding to the following policy years (2012, 2013, 2014, 2015, 2016), it is now possible to simulate tax/benefits policies from each of these 6 policy years for each of the 28 EU countries. These alternative "baselines" also form the starting points for modelling possible reforms, making use of the EUROMOD language.

[3] A network contract with Eurostat for this purpose has been established [EU-SILC/2009/17] and renewed [EU-SILC/2011/55].

The aim is to simulate as much as possible of the tax and benefit components of household disposable income. In practice, some parts of the tax or benefit system may be difficult to simulate and in that case the component is taken directly from the input database. This applies in the case of many contributory benefits and pensions (since information on past work and contribution history is not available in the EU-SILC or most other cross-sectional survey data sources) and many disability benefits (since information on the nature and severity of the disability is not included in the UDB data). The extent of these types of benefits varies across countries. For example, in some countries it is possible to simulate non-contributory pensions; on the contrary, in countries where such pensions do not exist, pension systems cannot be simulated.

In some other cases, benefits can only be partially simulated, using assumptions based on the information available, for instance on eligibility. For example, entitlement to unemployment benefits is simulated using information in the EU-SILC about number of years in work and the number of months spent working in the previous year. In some countries, the user can choose whether to use the simulated values of unemployment benefits or the values inputted from the data in their analysis. In these cases, the default is to make use of recorded values in analysis of income distribution, but to use simulated values when calculating indicators such as replacement rates or welfare resilience indicators.[4] Another example is that of contributory parental benefits. In some countries, it is possible to simulate them while in others it is not. In some cases, for example in Lithuania, it has been necessary to simulate parental benefits in order to simulate other components of the UDB SILC family benefit variable. Complete details of the benefits and taxes fully or partially simulated in this paper, and of those which are instead taken from the input data, are provided in the Country Reports.

2.3 Validation

Three distinct types of validation are usually carried out before the release of baseline results. First, as part of the policy implementation, the coding of the rules governing each policy instrument as well as the interactions between instruments were checked using a range of built-in tools. This is known as "micro-validation".

Secondly, once a country component in EUROMOD is working satisfactorily, aggregate estimates for expenditure on each benefit and revenues from each tax are compared with official external sources, such as national administrative statistics. Where available, the numbers of recipients and taxpayers are also compared. This "macro-validation" also helps to spot errors and problems in the implementation (either in the policy rules or the data, or in both). Once finalised, a report on the "macrovalidation" is included in each Country Report, to inform model users about how the baseline results from EUROMOD correspond to other external statistics, and discusses the reasons behind the differences.[5]

A third type of validation takes place when the model is used comparatively across-countries. Whether a discrepancy can be considered large or small (important or unimportant) becomes sometimes clearer in cross-national perspective. In addition, unexpected differences in distributional indicators between countries, can point to potential problems in the implementation of certain taxes and benefits, or to country specific factors related to the nature of taxes and benefits. An example of such an exercise is presented below, comparing baseline EUROMOD results with Eurostat statistics based on the EU-SILC.

[4] For example, see Fernandez Salgado, Figari, Sutherland and Tumino (2013).
[5] It should be noted that external statistics are often available only with a time lag (e.g. macro-validation of 2015 policies typically cannot be finalised until late 2016). Country Reports will document these issues.

Two main issues arise when validating macro statistics from EUROMOD: tax evasion and non-take up of benefits. Assuming full knowledge of and compliance with policy rules tends to result in over-simulation of taxes and of benefits and hence to under-estimate inequality of disposable incomes. At the same time, estimates based on the assumption of full compliance and benefits full take-up can be interpreted as the "de jure" or intended effects of the system.

In this paper, we model benefits non-take up and tax evasion using a country-specific approach, relying on the best available information from external administrative data. At the same time, we attempt to make our modelling as transparent as possible, by enabling external users to switch off (or modify) the model components specific to tax evasion and take-up, depending on their research objectives. In general, Country Reports show key results with and without take-up and tax evasion approximations. Tax evasion adjustments are included in the models of Bulgaria, Greece, Italy, and Romania, while benefits non take-up is modelled for Belgium, UK, Estonia, France, Ireland, Greece, Latvia, Poland, Portugal, Romania, and Finland. See Appendix 3 for a country-by-country description of the treatment of these issues.

2.4 Country Reports

Each national team has produced a country report conforming to common guidelines in terms of style and content. The intention is to provide comprehensive documentation for EUROMOD users and serve as reference for developers and national teams in the future.[6]

3. Poverty and inequality indicators with EUROMOD

Policy systems for years 2011 to 2016 are simulated in EUROMOD allowing the analysis of the effect of policy changes on income distribution. Table 1A shows selected poverty and inequality indicators for these policy years. Risk of poverty rates for the whole population of each of the 28 EU countries are shown for three poverty thresholds: 50%, 60% and 70% of national median equivalised household incomes (using the modified OECD equivalence scale). Risk of poverty for children (aged under 18) and older people (aged 65 or more) using the 60% threshold are also included. A commonly used indicator of income inequality is also shown: the Gini coefficient. The statistics are also reported for the whole EU-28 population. Figures for all years are based on the same input database, the 2012 EU-SILC. In each case, we have calculated the indicators using the same methods in principle as Eurostat although, as explained in section 5, there are a number of reasons why the values may differ from those produced by Eurostat from the EU-SILC data directly. Similarly, Table 1B shows the same poverty and inequality indicators based on 2014 input data for the available countries, and Table 1C reports the statistics for Latvia based on 2015 input data.

Incomes that are not simulated (e.g. market incomes) are updated from the baseline year 2011 (2013 in case of 2014 input data, and 2014 in case of 2015 input data) to the following years based on indices for each separate income source (e.g. earnings indices for earnings, pension uprating indices for pension-related incomes). Theses table show how poverty and inequality indicators evolve over time in each country, as a result of policy changes and changes in uprating factors, abstracting from changes in socio-demographic characteristics of the population, which are kept constant as in the baseline year.

[6] The country reports are available at https://www.euromod.ac.uk/using-euromod/country-reports/

3.1. Poverty risk: baseline year and trends

Table 1A shows the evolution over time of the poverty threshold, defined as 60% of the median equivalised household disposable income, in nominal terms across countries. The poverty line can shift because of inflation, changes in market and non-market incomes, tax/benefits policy reforms and uprating of policies over the period considered. In the non-euro-zone countries, poverty thresholds are also affected by fluctuations in the exchange rate. The countries experiencing the largest average annual growth in the poverty line between 2011 and 2016 are: Estonia (6.3%), Latvia (5.8%) Bulgaria (5.2%), Romania (5.2%), and Lithuania (4.4%). A number of countries experienced an annual shift in the poverty line between the EU-28 rate (1.6%) and 3.6%: the UK, Sweden, Poland, Slovakia, Malta, Belgium, Austria, Denmark and the Netherlands. On the other hand, the poverty line has not moved substantially in Denmark, Luxembourg, France, Italy, Czech Republic, Slovenia, Spain, Portugal and Ireland, where the average annual growth rate remained below 1%. Finally, the poverty line has dropped in nominal terms in Cyprus (by -1.2% on average per year) and more strongly in Greece (by -2.6% on average per year).

Table 1A shows that the highest at risk poverty rate using the 60% poverty line in the baseline year 2011 is observed in Spain (21.8%), followed by Romania, Greece (both above 21%) and Bulgaria, Croatia, Italy and Estonia (above 18%). The lowest poverty rates (below 12%) are registered in Hungary, Denmark, Slovakia, the Netherlands, Luxembourg and the Czech Republic (8.9%). The ranking of countries at both the top and at the bottom of the league-table seem to remain stable when considering alternative poverty thresholds (50% and 70% of the poverty line). Poverty risk results are higher for more vulnerable categories, such as children and elderly. In Romania, child poverty reaches 32% in the baseline year, followed by Spain (28%), and then by Italy, Bulgaria, Greece and Malta (where it varies between 24%-25%). The lowest child poverty rates (below 13%) are observed instead in Slovenia, Cyprus, Czech Republic, Finland, and Denmark. Elderly poverty reaches 31% in Cyprus, 26% in Bulgaria and Croatia, 19% in Estonia and 18% in Slovenia. At the other end of the spectrum, the countries with the lowest elderly poverty rates (below 10%) are Hungary, Denmark, France, Czech Republic, Slovakia, the Netherlands, Ireland and Luxembourg.

Table 1A also shows that the most relevant increase in poverty rates between 2011 and 2016 was registered in Latvia, Lithuania and Hungary, where the poverty rates increased by 4.6, 3.8 and 3.6 percentage points respectively. Latvia and Lithuania were exhibiting higher poverty rates compared to the EU-28 level already in 2011. Hungary's poverty rate was below the EU-28 level in 2011, but in 2016 poverty in Hungary increased quite substantially above this threshold. Increase in poverty rates in these countries seem to be associated with an increase in elderly poverty rate in the Baltic States. In Hungary, the increase in poverty might be associated with the relatively greater importance (in comparison with other countries) of spending on non-means tested benefits vs. means-tested benefits. Further, the adoption of a flat rate income tax since 2011, likely resulted in a lower anti-poverty effectiveness if compared to a progressive tax system.

The countries experiencing the largest poverty reduction between 2011 and 2016 according to Table 1A, are Poland, France and Greece (which however started from quite a high level in 2011). In Poland, one of the policy changes that can possibly be associated with poverty reduction is the recent introduction of a generous child benefit. Prior to that, in fact, poverty in Poland has been relatively stable. The anti-poverty effect of the new child benefit might be however over-estimated, since the policy was rolled out in April 2016, while the benefit has been simulated for the whole year 2016.

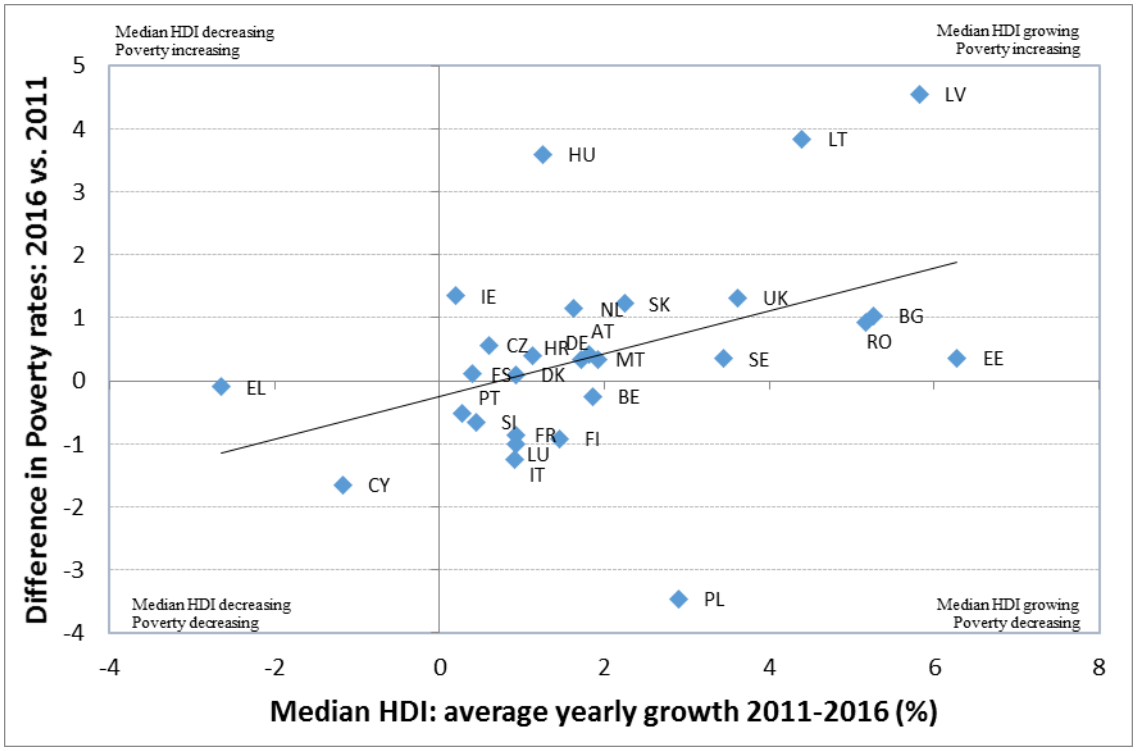
Table 1A also shows poverty trends between 2011 and 2016 for different population subgroups (children and elderly). Poland has been the country experiencing the strongest reduction also in child poverty (-12 percentage points) in the period considered, while Hungary and Latvia are the countries where child poverty has increased the most. In Latvia, elderly poverty increased by over 20 percentage points in 5 years, followed by Lithuania, which shows a 10 percentage points increase. In Cyprus, on the other hand, elderly poverty dropped by over 11 percentage points.

Figure 1 summarizes in a single chart some of the information included in Table 1A and discussed in the previous paragraphs: it shows the average yearly growth rate in median equivalised household disposable income over the period 2011-2016, plotted against the point difference in poverty rates between the end (2016) and the beginning of the period (2011). The bottom right panel in Figure 1 includes countries that experienced at the same time average positive growth in median household disposable income and a reduction in poverty, while the top right panel shows the countries that experienced positive growth in median household disposable income and an increase in poverty. In general, countries lying well above (below) the regression line, experienced a much stronger poverty increase (reduction) compared to the EU-28 average.

By choosing a relative poverty threshold, we might expect poverty to increase with growth in median equivalised household disposable income. Figure 1 shows, however, that countries experiencing similar growth in median household disposable income, can exhibit different patterns of poverty reduction. This can happen because growth in market and non-market incomes vary for the poor compared to the total population, and because changes in tax/benefits policies can make disposable income growing faster for the poor than for the population as a whole. For instance, Estonia, Latvia, Bulgaria and Romania exhibit similar trends in growth of median disposable income. However, in Latvia, the increase in poverty with respect to the beginning of the period has been much higher. The same finding applies to Lithuania, when compared to the UK and Sweden. Poland, on the other hand, experienced robust average growth in median incomes (almost 3% per year) and at the same time reduced poverty by almost 4 percentage points. Other countries where positive median income growth over time has been accompanied by poverty reduction are: Italy, France, Finland, Luxembourg, and Slovenia.

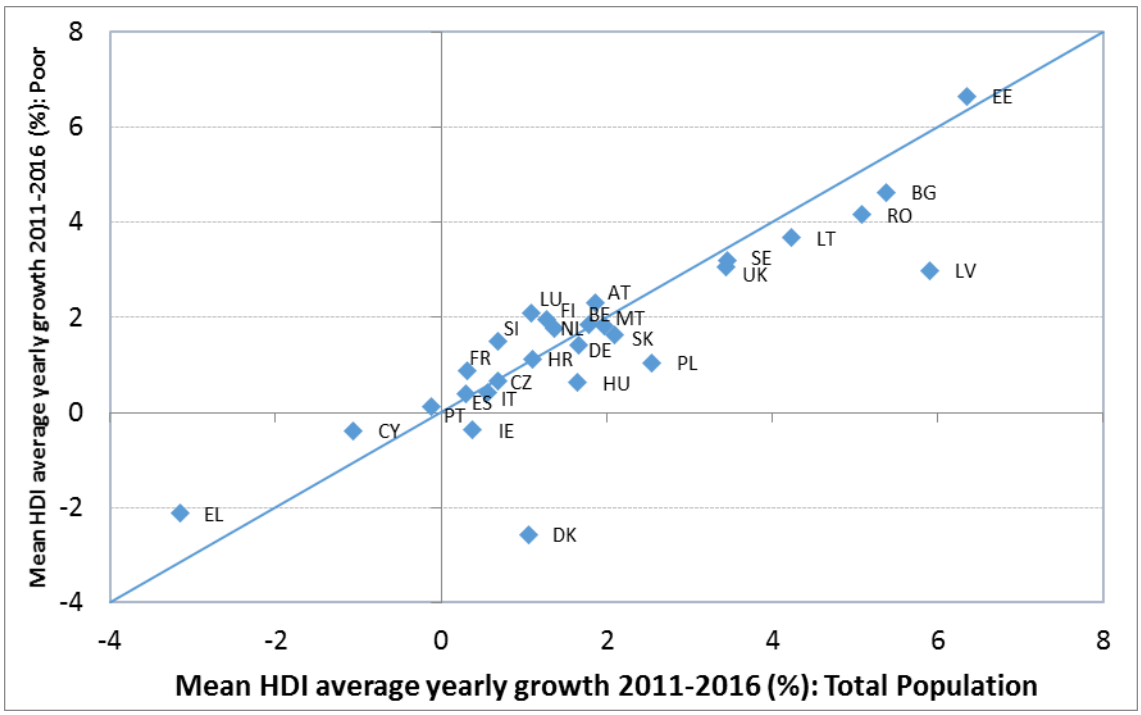
Figure 2 complements Figure 1, by plotting the average yearly growth in average disposable income of the total vs. the poor population, between 2011 and 2016. Country-points above (below) the 45-degree line show that the average disposable income of the poor grew faster (slower) than the average disposable income of the total population during the period considered. Considering again the example of Latvia, we notice that average income for the total population grew by almost 6% annually, while the average income for the poor grew by less than 3% per year. This suggests that in this case, taxes and benefits policy changes over the period considered might have been less pro-poor than in other countries aligned above the 45-degree diagonal (e.g. Luxembourg, Finland and Slovenia).

Figure 1. Average yearly growth of median Equivalised Household Disposable Income (HDI) vs. poverty reduction: 2011-2016



Source: Authors' calculations based on EUROMOD Version G4.0+ with EU-SILC 2012 data.

Figure 2. Average yearly growth of Mean Equivalised Household Disposable Income (HDI): total vs. poor population:2011-2016



Source: Authors' calculations based on EUROMOD Version G4.0+ with EU-SILC 2012 data.

It should be emphasised that these figures are not expected to coincide with the value of social indicators produced by the EU-SILC for 2012 and 2014 (based on 2011 and 2013 incomes). The EUROMOD estimates show the movement in poverty and inequality indicators resulting from policy changes over the period 2011-2016, and from changes in average values of different income sources over the same period. For example, if benefits and tax thresholds were uprated in line with increases in (median) incomes generally we would expect to see no changes in these indicators. To the extent that they are not or that there is differential change across income sources or structural policy reforms, differences can be observed in the indicators. This is informative if, for example, poverty and inequality are generally growing or predicted to do so (meaning that things would be worse without the policy effect) or if poverty and inequality are falling fast (meaning that policy effects are not the sole explanation). It is useful to know the direction and relative size of the policy effect since it is this that policy makers can influence directly.

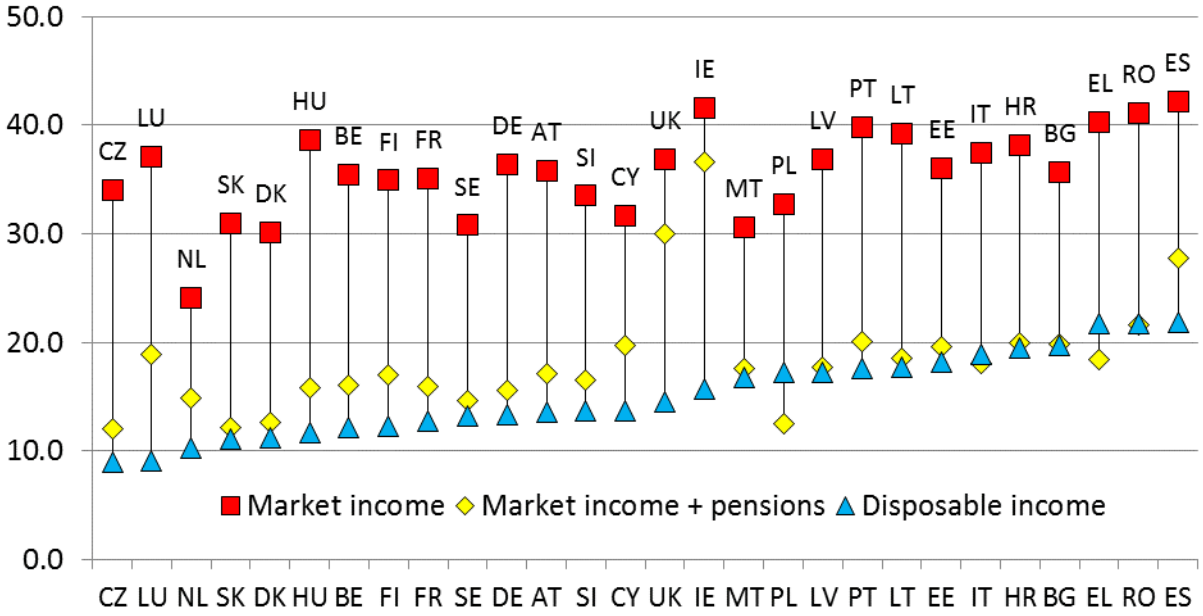
When looking at the baseline results based on 2014 EU SILC data (and 2013 incomes, shown in Table 1B) we notice that the ranking of country according to the poverty rate calculated with 60% of the median is substantially similar to those obtained using 2011 as baseline year, for those countries for which both data points are available. Lithuania confirmed to have the highest increase in poverty rates. Findings on child poverty and Cyprus' reduction in elderly poverty are robust also using 2014 EU-SILC input data.

3.2. The effect of taxes and benefits on the risk of poverty

The role of taxes and benefits in reducing inequality and poverty risk is one area that EUROMOD is especially designed to address. Tables 2A, 3A and 4A show the effects of various tax and benefit components on poverty risk, poverty gap and inequality (as measured by using the Gini coefficient) between 2011 and 2016. Tables 2B, 3B and 4B replicate the same analysis for those countries for which 2014 EU-SILC data were available. Note that for Tables 2A and 3A the poverty threshold is the same throughout, using 60% of median household disposable income in the baseline in the respective year. This implies that the poverty threshold stays constant as income components are added and subtracted. Columns 3-7 in Tables 2A to 4A, 2B to 4B and 2C to 4C, show what happens to poverty and inequality if each component (means-tested benefits, non-means-tested benefits -not including public pensions-, taxes and social insurance contributions) is added back (in the case of taxes) or deducted (in the case of benefits), in turn, from disposable income. Column 8 depicts poverty and inequality estimates on the basis of original income and column 9 presents what happens to these indices when public pensions are added to original income. The role of public pensions (in contrast with that of direct taxes and non-pension benefits, which are usually considered to be the main instruments of redistribution) is also graphically illustrated in Figures 4 (effects on poverty risk) and 5 (effects on inequality).

Changes in original income only arise in this analysis because of different growth rates of average incomes that are applied in the updating process. The poverty threshold is also influenced by changes in taxes and benefits, so it is reasonable to expect some variation in poverty risk on the basis of original income. The same applies to original income including public pensions although this is of course also affected by policies for the updating of pensions.

Figure 3. Poverty risk and the role of public pensions and non-pension benefits and taxes (2011 incomes and policies)



Source: EUROMOD Version G4.0+ based on EU-SILC 2012.

Note: Countries have been ranked according to the poverty estimates for disposable income.

The effect of adding public pensions to market income reduces poverty before taxes and benefits significantly in all countries, as shown in Figure 1. In the baseline year 2011, public pensions show the largest anti-poverty effect among various instruments of EU tax-benefits systems. In Hungary, when added to market incomes, pensions contribute to reducing the poverty rate by nearly 23 percentage points, the largest effect across countries. In other Southern and Eastern European countries, and Germany, the anti-poverty effect of pensions is similar: in the Czech Republic and Greece, poverty drops by 22 percentage points when pensions are added to original income, in Germany and Lithuania by 21, in Poland and Portugal by 19. On the contrary, the countries where public pensions are less effective in reducing poverty when added to original incomes are the Netherlands, the UK and Ireland. In these countries in fact an important part of the pensions system consists of occupational and private pensions, while public pensions have the role of a residual safety net.

After public pensions, means-tested benefits represent another important instrument for poverty reduction, in particular in Ireland, the UK, and, to a lesser extent, the Netherlands. In these countries, when means-tested benefits are subtracted from disposable income, the poverty rate increases by 17, 16 and 8 percentage points, respectively. On the other hand, in many countries, the anti-poverty effect of means-tested benefits remains modest. In fact, if at the EU-28 level, poverty increases by less than 6% points when means-tested benefits are excluded from disposable income, in 12 countries the increase is below 3 percentage points; further, for Slovakia, Poland, Greece, Latvia, and Estonia, the anti-poverty effect of means-tested benefits is below 2 percentage points.

In addition, in several countries an important anti-poverty role is played by universal benefits or benefits not subject to a means-test (e.g. unemployment benefits). This is the case of the UK, Denmark, Sweden, Ireland, Hungary and Luxembourg: in these countries, when non-means tested benefits are subtracted from disposable income, the poverty rate increases between 8 and 14 percentage points. On the other

hand, the anti-poverty effect of non-means-tested benefits in the baseline year remains very modest in Greece, Croatia, Poland and Malta.

The anti-poverty role played by taxes is rather modest compared to the one of benefits. Overall, in the EU28, when taxes are added to disposable income, poverty declines by only 2.4 percentage points. Larger effects are observed in the Nordic countries, where the tax system has a more marked redistributive role: in fact, in Denmark, poverty declines by 5.5 percentage points when taxes are added back to disposable income, and in Sweden, by 5 percentage points. Other countries experiencing an anti-poverty effect above 3 percentage points are Poland (4.3), France (3.9), the UK (3.8), Finland (3.7) and Hungary (3.2). On the other hand, for some 13 EU countries, the poverty-reduction effect of taxes remains below 1 percentage point.

As far as the effect of social insurance contributions on poverty is concerned, we observe similar magnitudes as taxes: when added back to disposable income, SICs reduce poverty by 2.9 percentage points at the EU level. The strongest poverty-reduction effects are observed in Slovenia, Greece, Poland, Luxembourg and the Netherlands (between 4.3 and 5.8 percentage points). On the other hand, SICs have a really minor contribution to poverty reduction (less than 1.5 percentage points) in Ireland, the UK, Finland and Estonia.

Table 2A offers also a comparison of how the impact of different components of the tax/benefits systems on poverty changed between 2011 and 2016. In general, the rankings of the countries in terms of the anti-poverty effectiveness of the single tax/benefits instruments, are largely preserved, with some exceptions. With respect to means-tested benefits, for instance, the country in which they show the largest change in terms of poverty reduction is Poland, where in 2016, poverty increases by 6 percentage points more, compared to 2011, when means-tested benefits are subtracted from disposable income. As mentioned earlier, this effect is likely to be explained by the introduction of generous means-tested family benefits, in particular child benefits, in 2016. Other countries registering an improvement in the anti-poverty effects of means-tested benefits over the same period are Cyprus and Greece. At the EU-level, the performance of means-tested benefits remains basically unchanged, while we observe a slight decline in anti-poverty effectiveness (between 1 and 2 percentage points), in Lithuania, the UK, Hungary, the Netherlands and Ireland.

As far as non-means-tested benefits are concerned, at the EU level we do not observe large differences in their anti-poverty impact between 2011 and 2016. Also, we observe only one country in which non-means-tested benefits improved their anti-poverty performance by more than 1 percentage point, (Estonia, 1.2). On the other hand, in Hungary, the anti-poverty effectiveness of these benefits declined by over 4 percentage points in 2016.

As far as taxes are concerned, again we do not observe much variation in their anti-poverty effectiveness between 2011 and 2016, and the maximum and the minimum variation in the impact over the period are included between +1 (Hungary) and -1 percentage points (Italy). Similar findings apply to Social Insurance Contributions. Finally, when looking at how the anti-poverty effects of public pensions has changed over time, while at the EU-level we do not observe any substantial change, we register a decline in the poverty-reduction effect by almost 5 percentage points in Latvia, and by 2.4, 2.2 and 1.9 percentage points in Lithuania, Romania and Bulgaria, respectively.

3.3. The effect of taxes and benefits on the poverty gap

Table 3A shows the effects of tax/benefits instruments on the poverty gap, which measures the average distance between the disposable income of the poor and the poverty line (as % of the poverty line). The table shows that the five countries with the highest poverty gap in the baseline year are the same

countries with the highest poverty rates, with some re-ranking. The poverty gap reaches 31% in Greece, 30% in Spain, and exceeds 25% in Romania (27.4%), Bulgaria and Croatia (26%). At the EU-level, the poverty gap is equal to 20% in the 2011 baseline year, while the countries with the lowest poverty gap are: the Netherlands and Finland (14%), Ireland (13%), and Luxembourg (6%). Comparing the 2016 results with the baseline year, we do not observe substantial differences or re-rankings.

Table 3A also enables us to decompose the effects of taxes and benefits on the poverty gap using the same approach followed in Table 2A. Looking at the effects of tax/benefits on the poverty gap, shows that public pensions lower the poverty gap by 43 percentage points when added to market incomes at the EU-level in the baseline year (2011). This effect varies widely across countries, however, reaching 70 percent points in the Czech Republic, 66 in Croatia and Slovakia, 62 in Greece and 60 in Estonia, while on the other hand very small effects can be found in Ireland, the Netherlands, Denmark and the UK. Means-tested benefits represent the second most important instrument, after public pension, in terms of effectiveness at reducing the poverty gap. At the EU level, they help closing the poverty gap by 13 percentage points, and up to 55 and 30 percentage points in Ireland, and the UK, respectively. On the other hand, they have very modest effects (below 4 percentage points) in Greece, Estonia, Italy, Hungary and Latvia. Non-means tested benefits have a smaller impact on the poverty gap at the EU level, where they help closing the gap by only 4 percentage points. The poverty gap reduction effect is stronger in Hungary (16 percentage points), Luxembourg, Netherlands, Denmark, Belgium and Sweden, while only modest effects (below 2 percentage points) can be found in Italy, Croatia, Malta, Cyprus, Bulgaria, Malta, and Poland. The impact of direct income taxes and social insurance contributions on the poverty gap is quite modest compared to the one of pensions and non-pensions benefits: at the EU-level taxes and SICs contribute only to a 1 and 0.4 percentage points reduction in the poverty gap, respectively. Few exceptions are the Nordic countries, where more progressive tax systems lead income taxes to reduce the poverty gap by over 7 percentage points in Denmark and by 5 percentage points in Sweden.

When we look at how effectiveness of tax/benefits instruments at closing the poverty gap have changed over time, we cannot observe substantial changes between 2011 and 2016. Few exceptions are represented by a stronger effectiveness of means tested benefits in Denmark, Slovenia, Greece, Czech Republic and Estonia. At the other side of the spectrum, Latvia, Lithuania and Slovakia, experienced a worsening in the capacity of their means-tested benefits to close the poverty gap.

Finally, Table 3B shows that using 2014 data do not alter substantially the main findings of the effect of taxes and benefits on the poverty gap. We notice however that for the policy year 2016, the effect of public pensions on the poverty gap is smaller by 22 percentage points in Spain, 8 in Portugal and Romania, and 7 in Slovenia, when considering the latest EU-SILC data available (2014), instead of 2012 data[7]. Also, means-tested benefits in Slovenia, Lithuania and Romania calculated for the 2016 policy year based on 2014 EU-SILC data, appear more effective at closing the poverty gap, by 5, 4 and 4 percentage points respectively, than if calculated on the basis of 2012 data.

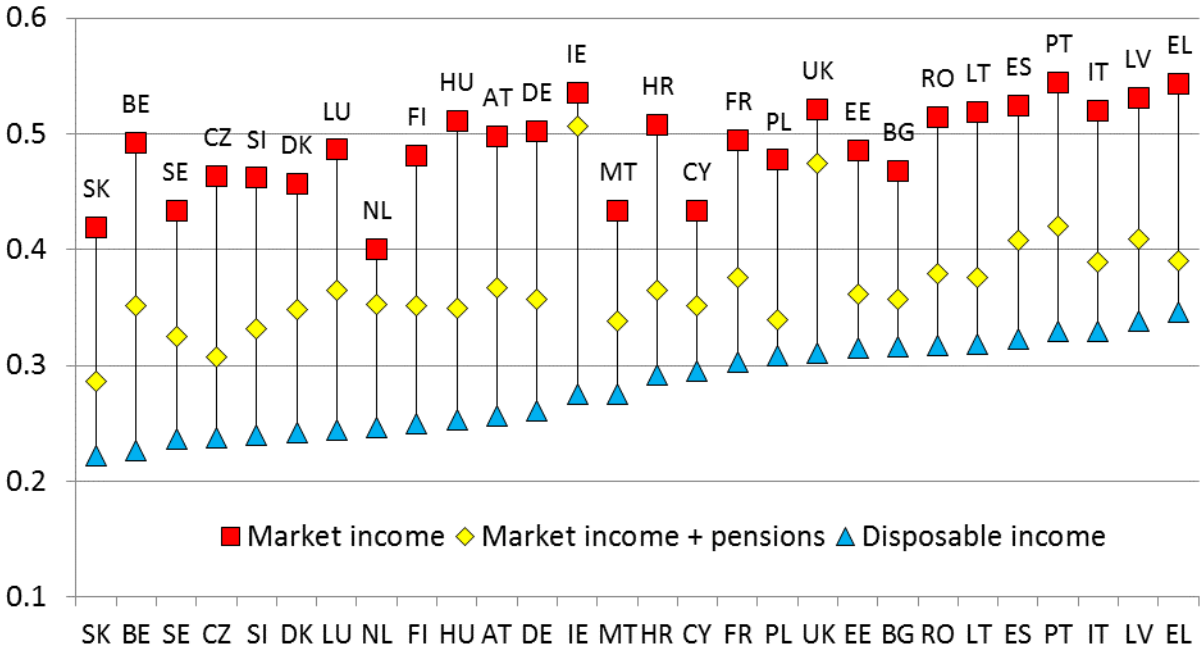
[7] In Spain, however, 2012 SILC data were based on surveys, while 2014 SILC was largely based on registry data.

3.4. The effect of taxes and benefits on inequality

Table 4A and Figure 4 show the role of tax-benefit components of household income in reducing income inequality as measured by the Gini coefficient. Inequality of market income including public pensions (before tax) is everywhere lower than inequality of market income but higher than that of disposable income.

As in the case of poverty, public pensions are the most relevant income component in reducing inequality in market incomes. The countries experiencing the largest reduction in the Gini coefficient once public pensions are added to original income are Hungary, Greece and the Czech Republic (the Gini drops by over 15 percentage points), followed by Germany, Croatia and Belgium (14 percentage points). At the other extreme of the spectrum, in Ireland, the UK, the Netherlands, the Gini coefficient drops only by 3 and 5 percentage points, respectively, given the greater importance of private and occupational pensions (included here in market income) in these countries, in addition to publicly provided old age pensions.

Figure 4. Income inequality (Gini coefficient) and the role of public pensions and non-pension benefits and taxes (2011 incomes and policies)



Source: EUROMOD based on EU-SILC 2012

Note: Countries have been ranked according to the value of the Gini coefficient for disposable income.

Non-pension benefits and taxes (income taxes and social contributions) vary in their effectiveness in reducing income inequality across countries. They have a relatively large role compared with other countries in Belgium (taxes), Ireland (both benefits and social insurance contributions), Denmark (non-means tested benefits), Hungary (non-means-tested benefits), the Netherlands, and the UK (means-tested benefits).

After pensions, means-tested benefits are the second instrument in order of importance to reduce inequality. The largest effect of means-tested benefits on the Gini coefficient can be found by far in the UK, where the Gini increases by over 11 percentage points when means-tested benefits are removed from disposable income. The second largest increase in the Gini occurs in Ireland (8.5 percentage points), followed by the Netherlands, Denmark and Finland (around 4 points). On the other hand, the

countries where means-tested benefits have the smallest inequality reducing effect are Hungary, Latvia and Estonia, followed by Italy, Slovakia Lithuania, Sweden, Czech Republic, Greece and Bulgaria. In these countries, the increase in the Gini index remains below 2 percentage points when means-tested benefits are subtracted from disposable income. This ranking can be explained partly by the higher importance of non-means tested benefits in some of the latter countries. In fact, when considering the inequality-reducing effect of non-means tested benefits, we find out that in Sweden, Hungary and Luxembourg non-means tested benefits have the largest inequality-reducing effect (above 4 percentage points). On the other hand, in countries such as Malta, Bulgaria, Italy, Poland, Cyprus and Greece, Lithuania, Croatia, non -means tested have the smallest anti-inequality effect among the EU-28 countries.

Table 4A shows us that direct income tax systems can have differential effects on inequality. In particular, the largest inequality-reducing effect of direct taxes can be found in Belgium, Ireland, Luxembourg, Portugal, Austria and Germany, where the Gini coefficient increases by over 5 percentage points when direct taxes are added back to disposable income. These countries are characterized by progressive tax systems, which could explain the equalizing effect of direct taxes on the income distribution. On the contrary, in Bulgaria, Hungary, and Poland direct taxes do not substantially affect inequality. In the case of Bulgaria and Hungary, this might be related to their flat rate tax systems. Finally, as far as Social Insurance Contributions are concerned, in Slovenia, Belgium, Hungary and Croatia, SICs are inequality reducing, while they have a very small effect in the majority of other countries.

Looking at changes between 2011 and 2016, the effects of taxes and benefits instruments in reducing income inequality seem to have remained largely stable over time. The few exceptions are Hungary, where the inequality-reducing effect of taxes was considerably weakened over time, and Greece, France, Portugal and Romania, where the inequality-reducing effect of selected group of policies (more specifically, means-tested benefits for Greece and social insurance contributions for the other three countries) was reinforced.

4. Comparing poverty and inequality indicators with external statistics

In this section, we compare the poverty and inequality baseline results obtained from EUROMOD with external aggregate statistics. The results from the baseline can be assessed in two ways. The first is to compare aggregate values for expenditure on benefits, revenues from taxes and contributions, and recipients/payers of benefits/taxes, with figures taken from external statistics, usually official administrative sources. The second is to compare poverty and inequality indicators, such as those provided in Table 1A, with similar estimates obtained directly from the EU-SILC data, likely those provided by Eurostat. These methods are considered in turn below.

4.1 Comparison with external aggregate statistics

This process is known as “macro-validation” and the comparisons for each country are documented in detail in the Country Reports. Comparisons are made between the weighted number of recipients/payers for each policy instrument (simulated or not simulated) in the EUROMOD baseline with figures taken from national administrative statistics for the same period. Similarly, the amount of annual benefits expenditure and tax revenues is compared for EUROMOD and national administrative estimates. Comparisons are often not straightforward to carry out for a number of reasons. First, the administrative statistics may refer to a different reference time period or unit of analysis than EUROMOD (this applies particularly to recipients/payers of an instrument). Secondly, the administrative statistics may not refer

to the same distinct instruments or income components that are itemised in EUROMOD. They may refer to sub-instruments or to combinations of several income components. Thirdly, in some countries for some instruments the statistics may only be available at the regional level. In some cases, they are only available with a long time delay and in others they are not made publicly available at all.

Furthermore, the process of validation is cumulative. If there is a problem with one income component this will also affect the precision of simulation of the components which rely on it. As an example, if earnings are under-reported in the survey – not only will social contributions be under-estimated, but so will be the size of any tax relief on the contributions. Thus income taxes will be over-estimated for this reason, but at the same time under-estimated because of the under-reporting of earnings. The problem with the latter effect may seem less serious than it is, because of the former effect.

Here we summarize the main challenges that typically arise by comparing EUROMOD results with national administrative statistics across countries.

1) First, it is not the case that the same patterns of over- or under- estimation can be observed across countries. For example, income taxes may be under-estimated because market incomes are under-reported or the available survey generally does not adequately represent high income taxpayers (as in the UK). Further, income taxes may be over-estimated because of lack of modelling of tax evasion (as in Latvia). It may also be over-estimated because it is not possible to model or measure the size of some tax reliefs and common tax avoidance measures (as in Portugal). Finally, it may be under- or over- estimated because of over- or under- estimation of simulated income components which are taxable.

2) The simulations are only as good as the underlying SILC data and, in the cases where it is necessary, as good as the imputation of income components from the UDB aggregates. Their quality also depends on the level of complexity of national tax and benefit systems.

3) Our assessment of whether a simulation is "good enough" depends on the importance of the instrument in total household disposable income, generally. If the instrument is small or affects few people, then it is less likely to match external statistics (not least, due to sampling variability) – and it is less important that it does so – than if it is an important component of household income.

4) As indicated above, non take-up of benefits, or the application of local discretion decisions in the assignment of benefits, leads EUROMOD to over-simulate means-tested benefits in many instances (see also Appendix 3). In many countries, social assistance receipt is over-simulated by a factor of 2 or 3. The size of this effect (e.g. on poverty risk) varies with the emphasis on this type of benefit in each national system. Adjustments to account for non take-up behaviour can be applied, but these can only be approximate. If the EU-SILC data adequately capture social assistance benefit recipients and payments (for example), then one solution is to tie "eligibility" to those with recorded receipt in the data. This results in baseline estimates that compare well with the SILC but might be less appropriate when modelling policy changes or "what if" scenarios involving new benefit entitlements, or swapping policies across countries. Examples of the treatment of non take-up and tax evasion are given in Appendix 3.

4.2 Why are indicators estimated by EUROMOD different from those calculated using EU-SILC data?

Tables 5A, 5B and 5C compare EUROMOD baseline results on poverty and inequality with official statistics published by Eurostat: EUROMOD results based on 2011 (Table 5A), 2013 (Table 5B), and 2014 (Table 5C) policies and incomes are compared to Eurostat figures based on EU-SILC 2012 (for

all 28 EU countries), EU-SILC 2014 (for 16 countries) and EU-SILC 2015 (for Latvia), respectively. Given that EUROMOD uses SILC as its input data, one would expect the estimates for the baseline years (2011, 2013, and 2014) to be the most closely related. This comparison is of some use for validation purposes as, if the two sets of estimates are very different, this may suggest some problem with the simulations or the input data. However, there are several reasons for which the two sets of estimates in baseline years should not be expected to be identical. These include:

- The release version of EU-SILC data: EUROMOD uses release 1 of both EU-SILC 2012, 2014 (when available), and 2015 (for Latvia) in most countries: details are provided in Appendix 2. Statistics provided by Eurostat are based on the most recent release, we assume. To the extent that the relevant underlying data change between releases, we would expect differences in the indicators from the two sources.

- The UK uses a different data source in EUROMOD: the Family Resources Survey (FRS) for 2012/2013 and 2013/2014. Although since the 2012 data the FRS is the basis of the EU-SILC for the UK, the two datasets differ by preparation (e.g. different imputations) and sample size (EU-SILC includes only FRS data collected until September).

- The standard definition of household disposable income produced by EUROMOD and used in this report is slightly different from the definition of the UDB variable (HY020) used for the official indicator calculations. In EUROMOD we do not include any non-cash employment income in the definition of disposable income (e.g., value of company car).[8] This is likely to have some effect on the income distribution, for example by reducing the median and the poverty threshold in countries with significant non-cash employment incomes in this form.

- In the EUROMOD input database we drop observations (households) from the SILC where one or more persons in the household has missing data on weights, and on the non-response imputation factor used to correct for missing data on income. This is not necessary in many countries, but in some countries the number of such cases varies from a few to more than 50.

- In constructing the input information used in the calculation of tax liabilities and benefit entitlements it is important that the different variables are as consistent as possible. One adjustment made to ensure that the information on the income reference period (and EUROMOD policy year) is consistent with the characteristics of the household (current at the time of the survey) is to drop children born after the EU-SILC income reference period and before the interview. This will affect household composition and hence the equivalence scale and the calculation of household equivalised disposable income.

- While we have made every effort to avoid it, differences in the methods of calculating the indicators may explain differences in results. We are not aware of any differences in formulae, assumptions or definitions used.[9] We have not top- or bottom- coded the EUROMOD household disposable income variable.

- Finally, as mentioned above our use of simulated values for benefits and taxes without allowing for non take-up of benefits nor tax evasion in some countries, will tend to make the income distribution appear less unequal and, risk of poverty rates smaller than those calculated using the SILC directly (which itself may be subject to measurement errors). In this report, adjustments have been made to account for benefits non take-up in Belgium, Estonia, France, Greece, Ireland, Latvia, Poland,

[8] In a definitive reconciliation of the two sources the income measures could in principle be adjusted to include precisely the same components.
[9] We have followed Eurostat document LC-ILC/39/09/EN.

Portugal, Romania, Finland and the UK. Adjustments for tax evasion have been implemented in Bulgaria, Greece, Italy and Romania.

The EUROMOD and Eurostat/EU-SILC estimates of the poverty rate based on the 60% of the median household disposable income poverty line indeed differ, but remain bounded between 2 and -2 percentage points in 23 out of 28 countries in the baseline year 2011. In comparison to EUROSTAT figures, poverty rates are still underestimated in Luxembourg (-6.0 percentage points), and to a lesser extent in Belgium, Germany, Hungary and Slovakia (between 2 and 3 percentage points of difference). In Malta and Spain, on the contrary, poverty rates are slightly over-estimated, but only by 1.7 and 1.1 percentage points. Differences with EUROSTAT do not appear more severe when looking at different poverty lines, calculated on the basis of 50% and 70% of the median household disposable income. The general tendency is to slightly underestimate rather than overestimate Eurostat poverty figures; the ranking of countries, however, does not seem to be affected.

When looking at poverty rates by for children and the elderly (defined as individuals aged below 18 and 65+, respectively), the differences with EU-SILC appear a bit more pronounced, and in some countries, large. This is the case for instance of child poverty in Luxembourg (9 percentage point difference), Hungary (5.6 percentage point difference), Slovakia (4.2 percentage point difference). As far as elderly poverty is concerned, instead, EUROMOD underestimates Eurostat poverty rates by 10.5 percentage points in Ireland, and by over 5 percentage points in Denmark, Lithuania, Belgium and Sweden.

In general, underestimation of poverty rates in the countries mentioned, was a common finding in previous' years' Baseline Reports. When the more recent 2014 EU-SILC input data are used for 16 available countries, the difference (in percentage points) between EUROMOD and Eurostat estimates in the poverty rate (based on the poverty line equal to 60% of the median of equivalised disposable income) is reduced in 8 countries (Bulgaria, Spain, Cyprus, Lithuania, Malta, Austria, Romania, and Slovakia), compared to the difference existing using 2012 input data. In Portugal, we do not observe any change, while in the 7 remaining countries (Greece, Italy, Croatia, Poland, Slovenia, Finland and the UK) the difference between EUROMOD and Eurostat poverty rates is not narrowed by using more recent data. In addition, in Slovakia, the underestimation child poverty with respect to Eurostat statistics is substantially reduced by using 2014 input data in EUROMOD, and in Lithuania, the underestimation of elderly poverty with respect to Eurostat figures is halved when 2014 input data are used.

The difference with Eurostat in the estimation of the Gini coefficient seem much less sizeable: the underestimation exceeds 3 percentage points only in Luxembourg, Belgium and Slovakia (in the latter case, the difference is smaller with 2014 data).

In understanding these discrepancies among the factors to be taken into account are the following:

- Over-simulation of some particular means-tested benefits can explain some of the low EUROMOD poverty rates. Over-simulation might result from several factors alone or in combination: unobserved differences at the municipality level, lack of information to simulate asset tests where these exist, and non take-up.[10] For example (a) social assistance in Slovakia

[10] It is worth noting that in some countries simulated means-tested benefits correspond very well to external statistics; higher poverty estimates in the EU-SILC may also be due to under-reporting of benefits in the data. For example, Unemployment Benefit II in Germany has been oversimulated in comparison to EU-SILC input data. However, macrovalidation results show that the benefit is accurately simulated when compared to official statistics. These results clearly point out to issues in the EU-SILC input data. e.g. underreporting of the benefit.

leading to underestimation of poverty rates, and (b) income support in Belgium due to the difficulty of fully capturing the means-test in the simulations, which leads to low poverty rates.

- In many countries groups of elderly people are concentrated around the 60% median poverty threshold meaning that their risk of poverty is sensitive to small shifts in the poverty line. This is one explanation for the poverty rate being lower in EUROMOD than in the EU-SILC in Ireland. This discrepancy is also driven by the oversimulation of pensions in EUROMOD. Comparisons of the threshold itself are only straightforward for the euro-zone countries.[11]Among these countries, the difference is small in most cases and larger than 5% of the Eurostat estimate in Spain, Portugal, France and Slovakia in the 2011 baseline year. In the case of Spain this difference is partly due to the backward revisions in the 2012 EU-SILC that are not part of the EUROMOD input data. For Spain and France, however, the discrepancy between EUROMOD and Eurostat poverty lines is substantially reduced when using 2014 EU-SILC input data (2013 baseline year): in Spain the difference drops below 0.5% with respect to the Eurostat value, in France it drops below 3%, while in Slovakia the underestimation remains slightly above 5%.
- Over-simulation of income taxes can lead to under-estimation of inequality and of median disposable income, and hence the risk of poverty estimates. The main contributing factors are the existence of tax evasion, which is not typically captured, and the non-simulation of some tax deductions due to lack of necessary information.

5. Work incentives: estimates of marginal effective tax rates

EUROMOD can be used to calculate the effect of tax and benefit systems on work incentives. In Table 6A, we provide mean and median marginal effective tax rates (METR) based on 2012 data for 6 policy years (from 2011 to 2016) for all EU-28 countries. Similarly, Table 6B shows mean and median METR using 2014 data for the available countries between 2013 and 2016.

EUROMOD calculates METR for all individuals with earned income, taking account of the effect of earning 3% more such income (in gross terms) on their household disposable income. Following Jara and Tumino (2013), here we present METR results for individuals of working age (18-64) who have more than 1 unit of national currency of monthly earnings. We exclude from our calculations the top percentile of the METR distribution if the value is above 150% and the lowest percentile if the value of METR is negative. The latter exclusions are made in order for average METR to be less sensitive to "outliers", although such values are in principle plausible.

There can be different ways of calculating METR, depending on the interpretation that one wished to place upon them, and comparability issues across countries should be borne in mind. One such issue relates to the treatment of benefit non take-up and tax evasion for the calculation of METR. The results presented below assume full take-up of benefits in all countries. In Bulgaria, Greece and Italy, where tax evasion has been modelled and used to obtain baseline statistics, full compliance has been assumed for the calculation of METRs. Hence, in all countries, all of the marginal earnings are assumed to be earned in the official economy and are subject to taxes, contributions and benefit withdrawal, assuming full compliance. From the methodological standpoint, whether or not to take evasion into account at all when measuring work incentives is therefore an issue to consider. This depends very much on whether the METRs are to be considered as indicators of the effects of the design of the tax-benefit system on

[11] For non-euro-zone countries the comparison of the threshold is complicated by the choice of exchange rate to use and this makes a difference in cases where this is changing over the data and policy simulation reference period. In the policy simulation we use the exchange rate prevailing at 30th June 2011.

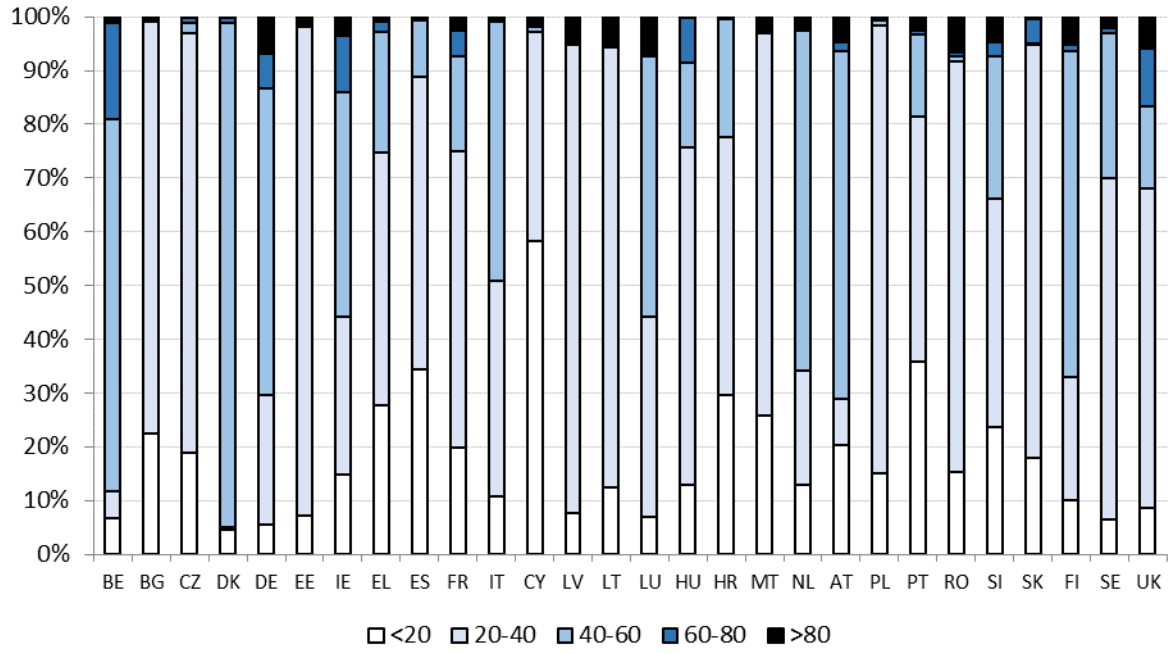
marginal earnings that are retained; or whether they are to be interpreted as calculations of the marginal return to additional work in practice, taking into account opportunities to evade. Further, the METRs focus on the components of disposable income and hence exclude employer SIC. Therefore, these calculations do not reflect the overall tax wedge.

Table 6a shows that Belgium exhibits by far the highest mean METR, followed by Luxembourg, Germany, Finland, Denmark and Ireland, where METR range between 40 and 45%. The lowest mean METR are instead observed in Estonia, Spain, Cyprus, Bulgaria and Malta (below 25%). The ranking of countries is in general confirmed when sorting according to the median METR instead of the mean. The table is also useful to understand which countries have made progress towards reducing disincentives to labour market participation over the period considered, and which instead have worsened in the ranking. Looking at mean METR, countries that have registered the largest increase in disincentives between 2011 and 2016 are France (7 percentage points), and Cyprus (almost 5 percentage points), followed by more moderate increases by Slovenia, Portugal and Italy, Slovakia and Finland. On the other hand, reductions in mean METRs over time can be observed in Malta, Germany, Hungary, Latvia (between 6.4 and 4 percentage points). When ranking the countries according to median, the ranking is in general preserved but Greece, Netherlands, and Luxembourg registered an important increase according to the median.

As well as averages, the distribution of METRs is of interest. Figure 5 shows, for the 2011 policy systems, the shares of the populations in paid work who face METRs in certain ranges: under 20%, 20% to under 40%, 40% to under 60%, 60% to under 80% and 80% and above.

In a few countries, an important share of the working population show low METRs, below 20%: it is the case of Cyprus (60%), Portugal (36%), Spain (34%), and Croatia (29.4%). On the other hand, in other countries the distribution of METR is very concentrated at higher levels (e.g. between 40% and 60%): this is the case of Denmark (94% of the working population has METR between 40% and 60%), Belgium (70%), the Netherlands, Austria (63%) and Finland (61%). Marginal rates below 40% predominate in many countries. Further, there are cases where there are large shares of the population in paid work both with relatively low and relatively high marginal rates (Ireland, Italy, Luxembourg, Slovenia, and Finland). In almost all countries there is a minority facing very high rates (i.e. over 80%) which typically occurs because of the interaction of tax and contributions with benefit withdrawal, or because of discontinuities in entitlement to benefits or tax concessions. For example, in Romania, there are a number of means-tested benefits where income below a threshold brings entitlement to the full amount while income above the threshold results in zero entitlement. The share of working people with such high METRs is 5% or more in Germany, Ireland Lithuania, Luxembourg, Romania and Finland.

Figure 5 Marginal effective tax rates 2011: share of population in paid work (%) by range of METR



Source: EUROMOD version G4.0+ based on EU-SILC 2012.

Figure 6 presents the decomposition by components of average METR for each country in the baseline year 2011. Average METR have been decomposed into three main components: taxes, representing the average increase in taxes paid at the household level as a proportion of the increase in individual gross earnings; social insurance contributions, including changes in both employee and self-employed social insurance contributions; and benefits, representing the average reduction in benefits and pensions paid at the household level as a proportion of the increase in earnings. The results of the decomposition for all the policy years 2011-2016 are reported in Tables 7A for all EU-28 countries, in Table 7B (policy years 2013-2016) for those countries for which 2014 EU-SILC input data are available, and in Table 7C (policy years 2014-2016) for Latvia.

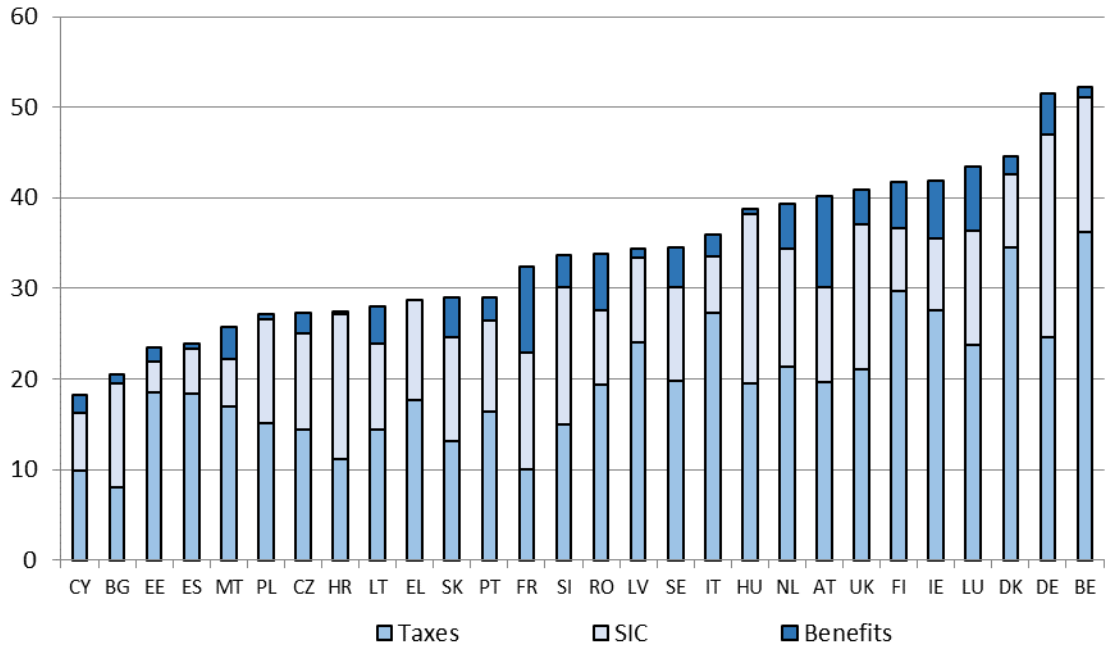
Despite a wide variation across countries, the graph shows that the tax component is usually the most important, the size of it varying significantly across countries and ranging from relatively low values in Bulgaria, Cyprus, and Slovakia, to relatively high values in Belgium, Germany, Ireland and Denmark.

In Belgium, almost 70% of average METR is accounted for by taxes, a similar proportion to Germany and Ireland. In Denmark, taxes' contribution to METR reaches 77%, while in Germany the weight of Social Insurance Contributions is higher (almost 35% of the total, vs. 18% in Denmark). Belgium, followed by the Nordic countries and by Ireland and Italy has also the highest METR due to taxes in absolute terms (over 36%), while taxes seem to offer less disincentive to work at the margin in Slovakia, Croatia, Cyprus and Bulgaria, countries which are also characterized by a relatively flat wage distribution. Countries where the contribution of SIC to METR is the largest are instead Hungary, Slovenia, Austria, Croatia, Germany and Slovakia, in all cases above 15%. At the other end of the spectrum, in Malta, Sweden, Spain and Estonia, the SIC contribution to METR is the lowest, below 6 percentage points (in Estonia, for example, most of SICs are paid by employers). In a few countries, the

contribution of benefits is also relevant to mean METR, however to a minor extent if compared to SIC and especially to taxes: this is the case of Slovenia, Austria, Croatia, Germany and Slovakia.

The METR estimates presented here show only a very small selection of indicators of work incentives that may be of interest. Breakdowns by gender, family status, employment status and analysis of METRS across the income distribution are examples of additional analysis that can be carried using EUROMOD.

Figure 6 Marginal effective tax rates (%) by income component, 2011



Source: EUROMOD version G4.0+ based on EU-SILC 2012.

6. Conclusions and next steps

The results from EUROMOD shown above are both limited to some key statistical indicators of the baselines for 2011-2016 policies. On the one hand improvements and refinements are possible that will improve the quality, comparability and applicability of the baseline results. On the other hand, EUROMOD is not just intended to generate baseline statistics for a particular policy year; its main purpose is to be used as a tool to explore alternative scenarios in terms of both policies and the characteristics of the populations on which they have impact. Future steps in the model development will include:

- Consideration of adjustments to improve the baseline in relation to external statistics while at the same time maintaining transparency in the model and its responsiveness to the effects of simulated policy changes. Adjustments for non take-up of benefits and evasion of taxes are one important area for future work. Another is improving understanding of when and how EUROMOD simulations better capture the situations of households than variables that may be under- or mis-reported in surveys.

- Another important development concerns adjustments for changes in labour markets (or demographics) so that simulations for recent years can also take account of the effects of economic shocks and the economic cycle in the period since the data were collected. Research performed on 27 EU countries suggests that in countries where there have been significant changes such adjustments can make a considerable difference to estimates of poverty and inequality and the effects of policies.[12]

- Also, we will continue to explore how to improve the precision and level of detail (as well as cross-country consistency) in the treatment of the updating of non-simulated incomes from the data to the policy year.

- An additional area for development is the expansion of the number of countries using the disaggregated benefit variables included in EU-SILC 2014 onwards for a selection of EU countries.

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[12] See Gasior and Rastrigina (2017).

Appendix 1 National teams contributing to EUROMOD G4.0+

Country	**National team – team leader**
Belgium	University of Antwerp – Gerlinde Verbist K.U.Leuven – André Decoster
Bulgaria	University of National and World Economy (UNSS), Sofia – Ekaterina Tosheva
Czech Republic	CERGE-EI – Daniel Münich
Denmark	Bent Greve (Roskilde University)
Germany	DIW Berlin (Deutsches Institut für Wirtschaftsforschung) – Peter Haan
Estonia	PRAXIS Center for Policy Studies – Märt Masso
Ireland	Teagasc - Cathal O'Donoghue
Greece	Athens University of Economics and Business (AUEB) – Panos Tsakloglou
Spain	Instituto de Estudios Fiscales (IEF) – Milagros Paniagua
France	Université de la Méditerranée, Marseille – Laurence Bouvard
Croatia	Institute of Public Finance – Ivica Urban
Italy	Bocconi University – Carlo Fiorio
Cyprus	University of Cyprus – Panos Pashardes
Latvia	Baltic International Centre for Economic Policy Studies (BICEPS) Anna Zasova
Lithuania	Vilnius University – Jekaterina Navicke
Luxembourg	LISER – Philippe Liégeois
Hungary	TÁRKI Social Research Institute – Péter Szivós
Malta	Ministry of Finance, the Economy and Investment - Godwin Mifsud
Netherlands	CentERdata – Klaas de Vos
Austria	European Centre for Social Welfare Policy and Research, Vienna – Michael Fuchs
Poland	Center for Economic Analysis (CenEA) – Michal Myck
Portugal	Lisboa School of Economics & Management - Carlos Farinha Rodrigues
Romania	National Research Institute for Labour and Social Protection - Eva Militaru
Slovenia	Inštitut za Ekonomska Raziskovanja (IER) – Boris Majcen and Nataša Kump
Slovakia	Ministry of Finance of the Slovak Republic - Rastislav Gabik
Finland	Research Department of the Social Insurance Institution of Finland (KELA) – Pertti Honkanen
Sweden	Ministry of Health and Social Affairs – Tom Nilstierna and Statistics Sweden - Klas Lindström
United Kingdom	Institute for Social and Economic Research (ISER) - Paola De Agostini

Appendix 2 EUROMOD input datasets used in the analysis in this paper

Country	Input data		
	2012	2014	2015
Belgium	EU-SILC 2012-3		
Bulgaria	EU-SILC 2012-1	EU-SILC 2014-1	
Czech Republic	EU-SILC 2012-1		
Denmark	EU-SILC 2012-1		
Germany	EU-SILC 2012-1		
Estonia	EU-SILC 2012-1 and national SILC variables		
Ireland	EU-SILC 2012-2		
Greece	National SILC 2012 (UDB & PDB versions)	National SILC (UDB & PDB versions 06/07/2015)	
Spain	National SILC 2012 (release date 30/10/2013)	EU-SILC 2014-1	
France	National SILC 2012 (SRCV 2012-lil-0901)		
Croatia	EU-SILC 2012-1	EU-SILC 2014-1	
Italy	National SILC 2012-1	National SILC 2014-1	
Cyprus	EU-SILC 2012-1	EU-SILC 2014-1	
Latvia	EU-SILC 2012-1		EU-SILC 2015-1
Lithuania	EU-SILC 2012-1 and national SILC variables	EU-SILC 2014-1 and national SILC variables	
Luxembourg	EU-SILC 2012-2 and national SILC variables		
Hungary	EU-SILC 2012-1		
Malta	EU-SILC 2012-1	EU-SILC 2014-1	
Netherlands	EU-SILC 2012-1		
Austria	National SILC 2012	National SILC 2014	
Poland	EU-SILC 2012-1 and national SILC variables	EU-SILC 2014-1 and national SILC variables	
Portugal	EU-SILC 2012-1	EU-SILC 2014-1	
Romania	EU-SILC 2012-1	EU-SILC 2014-1	
Slovenia	EU-SILC 2012-1	EU-SILC 2014-1	
Slovakia	National SILC 2012 (20/01/2014)	National SILC (28/08/2015)	
Finland	EU-SILC 2012-1	EU-SILC 2014-1	
Sweden	EU-SILC 2012-1		
United Kingdom	Family Resources Survey 2012/13	Family Resources Survey 2013/14	

Appendix 3 Country notes: tax evasion and benefit non take up

- **Tax evasion**

For **Bulgaria** tax evasion adjustments have been made because of oversimulation of taxes and social insurance contributions. The adjustment is based on a comparison between net and gross employment incomes. Under this approach, it is assumed that an individual is involved in the shadow economy if her (positive) net and gross employment incomes are equal. Such an individual is assumed to be a full tax evader and hence, no income tax and social insurance contributions are simulated for her. Furthermore, for the simulation of the income test for child and social assistance benefits, the earnings of a tax evader are not taken into account because it is assumed that they will not be reported and thus, will not be part of the income test. No correction for individuals with self-employment income has been done. These adjustments lead to more accurate simulations of the tax and benefit instruments.

For **Greece** tax evasion adjustments have been made on the basis of external estimates for the extent of average income underreporting by income source (earnings, self-employment income from farming and non-farm business). Assuming that net incomes reported in SILC reflect true incomes, two sets of gross incomes have been derived – one under the assumption of full compliance and the other assuming that everyone have underreported a given income source to the tax authority by the same proportion. A user can choose which assumption is utilised for calculating disposable incomes, and the model automatically draws on the relevant set of gross incomes. Adjustments for tax evasion are used by default for the baseline scenarios.

For **Italy** self-employment income has been calibrated in order to take into account tax evasion behaviour. Since we implement our own net-to-gross procedure (starting from net incomes reported in SILC data), we split the recorded self-employment income into two components: the first component declared to the tax authorities (and hence grossed up) and the second component not declared (but still included in the definition of disposable income). The coefficient used to separate the two components allows us to get a total aggregate gross self-employment income corresponding to the aggregate amount of reported self-employment income as reported in the official statistics.

For **Romania** all self-employed in agriculture living in rural areas and with a self-employment income below the average wage are assumed to evade taxes.

Full compliance is assumed for both income taxes and social insurance contributions for the rest of the countries.

- **Benefit non take-up**

For **Belgium** and the **UK** we employ a simple non take-up correction of the main means-tested benefits by applying the take-up proportions estimated on a caseload basis (own calculations in case of Belgium; using statistics from the Department of Work and Pensions and HM Revenue and Customs in case of the UK). Take-up probabilities are applied at the household level (so that people entitled to the same benefits within a household exhibit the same take-up behaviour), for each benefit separately. In general we assume that take-up behaviour is not affected by changes in the size of benefit or tax credit entitlements. However, by applying differential take-up probabilities according to type of claimant in the UK, some of this effect is captured.

For **Estonia** non take-up is simulated for social assistance on the assumption that small entitlements (either in absolute or relative to other household income) are not claimed. Full take-up is assumed for all other simulated means-tested benefits.

For **France** non take-up correction of the main means-tested social assistance benefit (RMI/RSA)[13] is simulated to be random- proportions of non-take up -separately by active and inactive units (for RSA) taken from external data.

For **Ireland**, non take-up is simulated for Family Income Supplement, applying external estimates on the caseload. Full take-up is assumed for all other means-tested simulated benefits.

For **Greece** a random non take-up correction is simulated for unemployment assistance benefit for long-term unemployed. The receipt of social dividend (a lump-sum benefit only provided in 2014) was restricted to the amount of the primary budget surplus that was allocated to the benefit, i.e. approximately €450 million. The beneficiaries of food stamps and rent allowance (two benefits only provided in 2015 and 2016) were also calibrated to guarantee consistency with the official statistics. Full take-up is assumed for all other simulated means-tested benefits.

For **Latvia** non take up is simulated for paternity benefit based on the benefit receipt observed in the data.

For **Poland** full take up is assumed in the simulation of nursing supplement, nursing allowance, family allowance, family supplements, birth allowance, nursing benefit and permanent social assistance. In general, the simulated number and amount of benefits are consistent with official statistics. However, for housing benefit, due to significant differences between the number of recipients simulated by the model (assuming full take up) and reported in official statistics, eligibility is conditional on receipt being reported in the input database. Furthermore, due to lack of information on assets that are necessary for the means-test, the eligibility for temporary social assistance is simulated conditional on an estimated expected probability to be eligible. Moreover, by law the central government is obliged to pay just a share of the total benefit amount. The rest (or part of it) may be paid by the local government. In EUROMOD, we assume that only the central government pays its part.

For **Portugal** full take up is assumed in the simulation of all means-tested benefits. However, given the inability of simulating all eligibility conditions for the social solidarity supplement for the elderly, the simulation of this benefit overestimates the number of recipients and aggregate amounts. Thus, the beneficiaries were calibrated to guarantee consistency with the official statistics.

For **Romania** non take-up is simulated for the minimum guaranteed income, which under full take-up is overestimated by a factor of 4. The calibration is based on the assumption that households headed by a person under 25 do not claim. Means-tested benefits for lone parents are underestimated by a factor of 2 due to a lack of lone parents in the data.

In **Finland** eligibility for income support is assessed at the family level (rather than at the household level). For example, adult children can apply separately from their parents. In practice, however, this happens rarely. Therefore, in the model we account for non take-up by simulating income test at the household level. Also, the households where the head is self-employed are excluded from eligibility (as they rarely apply for income support).

Full take-up is assumed for all simulated means-tested benefits for the remaining EU countries.

[13] RMI stands for Revenu minimum d'insertion and RSA for Revenu de solidarité active.

Table 1A. EUROMOD poverty and inequality statistics: 2011-2016 (2012 data)

	Policy year	Poverty risk: all			Poverty risk (60%)		Poverty threshold	Gini coefficient
		50%	60%	70%	age <18	age>=65	(€/year)	
Belgium	2011	6.6	12.2	19.5	13.7	14.1	11,680	0.227
	2012	6.5	11.7	19.2	13.4	12.9	12,046	0.225
	2013	6.5	11.8	19.2	13.7	12.3	12,363	0.225
	2014	6.5	11.6	18.8	14.0	10.8	12,505	0.224
	2015	6.5	11.6	18.7	14.0	10.9	12,498	0.224
	2016	6.6	11.9	19.3	14.1	12.3	12,807	0.223
Bulgaria	2011	13.3	19.7	27.1	24.4	26.6	1,688	0.316
	2012	13.7	20.5	27.5	24.5	30.1	1,762	0.322
	2013	13.8	20.2	27.3	25.1	28.0	1,872	0.322
	2014	13.9	20.5	28.1	24.1	30.7	1,979	0.321
	2015	14.3	20.9	28.5	24.4	32.5	2,117	0.325
	2016	14.0	20.7	28.4	24.4	32.2	2,180	0.325
Czech Republic	2011	4.8	8.9	16.3	11.8	4.9	4,685	0.238
	2012	4.8	9.0	16.1	12.0	5.0	4,544	0.239
	2013	4.7	8.9	15.9	12.1	4.3	4,524	0.237
	2014	4.8	9.3	16.4	12.5	4.9	4,608	0.239
	2015	5.1	9.3	16.4	12.6	4.8	4,707	0.240
	2016	5.1	9.5	16.6	12.9	5.3	4,822	0.242
Denmark	2011	6.5	11.2	18.8	8.3	7.7	15,625	0.242
	2012	6.4	11.2	18.7	8.3	7.5	15,926	0.241
	2013	6.5	11.1	18.5	8.6	6.6	16,141	0.243
	2014	6.5	11.2	18.5	8.7	6.2	16,158	0.248
	2015	6.7	11.3	18.5	9.1	5.8	16,129	0.251
	2016	6.7	11.3	18.6	9.1	5.8	16,364	0.252
Germany	2011	5.9	13.3	22.0	13.2	13.7	11,758	0.261
	2012	6.0	13.3	22.0	13.4	13.5	11,926	0.262
	2013	6.0	13.4	22.2	13.5	13.8	12,125	0.262
	2014	6.0	13.5	22.3	13.7	13.9	12,366	0.262
	2015	6.2	13.7	22.5	13.5	15.0	12,590	0.263
	2016	6.4	13.7	22.7	13.3	15.1	12,801	0.264
Estonia	2011	10.6	18.2	26.6	17.0	19.3	3,630	0.315
	2012	10.7	18.2	26.9	17.1	19.5	3,796	0.317
	2013	11.1	19.1	27.3	17.6	22.8	4,055	0.319
	2014	10.9	18.9	27.3	17.0	22.7	4,285	0.321
	2015	10.0	19.2	27.0	15.4	26.8	4,646	0.318
	2016	9.5	18.5	26.4	14.1	26.9	4,920	0.313
Ireland	2011	6.3	15.7	24.7	20.1	2.3	11,746	0.275
	2012	6.3	16.0	24.7	20.5	2.6	11,749	0.275
	2013	6.6	16.3	24.7	21.0	2.9	11,532	0.279
	2014	6.9	16.1	24.7	20.4	4.4	11,411	0.281
	2015	7.0	16.5	25.3	20.7	4.7	11,617	0.284
	2016	7.5	17.0	25.8	21.2	5.3	11,851	0.287
Greece	2011	15.1	21.7	29.0	24.3	14.9	5,783	0.346
	2012	15.1	21.8	29.4	25.1	13.3	5,477	0.344
	2013	15.4	21.9	30.0	24.4	14.7	5,110	0.345
	2014	13.9	20.4	29.1	23.6	10.9	5,081	0.338
	2015	15.4	22.4	29.7	24.4	13.4	5,170	0.338
	2016	14.4	21.6	29.0	22.8	15.0	5,043	0.333
Spain	2011	14.5	21.9	29.2	28.3	17.0	7,363	0.322
	2012	14.5	21.8	28.1	28.3	16.4	7,346	0.319
	2013	14.4	21.8	28.2	28.4	15.7	7,349	0.319
	2014	14.5	21.9	28.1	28.4	15.7	7,349	0.318
	2015	14.6	22.0	28.3	28.3	16.4	7,479	0.319
	2016	14.6	22.0	28.2	28.3	16.5	7,511	0.320

Table 1A (continued). EUROMOD poverty and inequality statistics

	Policy year	Poverty risk: all			Poverty risk (60%)		Poverty threshold	Gini coefficient
		50%	60%	70%	age <18	age>=65	(€/year)	
France	2011	6.4	12.7	20.6	16.9	7.5	11,651	0.303
	2012	6.4	12.8	20.6	17.3	7.4	11,778	0.302
	2013	5.9	11.8	19.9	16.0	6.6	11,708	0.287
	2014	5.9	11.8	19.7	15.9	7.0	11,831	0.285
	2015	5.8	12.1	20.1	16.4	7.3	12,017	0.284
	2016	5.8	11.8	20.4	16.2	7.8	12,196	0.284
Italy	2011	11.3	18.9	26.5	25.1	15.8	9,352	0.329
	2012	11.3	18.1	26.3	24.2	14.4	9,358	0.327
	2013	10.9	17.6	25.8	23.6	13.2	9,490	0.324
	2014	11.1	17.7	26.0	23.1	14.1	9,650	0.322
	2015	11.1	17.8	26.1	23.1	14.5	9,747	0.320
	2016	10.9	17.7	26.0	23.1	14.2	9,784	0.319
Cyprus	2011	6.4	13.7	22.1	12.1	31.3	10,349	0.295
	2012	6.8	13.5	22.4	11.6	28.9	10,350	0.295
	2013	6.7	13.6	22.0	12.6	26.3	10,201	0.294
	2014	5.6	12.4	21.2	12.7	21.4	9,968	0.289
	2015	5.5	12.3	20.9	12.7	20.6	9,894	0.289
	2016	5.3	12.1	21.0	12.8	19.4	9,755	0.289
Latvia	2011	10.6	17.3	26.9	20.8	10.2	2,519	0.338
	2012	11.3	18.0	27.8	21.1	13.3	2,653	0.346
	2013	11.7	18.7	28.1	21.4	16.3	2,767	0.352
	2014	12.6	20.3	28.3	21.3	24.5	3,002	0.357
	2015	13.1	21.3	28.9	21.4	28.7	3,191	0.363
	2016	13.7	21.8	29.5	21.5	31.5	3,341	0.366
Lithuania	2011	10.7	17.7	26.8	20.0	13.5	2,479	0.319
	2012	12.4	20.0	27.3	25.8	15.5	2,588	0.320
	2013	12.6	20.3	28.1	25.4	17.9	2,667	0.325
	2014	13.4	20.4	27.8	25.4	17.7	2,804	0.326
	2015	13.9	21.5	28.6	26.1	21.9	2,903	0.331
	2016	14.1	21.5	28.5	25.2	23.2	3,074	0.332
Luxembourg	2011	1.5	9.1	22.2	13.6	1.9	19,406	0.244
	2012	1.6	9.1	22.0	13.9	2.0	19,867	0.245
	2013	1.5	9.0	21.5	13.9	2.0	20,290	0.242
	2014	1.5	8.5	21.0	13.4	2.0	20,454	0.242
	2015	1.4	8.2	21.1	13.1	2.0	20,301	0.242
	2016	1.4	8.1	21.0	12.6	2.0	20,312	0.242
Hungary	2011	5.5	11.7	20.2	17.3	8.4	2,632	0.252
	2012	8.0	14.0	21.3	21.4	5.6	2,432	0.264
	2013	8.4	14.6	22.0	22.8	5.4	2,530	0.275
	2014	8.2	14.5	21.9	21.8	5.9	2,613	0.274
	2015	9.2	15.4	22.6	23.5	6.7	2,671	0.281
	2016	9.3	15.3	22.7	23.1	7.3	2,788	0.283
Croatia	2011	12.6	19.5	25.8	20.1	26.1	3,237	0.292
	2012	12.7	19.6	26.0	20.3	26.2	3,293	0.290
	2013	12.7	19.7	25.9	20.6	26.1	3,331	0.289
	2014	12.8	19.0	25.7	20.5	23.9	3,321	0.289
	2015	13.1	19.8	26.1	20.8	26.4	3,384	0.294
	2016	13.1	19.9	26.2	20.8	26.5	3,424	0.294
Malta	2011	9.3	16.8	25.9	24.1	16.5	6,905	0.275
	2012	9.6	17.2	26.0	24.4	16.9	7,137	0.276
	2013	9.5	17.0	26.0	24.2	17.2	7,225	0.278
	2014	9.6	17.2	26.1	24.4	16.9	7,365	0.280
	2015	9.5	17.0	25.8	23.6	17.5	7,524	0.281
	2016	9.9	17.1	26.2	24.1	17.0	7,595	0.282

Table 1A (continued). EUROMOD poverty and inequality statistics

	Policy year	Poverty risk: all			Poverty risk (60%)		Poverty threshold	Gini coefficient
		50%	60%	70%	age <18	age>=65	(€/year)	
Netherlands	2011	4.5	10.3	18.7	14.2	4.4	12,781	0.246
	2012	4.7	10.4	19.0	14.8	4.1	12,946	0.246
	2013	4.6	10.4	19.2	14.6	4.5	13,082	0.248
	2014	4.8	10.6	19.1	15.0	4.0	13,392	0.246
	2015	4.9	10.7	19.3	14.5	4.2	13,662	0.247
	2016	4.9	11.4	20.2	14.9	6.4	13,859	0.247
Austria	2011	7.1	13.6	21.4	15.8	12.8	12,699	0.256
	2012	6.0	13.3	21.3	15.7	11.6	12,883	0.256
	2013	5.8	13.2	21.2	15.7	11.2	13,016	0.255
	2014	5.5	13.1	21.1	15.8	11.0	13,184	0.254
	2015	5.0	13.1	21.0	15.9	10.9	13,311	0.254
	2016	6.4	14.1	21.6	17.1	11.7	13,884	0.257
Poland	2011	10.5	17.2	24.8	21.5	13.4	3,091	0.308
	2012	11.1	17.4	25.1	22.2	13.3	3,024	0.311
	2013	10.9	17.5	25.3	22.1	13.1	3,066	0.309
	2014	11.0	17.7	25.3	22.7	13.1	3,309	0.310
	2015	11.1	17.8	25.4	22.6	13.4	3,393	0.311
	2016	8.2	13.7	21.3	8.7	15.3	3,556	0.288
Portugal	2011	10.9	17.6	25.0	21.5	15.0	5,277	0.329
	2012	10.2	16.7	23.7	20.3	14.7	5,164	0.321
	2013	10.6	17.0	24.2	20.7	14.9	5,196	0.319
	2014	10.7	17.1	24.3	20.7	15.2	5,212	0.319
	2015	10.8	17.2	24.7	20.8	15.3	5,287	0.322
	2016	10.8	17.1	24.8	20.5	15.2	5,348	0.318
Romania	2011	15.6	21.8	28.5	32.6	13.7	1,272	0.317
	2012	15.9	21.9	28.9	32.3	15.1	1,259	0.318
	2013	15.7	22.3	29.1	32.6	16.3	1,324	0.319
	2014	16.7	22.9	29.6	33.0	17.0	1,376	0.324
	2015	14.8	22.1	28.7	29.7	20.0	1,530	0.315
	2016	15.8	22.7	29.2	30.2	21.4	1,631	0.322
Slovenia	2011	7.4	13.7	21.1	12.7	18.5	7,058	0.239
	2012	6.9	13.3	20.5	11.8	19.2	7,122	0.238
	2013	6.8	13.4	20.6	11.7	19.2	7,102	0.238
	2014	6.3	13.3	20.6	11.9	19.5	7,141	0.236
	2015	6.5	13.5	21.0	11.9	19.4	7,182	0.241
	2016	6.1	13.0	21.0	11.0	19.3	7,214	0.240
Slovakia	2011	5.5	11.1	17.9	17.7	4.8	3,841	0.222
	2012	5.8	11.2	18.0	17.9	4.7	3,949	0.223
	2013	6.6	12.2	18.5	20.6	3.9	3,984	0.222
	2014	7.1	12.3	18.6	20.6	4.2	4,108	0.225
	2015	7.3	12.1	18.8	20.5	4.2	4,206	0.226
	2016	7.6	12.3	18.8	20.7	4.6	4,292	0.228
Finland	2011	5.3	12.2	21.0	11.3	14.6	13,267	0.249
	2012	4.8	11.8	20.5	11.1	13.6	13,723	0.243
	2013	4.6	11.5	20.1	11.1	12.7	13,893	0.241
	2014	4.4	11.3	19.8	11.0	12.3	13,986	0.239
	2015	4.4	11.2	19.7	11.2	12.1	14,092	0.239
	2016	4.5	11.3	19.8	11.2	12.6	14,252	0.238
Sweden	2011	7.5	13.3	21.7	15.3	12.2	14,535	0.236
	2012	7.2	13.0	21.6	15.1	11.2	15,562	0.237
	2013	7.4	13.2	21.4	15.4	10.2	16,072	0.235
	2014	7.4	13.5	21.6	15.1	11.4	16,379	0.237
	2015	7.8	14.0	21.7	15.3	13.1	16,712	0.237
	2016	7.9	13.6	21.4	15.1	11.5	17,197	0.235

Table 1A (continued). EUROMOD poverty and inequality statistics

	Policy year	Poverty risk: all			Poverty risk (60%)		Poverty threshold	Gini coefficient
		50%	60%	70%	age <18	age>=65	(€/year)	
United Kingdom	2011	7.9	14.5	23.2	15.3	13.3	9,481	0.310
	2012	7.9	14.2	23.0	15.2	12.6	10,834	0.309
	2013	8.5	15.1	23.7	16.4	13.2	10,365	0.311
	2014	8.7	15.3	23.9	16.6	13.2	11,242	0.312
	2015	8.8	15.4	24.1	16.7	13.7	11,598	0.312
	2016	9.0	15.8	24.5	17.2	13.8	11,191	0.314
EU-28 (weighted)	2011	8.9	15.7	23.7	19.1	12.9	8,790	0.294
	2012	9.0	15.7	23.5	19.3	12.5	9,030	0.294
	2013	9.0	15.6	23.6	19.3	12.3	9,041	0.292
	2014	9.1	15.7	23.7	19.3	12.5	9,276	0.292
	2015	9.2	15.9	23.8	19.3	13.2	9,449	0.292
	2016	9.0	15.7	23.7	18.2	13.7	9,524	0.291

Table 2A. Effects of tax-benefit components on poverty risk: 2011-2016 (2012 data)

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Belgium	2011	12.2	17.4	15.9	11.7	10.6	35.5	16.1
	2012	11.7	17.0	15.8	11.4	10.3	35.5	15.9
	2013	11.8	17.0	15.8	11.4	10.3	35.6	16.0
	2014	11.6	16.7	15.7	11.4	10.2	35.6	16.0
	2015	11.6	16.6	15.6	11.3	10.1	35.5	15.9
	2016	11.9	16.9	15.9	11.8	10.4	36.1	16.5
Bulgaria	2011	19.7	22.6	22.0	18.0	17.5	35.7	19.9
	2012	20.5	23.2	22.8	18.6	18.2	34.9	20.3
	2013	20.2	22.7	22.2	18.0	17.8	34.8	19.6
	2014	20.5	23.4	22.6	18.7	18.2	35.0	20.5
	2015	20.9	23.5	22.9	19.2	18.6	34.7	20.7
	2016	20.7	23.3	22.7	19.0	18.5	34.5	20.7
Czech	2011	8.9	11.9	13.4	8.8	6.3	34.0	12.0
Republic	2012	9.0	12.1	12.7	8.8	6.3	33.7	11.9
	2013	8.9	12.1	12.6	8.6	6.2	33.7	11.7
	2014	9.3	12.2	12.8	9.0	6.5	33.6	11.8
	2015	9.3	12.0	12.9	9.0	6.6	33.5	11.7
	2016	9.5	12.1	13.1	9.3	6.7	33.4	11.7
Denmark	2011	11.2	17.0	19.8	5.7	9.5	30.2	12.7
	2012	11.2	16.8	19.7	5.6	9.6	30.1	12.6
	2013	11.1	16.3	19.6	5.7	9.5	30.1	12.6
	2014	11.2	17.5	18.5	5.9	9.7	30.0	12.7
	2015	11.3	17.2	18.3	5.6	9.7	29.8	12.6
	2016	11.3	17.2	18.4	5.6	9.7	30.0	12.6
Germany	2011	13.3	17.6	18.7	12.5	9.7	36.4	15.6
	2012	13.3	17.7	18.5	12.4	9.6	36.2	15.4
	2013	13.4	17.6	18.5	12.5	9.7	36.2	15.5
	2014	13.5	17.6	18.4	12.5	9.7	36.1	15.4
	2015	13.7	17.7	18.5	12.8	9.8	36.0	15.3
	2016	13.7	17.8	18.6	12.7	10.0	35.9	15.2
Estonia	2011	18.2	18.2	23.4	16.0	17.2	36.0	19.6
	2012	18.2	18.2	23.5	15.9	17.2	35.9	19.5
	2013	19.1	19.1	24.2	16.6	18.3	35.9	20.2
	2014	18.9	18.9	24.3	16.4	18.1	35.7	20.0
	2015	19.2	19.4	25.3	16.4	18.3	36.1	21.1
	2016	18.5	18.8	25.0	16.6	17.7	36.2	21.2
Ireland	2011	15.7	32.5	26.5	15.4	15.3	41.6	36.6
	2012	16.0	32.6	26.6	15.5	15.5	41.3	36.4
	2013	16.3	32.9	26.0	15.2	15.6	40.6	35.8
	2014	16.1	33.1	26.3	14.3	15.5	40.2	35.4
	2015	16.5	32.8	26.7	15.0	16.0	40.2	35.4
	2016	17.0	32.7	27.2	15.8	16.5	40.2	35.5
Greece	2011	21.7	22.8	23.7	20.3	17.1	40.3	18.4
	2012	21.8	22.6	23.7	19.7	17.0	40.9	18.0
	2013	21.9	25.2	23.4	19.7	16.4	40.8	18.8
	2014	20.4	25.1	21.9	18.4	15.6	40.9	18.7
	2015	22.4	25.8	23.9	20.2	17.1	41.3	19.1
	2016	21.6	24.7	23.3	20.0	15.6	40.5	18.3
Spain	2011	21.9	27.6	25.1	21.6	19.6	42.1	27.8
	2012	21.8	27.5	25.1	21.6	19.7	42.2	27.7
	2013	21.8	27.4	25.0	21.6	19.6	42.3	27.5
	2014	21.9	27.5	25.0	21.6	19.6	42.3	27.6
	2015	22.0	27.7	25.3	21.8	19.7	42.7	28.1
	2016	22.0	27.6	25.3	21.9	19.8	42.7	28.0

Table 2A (continued). Effects of tax-benefit components on poverty risk

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
France	2011	12.7	19.3	18.7	8.8	8.9	35.1	16.0
	2012	12.8	19.3	18.6	8.7	8.8	35.1	15.9
	2013	11.8	18.7	17.8	8.1	8.3	34.6	15.5
	2014	11.8	18.7	17.8	8.1	8.4	34.5	15.4
	2015	12.1	18.7	17.9	8.3	8.6	34.5	15.5
	2016	11.8	18.8	17.9	8.3	8.6	34.5	15.6
Italy	2011	18.9	21.6	21.7	16.0	16.2	37.4	18.0
	2012	18.1	21.2	21.0	15.3	15.7	37.1	17.4
	2013	17.6	21.0	20.5	15.2	15.2	37.2	17.4
	2014	17.7	21.0	20.4	15.5	15.4	37.5	17.7
	2015	17.8	21.0	20.5	15.7	15.4	37.7	17.8
	2016	17.7	20.9	20.4	15.8	15.2	37.7	17.9
Cyprus	2011	13.7	16.8	18.9	13.3	11.7	31.7	19.7
	2012	13.5	17.6	17.0	13.2	12.0	31.3	18.8
	2013	13.6	17.4	17.1	13.0	11.5	31.5	18.7
	2014	12.4	17.6	16.3	12.0	10.4	31.7	18.6
	2015	12.3	17.6	16.1	11.9	10.2	31.7	18.5
	2016	12.1	17.5	15.8	11.8	10.0	32.0	18.6
Latvia	2011	17.3	18.2	22.4	15.0	15.1	36.8	17.7
	2012	18.0	18.7	23.1	15.7	16.0	36.1	17.9
	2013	18.7	19.1	23.9	16.2	16.6	36.1	18.6
	2014	20.3	20.6	24.8	18.0	18.3	36.1	20.2
	2015	21.3	21.4	25.9	18.8	19.3	36.1	21.1
	2016	21.8	21.9	26.4	19.4	19.9	35.8	21.6
Lithuania	2011	17.7	20.9	21.2	15.8	15.2	39.2	18.5
	2012	20.0	21.9	22.9	18.0	17.3	39.3	18.8
	2013	20.3	22.0	23.2	18.4	18.2	39.0	19.3
	2014	20.4	21.9	22.8	18.6	18.2	39.1	19.4
	2015	21.5	22.6	23.6	19.6	19.1	39.0	20.4
	2016	21.5	22.8	23.5	20.0	19.4	39.1	20.7
Luxembourg	2011	9.1	15.3	23.5	8.4	3.8	37.1	18.9
	2012	9.1	15.2	23.0	8.5	4.1	37.0	18.9
	2013	9.0	14.8	22.3	8.1	4.3	36.6	18.3
	2014	8.5	14.7	21.7	7.4	3.9	35.9	17.6
	2015	8.2	14.8	21.3	7.0	3.8	35.8	17.4
	2016	8.1	14.8	21.3	6.8	3.7	35.8	17.4
Hungary	2011	11.7	13.8	24.0	8.5	8.3	38.7	15.8
	2012	14.0	16.3	23.4	9.5	9.2	37.7	14.5
	2013	14.6	16.5	23.6	10.0	9.5	37.8	14.6
	2014	14.5	16.2	23.1	9.8	10.0	37.9	14.8
	2015	15.4	16.1	23.6	10.8	11.0	37.4	14.6
	2016	15.3	16.1	23.3	11.0	11.2	37.4	14.9
Croatia	2011	19.5	22.1	21.3	19.2	16.2	38.1	20.0
	2012	19.6	22.3	21.5	19.5	16.4	38.2	20.1
	2013	19.7	22.4	21.5	19.5	15.9	38.2	19.4
	2014	19.0	21.8	20.8	18.9	15.7	38.2	19.3
	2015	19.8	22.6	21.6	19.7	16.5	38.3	20.1
	2016	19.9	22.6	21.8	19.7	16.5	38.3	20.1
Malta	2011	16.8	21.5	17.1	15.9	13.0	30.6	17.6
	2012	17.2	21.6	17.5	16.2	13.2	30.5	17.7
	2013	17.0	21.7	17.4	16.1	13.2	30.3	17.7
	2014	17.2	21.8	17.6	16.1	13.3	30.5	17.7
	2015	17.0	22.0	17.3	15.8	13.2	30.2	17.6
	2016	17.1	21.7	17.5	16.1	13.4	30.5	17.6

Table 2A (continued). Effects of tax-benefit components on poverty risk

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Netherlands	2011	10.3	18.1	17.0	9.0	4.4	24.1	14.8
	2012	10.4	18.1	17.2	9.1	4.6	24.2	14.8
	2013	10.4	18.5	17.1	8.9	4.5	24.2	14.8
	2014	10.6	17.8	17.4	9.3	4.9	24.5	15.0
	2015	10.7	18.0	17.7	8.8	4.8	24.6	15.0
	2016	11.4	18.1	18.4	9.3	4.8	24.8	15.1
Austria	2011	13.6	16.8	21.4	12.7	10.3	35.8	17.2
	2012	13.3	16.7	21.2	12.5	10.0	35.6	16.9
	2013	13.2	16.5	21.1	12.5	9.8	35.5	16.8
	2014	13.1	16.4	21.0	12.1	9.7	35.4	16.7
	2015	13.1	16.4	20.9	12.0	9.7	35.4	16.6
	2016	14.1	16.9	21.5	13.3	10.3	36.2	17.7
Poland	2011	17.2	19.0	19.1	12.9	12.4	32.7	12.5
	2012	17.4	19.1	19.4	13.0	12.6	32.5	12.1
	2013	17.5	19.3	19.5	12.9	12.4	32.7	12.2
	2014	17.7	19.3	19.7	13.1	12.6	32.8	12.2
	2015	17.8	19.4	19.7	13.3	12.7	32.8	12.3
	2016	13.7	21.6	15.7	9.9	9.9	34.3	14.0
Portugal	2011	17.6	20.5	20.9	17.3	15.0	39.8	20.1
	2012	16.7	19.8	20.0	16.4	14.6	39.5	19.8
	2013	17.0	19.9	20.2	16.4	14.8	39.3	19.7
	2014	17.1	19.9	20.2	16.5	14.9	39.3	19.7
	2015	17.2	19.9	20.4	16.7	15.1	39.4	19.8
	2016	17.1	20.0	20.3	16.6	14.9	39.4	19.9
Romania	2011	21.8	25.2	24.2	18.9	19.8	41.1	21.6
	2012	21.9	25.4	24.4	19.2	20.0	40.6	21.5
	2013	22.3	25.4	24.7	19.3	20.2	40.4	21.4
	2014	22.9	25.9	25.1	19.7	20.7	40.6	22.0
	2015	22.1	25.9	25.4	18.9	20.2	40.9	23.0
	2016	22.7	26.1	25.8	19.9	21.1	40.9	23.7
Slovenia	2011	13.7	17.2	21.3	13.1	9.4	33.5	16.6
	2012	13.3	17.4	20.8	12.6	9.3	33.7	16.8
	2013	13.4	17.5	21.0	12.7	9.3	34.0	17.0
	2014	13.3	17.4	21.1	12.6	9.1	33.7	16.9
	2015	13.5	17.5	20.9	12.8	9.1	33.5	16.8
	2016	13.0	17.6	20.7	12.5	8.8	33.5	16.8
Slovakia	2011	11.1	12.9	14.9	10.6	7.2	31.0	12.2
	2012	11.2	12.9	15.0	10.8	7.3	31.1	12.2
	2013	12.2	13.9	16.2	11.5	7.2	30.8	11.8
	2014	12.3	14.0	16.5	11.6	7.6	30.5	11.7
	2015	12.1	13.9	16.4	11.5	7.7	30.4	11.6
	2016	12.3	13.9	16.3	11.5	7.9	30.2	11.6
Finland	2011	12.2	18.4	19.0	8.5	11.3	34.9	17.0
	2012	11.8	18.1	18.9	8.1	10.6	35.0	17.1
	2013	11.5	18.1	18.7	7.7	10.4	34.9	16.8
	2014	11.3	18.1	18.6	7.5	10.2	34.7	16.6
	2015	11.2	18.0	18.4	7.5	10.2	34.6	16.5
	2016	11.3	18.1	18.4	7.9	10.3	34.6	16.6
Sweden	2011	13.3	15.8	23.1	8.3	11.6	30.8	14.6
	2012	13.0	15.6	22.8	8.0	11.2	30.7	14.4
	2013	13.2	15.4	22.8	8.2	11.3	30.9	14.3
	2014	13.5	15.6	23.0	8.2	11.7	30.8	14.4
	2015	14.0	15.7	23.2	8.4	12.2	30.8	14.4
	2016	13.6	15.4	23.0	8.5	12.3	30.8	14.1

Table 2A (continued). Effects of tax-benefit components on poverty risk

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
United Kingdom	2011	14.5	30.2	22.7	10.7	13.9	36.9	30.0
	2012	14.2	29.9	22.3	10.7	13.7	37.0	29.9
	2013	15.1	29.9	22.8	11.6	14.5	37.2	30.0
	2014	15.3	29.9	22.9	11.7	14.7	37.3	30.1
	2015	15.4	29.8	23.0	12.0	14.8	37.4	30.1
	2016	15.8	29.8	23.5	12.3	15.1	37.3	30.0
EU-28 (weighted)	2011	15.7	21.4	20.8	13.4	12.8	36.4	19.3
	2012	15.7	21.4	20.6	13.3	12.7	36.3	19.1
	2013	15.6	21.3	20.5	13.3	12.7	36.3	19.0
	2014	15.7	21.3	20.5	13.4	12.8	36.3	19.1
	2015	15.9	21.4	20.7	13.6	13.0	36.3	19.2
	2016	15.7	21.6	20.5	13.5	12.9	36.4	19.4

Table 3A. Effects of tax-benefit components on poverty gap: 2011-2016 (2012 data)

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Belgium	2011	19.3	23.5	31.5	21.4	19.7	98.9	49.2
	2012	19.7	23.5	31.9	21.7	20.0	99.0	49.4
	2013	19.6	23.4	31.7	21.9	19.9	98.8	49.6
	2014	19.6	24.0	31.7	21.9	19.8	98.5	49.6
	2015	19.8	24.4	31.5	21.9	19.8	98.3	49.6
	2016	18.7	23.9	30.5	21.0	19.8	98.4	49.0
Bulgaria	2011	25.6	33.0	26.9	25.5	24.7	76.0	35.1
	2012	25.1	32.9	27.1	25.2	24.6	75.8	34.8
	2013	25.3	33.0	27.6	25.7	25.3	75.6	35.3
	2014	24.5	32.1	26.0	25.0	24.1	76.5	34.3
	2015	25.6	32.4	26.6	26.0	25.5	78.1	33.7
	2016	26.3	31.9	26.8	26.0	25.9	78.4	33.1
Czech	2011	18.7	22.8	21.9	18.3	18.3	98.3	27.2
Republic	2012	18.7	23.9	22.0	18.2	18.8	99.1	27.7
	2013	18.3	23.4	21.9	17.7	18.9	99.1	28.3
	2014	18.7	23.9	22.4	18.1	18.9	99.3	28.4
	2015	18.9	25.7	22.4	18.5	19.0	99.4	28.2
	2016	18.7	26.1	22.2	18.6	18.6	99.5	28.9
Denmark	2011	20.8	29.1	33.2	28.6	20.8	84.0	72.0
	2012	20.7	30.2	33.2	28.2	19.6	84.0	71.9
	2013	21.6	34.1	33.2	28.9	22.1	84.1	74.4
	2014	20.9	33.0	31.9	26.9	20.8	83.9	74.1
	2015	20.9	35.0	32.7	28.1	19.7	84.5	74.1
	2016	20.9	34.9	33.0	28.3	20.0	84.3	74.0
Germany	2011	14.8	32.3	20.9	15.2	15.9	93.2	45.4
	2012	14.9	33.2	20.7	15.3	16.5	93.4	46.4
	2013	14.9	33.3	20.7	15.2	16.5	93.4	46.3
	2014	14.8	33.4	20.8	15.5	16.5	93.8	46.7
	2015	14.9	32.9	20.9	15.3	16.8	94.2	46.5
	2016	15.4	33.2	20.5	16.1	16.6	95.1	46.8
Estonia	2011	22.9	22.9	29.1	24.6	23.3	89.9	29.1
	2012	23.1	23.1	29.3	24.7	23.2	90.4	28.9
	2013	21.5	21.5	28.6	23.8	21.5	90.1	28.5
	2014	21.0	21.7	28.4	23.6	20.9	90.7	28.6
	2015	18.0	20.4	27.1	20.0	18.5	89.1	27.7
	2016	17.1	20.3	26.5	18.4	16.9	88.6	28.0
Ireland	2011	13.2	69.8	24.2	13.2	13.2	85.1	87.2
	2012	13.3	69.6	24.1	13.3	13.3	86.2	87.8
	2013	13.5	69.8	23.5	13.0	13.9	87.2	89.2
	2014	14.1	69.4	23.6	12.8	14.2	87.7	89.5
	2015	14.6	70.3	24.0	12.8	14.2	87.7	89.1
	2016	15.0	70.5	24.8	13.4	14.3	87.4	89.2
Greece	2011	30.8	30.8	33.9	31.1	27.7	95.2	32.0
	2012	31.6	31.8	33.4	32.4	29.2	92.7	31.7
	2013	30.3	33.2	32.2	29.4	27.8	93.2	31.6
	2014	30.7	33.4	33.3	29.6	25.7	93.3	32.6
	2015	29.6	32.9	31.5	28.0	25.4	92.1	32.4
	2016	28.4	32.2	31.1	27.3	25.2	94.7	31.7
Spain	2011	29.5	40.0	33.5	30.0	29.5	92.5	43.5
	2012	30.1	40.0	33.8	30.4	29.1	91.7	43.3
	2013	30.4	39.8	33.8	30.4	30.0	92.5	42.8
	2014	30.3	39.7	33.8	30.4	30.1	92.8	42.8
	2015	29.2	39.4	33.8	29.8	29.7	92.3	42.9
	2016	29.2	39.6	34.1	29.9	29.8	92.6	43.0

Table 3A (continued). Effects of tax-benefit components on poverty gap

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
France	2011	16.7	27.7	23.5	19.6	17.1	76.3	34.7
	2012	16.6	28.0	23.5	19.0	17.2	77.1	34.5
	2013	17.1	26.9	22.7	17.4	17.5	77.5	35.0
	2014	16.7	27.0	22.5	17.4	17.1	77.8	34.9
	2015	16.2	27.4	22.3	17.4	16.9	77.8	34.9
	2016	16.4	27.2	22.1	18.3	17.3	78.1	34.7
Italy	2011	23.1	27.0	25.7	28.0	24.2	84.2	34.2
	2012	24.1	27.3	26.9	28.1	24.6	84.9	34.4
	2013	24.5	26.9	27.3	28.5	25.1	86.6	34.4
	2014	25.0	27.5	27.4	28.3	26.0	87.2	34.3
	2015	24.8	27.6	26.8	27.7	25.8	88.2	34.6
	2016	24.6	27.3	26.6	27.8	25.7	88.1	34.6
Cyprus	2011	15.4	18.9	19.5	15.9	16.0	63.0	22.1
	2012	16.9	18.8	18.5	17.4	16.4	64.1	21.4
	2013	16.3	19.1	18.4	16.9	17.1	63.7	21.7
	2014	15.1	19.2	16.5	14.9	13.7	63.7	21.3
	2015	15.0	18.8	16.4	14.6	13.4	63.8	21.2
	2016	14.8	18.8	16.5	14.6	13.8	63.3	21.3
Latvia	2011	22.3	29.9	29.1	21.5	20.9	87.6	36.9
	2012	23.2	29.5	29.5	23.0	22.2	88.3	37.7
	2013	23.7	28.9	30.3	24.6	23.5	88.6	35.8
	2014	23.7	26.9	28.9	23.6	23.8	88.6	34.0
	2015	23.6	25.7	29.6	24.9	24.5	88.6	33.5
	2016	24.1	25.5	29.9	25.5	24.9	88.8	33.2
Lithuania	2011	22.1	33.2	23.1	22.9	22.0	89.2	39.3
	2012	22.1	33.1	24.1	23.0	22.2	89.1	39.6
	2013	23.2	33.0	25.9	23.2	21.8	90.0	38.5
	2014	25.1	32.2	27.1	25.4	24.2	90.0	38.7
	2015	25.1	31.8	27.9	25.3	23.7	90.1	36.8
	2016	25.6	31.0	29.1	26.8	24.7	90.3	36.7
Luxembourg	2011	6.5	23.3	22.0	7.4	8.1	62.5	35.5
	2012	6.2	23.3	22.6	7.4	7.6	62.4	35.5
	2013	6.8	23.6	22.9	7.9	7.6	62.4	34.9
	2014	6.9	23.4	22.4	7.7	7.9	65.7	36.2
	2015	7.1	24.2	22.0	8.7	7.5	65.9	35.9
	2016	7.1	24.2	22.0	8.7	8.3	65.8	35.9
Hungary	2011	15.4	18.6	33.3	14.5	13.7	89.6	40.1
	2012	19.8	22.8	36.7	19.3	18.4	90.4	41.3
	2013	20.0	23.7	36.9	19.3	18.7	90.2	41.7
	2014	20.2	23.6	36.1	19.9	18.9	90.2	41.4
	2015	21.9	23.7	38.2	21.6	21.2	90.9	40.8
	2016	21.9	23.5	38.1	22.1	21.3	90.9	40.6
Croatia	2011	25.5	31.2	27.6	25.6	25.2	100.0	32.7
	2012	25.8	31.2	27.8	25.8	25.7	100.0	33.0
	2013	25.3	30.9	27.8	25.3	26.2	100.0	33.3
	2014	25.8	31.9	29.7	25.8	26.4	100.0	33.1
	2015	26.0	31.0	28.5	26.0	26.2	100.0	33.2
	2016	26.1	31.3	28.1	26.1	25.9	100.0	33.2
Malta	2011	18.9	25.7	19.5	19.1	17.5	77.6	25.9
	2012	18.7	25.5	19.3	19.5	17.5	77.6	25.6
	2013	18.6	25.7	19.2	19.1	17.8	77.5	26.1
	2014	18.7	25.8	19.1	19.3	17.8	76.8	25.7
	2015	18.4	25.7	18.7	18.5	17.1	76.7	26.2
	2016	19.3	26.1	19.7	20.0	18.4	75.6	25.9

Table 3A (continued). Effects of tax-benefit components on poverty gap

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Netherlands	2011	14.4	31.1	28.1	14.9	16.8	60.1	59.1
	2012	15.1	31.5	27.8	15.4	16.5	60.2	59.0
	2013	14.6	31.8	27.5	15.3	15.5	60.0	59.2
	2014	14.8	31.3	26.9	15.0	16.6	60.5	59.3
	2015	14.7	31.9	25.3	14.9	14.9	60.5	59.2
	2016	13.1	31.7	25.4	14.2	14.8	60.8	59.3
Austria	2011	17.0	26.4	20.0	17.0	13.6	91.6	38.8
	2012	16.0	26.7	19.2	16.0	13.2	91.6	38.3
	2013	14.5	27.4	19.3	15.3	12.5	91.7	38.5
	2014	14.1	27.2	19.2	15.5	12.3	91.6	38.5
	2015	14.1	26.8	19.2	15.3	12.1	91.6	38.9
	2016	15.5	27.1	19.8	17.0	13.5	91.2	38.3
Poland	2011	23.0	27.5	24.4	23.0	20.6	78.7	25.4
	2012	23.8	28.0	25.6	23.5	21.1	79.5	26.0
	2013	22.4	27.8	24.4	22.3	20.7	79.1	26.3
	2014	22.7	27.9	24.5	22.3	20.6	79.7	26.4
	2015	22.9	28.0	24.6	22.8	20.7	79.9	26.1
	2016	22.5	27.6	22.7	21.7	20.6	75.6	25.8
Portugal	2011	23.3	29.5	27.5	23.0	22.6	90.3	31.8
	2012	22.4	29.1	25.9	21.8	21.7	90.7	31.0
	2013	23.6	28.5	27.6	23.5	24.2	90.7	31.0
	2014	23.7	28.5	28.3	23.6	24.5	90.6	31.0
	2015	24.1	29.0	28.4	23.9	24.6	90.4	31.3
	2016	23.9	29.0	27.9	22.8	24.1	90.3	31.4
Romania	2011	27.4	36.0	32.4	27.3	28.7	81.5	42.3
	2012	26.8	34.2	31.0	25.9	28.0	81.1	40.4
	2013	27.2	33.6	30.9	26.2	28.6	80.7	40.2
	2014	28.6	36.6	32.9	28.3	29.5	83.0	42.3
	2015	27.0	34.9	30.7	26.7	28.0	82.5	41.0
	2016	28.2	35.7	33.0	26.8	29.8	83.6	41.9
Slovenia	2011	18.9	24.9	23.0	19.2	20.2	88.0	29.4
	2012	17.3	25.0	22.5	17.7	19.6	86.9	30.0
	2013	17.1	25.3	22.6	17.6	19.6	87.3	29.9
	2014	15.9	25.6	20.7	16.0	18.2	87.7	30.3
	2015	16.0	25.8	20.3	16.0	18.4	86.7	29.1
	2016	15.2	25.9	19.6	15.2	17.9	86.7	29.2
Slovakia	2011	16.5	25.0	21.3	16.8	17.9	96.1	29.4
	2012	17.6	25.4	21.9	17.6	18.7	95.2	29.4
	2013	18.5	26.4	23.5	18.8	19.4	97.2	30.3
	2014	20.0	26.2	23.9	20.0	20.3	98.0	30.7
	2015	21.3	26.1	24.8	20.9	21.3	98.2	31.2
	2016	21.2	26.1	25.5	21.2	21.2	98.4	31.9
Finland	2011	14.3	27.1	22.0	15.1	14.6	90.4	35.4
	2012	13.0	27.4	21.1	13.9	14.0	90.9	35.4
	2013	12.9	27.1	21.3	13.2	13.4	91.0	35.8
	2014	12.8	26.9	21.5	13.3	13.3	91.4	36.2
	2015	13.0	27.1	21.6	13.4	13.0	91.7	36.3
	2016	13.0	26.9	21.1	13.6	13.1	91.6	35.4
Sweden	2011	20.3	27.7	31.3	23.7	20.3	84.6	44.6
	2012	20.0	28.3	31.0	22.8	19.8	84.1	45.9
	2013	19.5	28.2	31.2	23.7	19.6	84.8	47.8
	2014	18.8	28.2	30.2	23.9	19.2	84.6	46.0
	2015	19.4	28.4	29.9	25.1	19.8	85.3	46.4
	2016	20.3	28.6	30.8	25.3	20.3	85.4	48.3

Table 3A (continued). Effects of tax-benefit components on poverty gap

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
United Kingdom	2011	19.1	49.7	21.9	20.9	19.5	79.4	63.5
	2012	20.0	49.5	23.0	21.4	20.0	79.2	63.8
	2013	20.3	49.4	23.5	21.7	20.6	79.4	63.9
	2014	20.3	50.0	23.8	22.2	20.7	79.5	64.3
	2015	20.4	50.2	23.8	21.8	20.9	79.6	64.3
	2016	20.6	51.0	23.6	22.0	21.5	80.1	65.4
EU-28 (weighted)	2011	20.3	32.9	25.6	21.8	20.5	85.0	42.4
	2012	20.8	33.2	25.9	22.0	20.8	85.1	42.6
	2013	20.8	33.1	25.9	21.8	21.1	85.5	42.8
	2014	20.9	33.3	26.0	21.9	21.2	85.9	42.9
	2015	20.8	33.3	25.8	21.8	21.1	86.0	42.8
	2016	20.9	33.4	25.6	21.9	21.3	86.1	43.0

Table 4A. Effects of tax-benefit components on Gini coefficient: 2011-2016 (2012 data)

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Belgium	2011	0.227	0.251	0.254	0.298	0.251	0.492	0.352
	2012	0.225	0.249	0.253	0.297	0.250	0.493	0.350
	2013	0.225	0.249	0.252	0.296	0.249	0.492	0.350
	2014	0.224	0.248	0.252	0.296	0.248	0.492	0.349
	2015	0.224	0.248	0.252	0.296	0.248	0.491	0.349
	2016	0.223	0.247	0.251	0.295	0.247	0.491	0.348
Bulgaria	2011	0.316	0.340	0.321	0.323	0.323	0.467	0.357
	2012	0.322	0.345	0.327	0.329	0.329	0.467	0.361
	2013	0.322	0.344	0.327	0.329	0.329	0.467	0.360
	2014	0.321	0.344	0.326	0.328	0.329	0.467	0.361
	2015	0.325	0.345	0.329	0.332	0.333	0.467	0.363
	2016	0.325	0.345	0.330	0.333	0.333	0.468	0.362
Czech Republic	2011	0.238	0.254	0.256	0.266	0.252	0.463	0.307
	2012	0.239	0.257	0.255	0.267	0.253	0.463	0.308
	2013	0.237	0.255	0.252	0.266	0.251	0.463	0.307
	2014	0.239	0.256	0.255	0.268	0.253	0.463	0.308
	2015	0.240	0.257	0.256	0.269	0.254	0.463	0.308
	2016	0.242	0.259	0.257	0.272	0.255	0.463	0.310
Denmark	2011	0.242	0.278	0.287	0.285	0.257	0.457	0.348
	2012	0.241	0.277	0.287	0.284	0.256	0.457	0.347
	2013	0.243	0.279	0.288	0.285	0.258	0.459	0.348
	2014	0.248	0.290	0.288	0.293	0.262	0.464	0.355
	2015	0.251	0.294	0.292	0.298	0.265	0.468	0.360
	2016	0.252	0.294	0.292	0.298	0.265	0.468	0.360
Germany	2011	0.261	0.294	0.278	0.312	0.269	0.503	0.358
	2012	0.262	0.295	0.278	0.313	0.270	0.502	0.357
	2013	0.262	0.295	0.278	0.314	0.270	0.503	0.358
	2014	0.262	0.295	0.278	0.315	0.270	0.503	0.358
	2015	0.263	0.296	0.279	0.317	0.272	0.503	0.360
	2016	0.264	0.296	0.279	0.318	0.272	0.504	0.360
Estonia	2011	0.315	0.320	0.331	0.342	0.319	0.485	0.362
	2012	0.317	0.321	0.333	0.343	0.321	0.485	0.363
	2013	0.319	0.324	0.335	0.346	0.323	0.485	0.364
	2014	0.321	0.327	0.337	0.346	0.324	0.487	0.366
	2015	0.318	0.325	0.337	0.343	0.321	0.487	0.366
	2016	0.313	0.322	0.331	0.340	0.315	0.487	0.365
Ireland	2011	0.275	0.398	0.316	0.343	0.294	0.536	0.506
	2012	0.275	0.398	0.317	0.345	0.294	0.536	0.506
	2013	0.279	0.403	0.318	0.348	0.298	0.535	0.506
	2014	0.281	0.406	0.321	0.349	0.301	0.536	0.507
	2015	0.284	0.406	0.324	0.353	0.304	0.536	0.508
	2016	0.287	0.407	0.326	0.354	0.306	0.537	0.508
Greece	2011	0.346	0.351	0.357	0.381	0.346	0.544	0.390
	2012	0.344	0.348	0.354	0.381	0.342	0.543	0.388
	2013	0.345	0.361	0.353	0.380	0.343	0.543	0.394
	2014	0.338	0.359	0.346	0.373	0.336	0.543	0.392
	2015	0.338	0.357	0.346	0.373	0.336	0.542	0.391
	2016	0.333	0.352	0.341	0.369	0.332	0.542	0.386
Spain	2011	0.322	0.356	0.339	0.362	0.323	0.524	0.408
	2012	0.319	0.353	0.337	0.362	0.320	0.524	0.408
	2013	0.319	0.352	0.335	0.361	0.319	0.524	0.406
	2014	0.318	0.352	0.335	0.361	0.319	0.524	0.406
	2015	0.319	0.353	0.337	0.359	0.319	0.525	0.406
	2016	0.320	0.354	0.338	0.359	0.321	0.525	0.406

Table 4A (continued). Effects of tax-benefit components on Gini coefficient

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
France	2011	0.303	0.338	0.327	0.330	0.305	0.494	0.376
	2012	0.302	0.336	0.325	0.328	0.303	0.494	0.374
	2013	0.287	0.322	0.311	0.324	0.296	0.494	0.374
	2014	0.285	0.320	0.308	0.324	0.294	0.494	0.374
	2015	0.284	0.320	0.307	0.324	0.294	0.494	0.374
	2016	0.284	0.318	0.307	0.324	0.294	0.494	0.374
Italy	2011	0.329	0.342	0.335	0.371	0.336	0.520	0.389
	2012	0.327	0.340	0.333	0.370	0.334	0.520	0.388
	2013	0.324	0.338	0.330	0.368	0.332	0.521	0.387
	2014	0.322	0.335	0.327	0.367	0.330	0.521	0.386
	2015	0.320	0.334	0.325	0.366	0.328	0.521	0.385
	2016	0.319	0.333	0.324	0.366	0.327	0.521	0.385
Cyprus	2011	0.295	0.308	0.309	0.325	0.295	0.434	0.351
	2012	0.295	0.311	0.302	0.327	0.295	0.434	0.351
	2013	0.294	0.310	0.302	0.327	0.295	0.435	0.351
	2014	0.289	0.311	0.297	0.322	0.290	0.436	0.351
	2015	0.289	0.311	0.297	0.322	0.290	0.436	0.351
	2016	0.289	0.312	0.297	0.322	0.289	0.437	0.352
Latvia	2011	0.338	0.354	0.352	0.373	0.352	0.531	0.409
	2012	0.346	0.360	0.359	0.380	0.359	0.530	0.414
	2013	0.352	0.364	0.366	0.384	0.366	0.530	0.416
	2014	0.357	0.367	0.371	0.390	0.369	0.530	0.420
	2015	0.363	0.371	0.377	0.393	0.375	0.529	0.422
	2016	0.366	0.373	0.380	0.396	0.377	0.529	0.424
Lithuania	2011	0.319	0.340	0.327	0.342	0.328	0.519	0.376
	2012	0.320	0.340	0.330	0.342	0.330	0.519	0.375
	2013	0.325	0.344	0.334	0.347	0.335	0.519	0.379
	2014	0.326	0.343	0.335	0.349	0.335	0.519	0.379
	2015	0.331	0.348	0.340	0.354	0.341	0.519	0.384
	2016	0.332	0.347	0.341	0.357	0.342	0.519	0.385
Luxembourg	2011	0.244	0.269	0.288	0.305	0.252	0.486	0.365
	2012	0.245	0.270	0.289	0.305	0.254	0.486	0.365
	2013	0.242	0.267	0.285	0.305	0.252	0.486	0.364
	2014	0.242	0.267	0.285	0.305	0.252	0.486	0.364
	2015	0.242	0.268	0.283	0.306	0.252	0.486	0.364
	2016	0.242	0.268	0.283	0.305	0.252	0.486	0.364
Hungary	2011	0.252	0.262	0.312	0.277	0.276	0.511	0.349
	2012	0.264	0.275	0.316	0.284	0.285	0.510	0.348
	2013	0.275	0.285	0.326	0.285	0.293	0.510	0.347
	2014	0.274	0.283	0.322	0.284	0.295	0.510	0.348
	2015	0.281	0.285	0.329	0.290	0.302	0.510	0.350
	2016	0.283	0.287	0.329	0.293	0.306	0.510	0.353
Croatia	2011	0.292	0.315	0.302	0.320	0.313	0.508	0.365
	2012	0.290	0.312	0.299	0.320	0.311	0.508	0.364
	2013	0.289	0.311	0.299	0.319	0.310	0.508	0.363
	2014	0.289	0.311	0.299	0.319	0.310	0.508	0.363
	2015	0.294	0.315	0.304	0.320	0.314	0.508	0.364
	2016	0.294	0.315	0.304	0.321	0.315	0.508	0.364
Malta	2011	0.275	0.307	0.277	0.311	0.276	0.433	0.338
	2012	0.276	0.307	0.277	0.311	0.277	0.433	0.338
	2013	0.278	0.309	0.279	0.312	0.279	0.433	0.340
	2014	0.280	0.311	0.281	0.312	0.281	0.433	0.339
	2015	0.281	0.314	0.283	0.312	0.282	0.433	0.341
	2016	0.282	0.312	0.283	0.313	0.283	0.433	0.339

Table 4A (continued). Effects of tax-benefit components on Gini coefficient

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Netherlands	2011	0.246	0.297	0.285	0.300	0.243	0.401	0.353
	2012	0.246	0.296	0.285	0.300	0.244	0.401	0.353
	2013	0.248	0.299	0.286	0.299	0.246	0.402	0.354
	2014	0.246	0.293	0.283	0.297	0.247	0.402	0.353
	2015	0.247	0.295	0.284	0.298	0.247	0.403	0.354
	2016	0.247	0.294	0.285	0.296	0.248	0.403	0.353
Austria	2011	0.256	0.283	0.287	0.314	0.270	0.498	0.367
	2012	0.256	0.284	0.287	0.314	0.269	0.498	0.367
	2013	0.255	0.283	0.285	0.314	0.269	0.498	0.367
	2014	0.254	0.283	0.285	0.313	0.269	0.498	0.367
	2015	0.254	0.283	0.285	0.313	0.268	0.498	0.367
	2016	0.257	0.285	0.287	0.314	0.270	0.498	0.367
Poland	2011	0.308	0.320	0.316	0.324	0.310	0.477	0.339
	2012	0.311	0.323	0.319	0.325	0.312	0.478	0.339
	2013	0.309	0.322	0.317	0.323	0.309	0.478	0.339
	2014	0.310	0.322	0.317	0.324	0.310	0.479	0.339
	2015	0.311	0.323	0.318	0.325	0.311	0.479	0.340
	2016	0.288	0.324	0.295	0.305	0.292	0.480	0.342
Portugal	2011	0.329	0.353	0.345	0.382	0.336	0.544	0.421
	2012	0.321	0.345	0.336	0.368	0.333	0.541	0.413
	2013	0.319	0.339	0.334	0.380	0.334	0.544	0.421
	2014	0.319	0.339	0.334	0.380	0.335	0.544	0.421
	2015	0.322	0.342	0.338	0.383	0.335	0.544	0.421
	2016	0.318	0.340	0.333	0.381	0.331	0.545	0.422
Romania	2011	0.317	0.343	0.328	0.338	0.328	0.515	0.380
	2012	0.318	0.342	0.328	0.339	0.329	0.512	0.379
	2013	0.319	0.342	0.329	0.340	0.330	0.511	0.379
	2014	0.324	0.349	0.334	0.345	0.335	0.517	0.386
	2015	0.315	0.344	0.331	0.339	0.329	0.518	0.388
	2016	0.322	0.349	0.336	0.345	0.336	0.522	0.394
Slovenia	2011	0.239	0.262	0.270	0.276	0.261	0.462	0.332
	2012	0.238	0.265	0.268	0.275	0.261	0.462	0.333
	2013	0.238	0.265	0.267	0.273	0.261	0.463	0.332
	2014	0.236	0.265	0.266	0.272	0.261	0.463	0.333
	2015	0.241	0.270	0.270	0.278	0.265	0.464	0.337
	2016	0.240	0.270	0.268	0.276	0.264	0.464	0.336
Slovakia	2011	0.222	0.241	0.240	0.244	0.235	0.420	0.286
	2012	0.223	0.240	0.241	0.244	0.235	0.420	0.285
	2013	0.222	0.240	0.242	0.243	0.236	0.420	0.284
	2014	0.225	0.241	0.244	0.245	0.239	0.420	0.285
	2015	0.226	0.241	0.245	0.247	0.241	0.420	0.286
	2016	0.228	0.243	0.247	0.249	0.243	0.420	0.288
Finland	2011	0.249	0.288	0.280	0.292	0.259	0.481	0.351
	2012	0.243	0.282	0.274	0.288	0.254	0.480	0.349
	2013	0.241	0.281	0.272	0.286	0.252	0.480	0.348
	2014	0.239	0.280	0.271	0.285	0.251	0.479	0.348
	2015	0.239	0.279	0.270	0.286	0.251	0.479	0.348
	2016	0.238	0.279	0.269	0.287	0.252	0.479	0.349
Sweden	2011	0.236	0.253	0.286	0.275	0.240	0.434	0.325
	2012	0.237	0.254	0.286	0.275	0.241	0.434	0.326
	2013	0.235	0.252	0.285	0.274	0.239	0.434	0.324
	2014	0.237	0.255	0.285	0.276	0.241	0.434	0.325
	2015	0.237	0.254	0.285	0.276	0.241	0.434	0.324
	2016	0.235	0.251	0.283	0.277	0.238	0.435	0.324

Table 4A (continued). Effects of tax-benefit components on Gini coefficient

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
United Kingdom	2011	0.310	0.401	0.343	0.351	0.327	0.521	0.474
	2012	0.309	0.398	0.341	0.350	0.326	0.521	0.473
	2013	0.311	0.398	0.344	0.352	0.328	0.522	0.472
	2014	0.312	0.398	0.344	0.352	0.329	0.522	0.473
	2015	0.312	0.398	0.344	0.353	0.329	0.523	0.473
	2016	0.314	0.399	0.346	0.356	0.332	0.523	0.474
EU-28 (weighted)	2011	0.294	0.329	0.315	0.332	0.302	0.501	0.383
	2012	0.294	0.329	0.314	0.332	0.302	0.500	0.382
	2013	0.292	0.327	0.312	0.332	0.301	0.501	0.382
	2014	0.292	0.326	0.311	0.332	0.301	0.501	0.383
	2015	0.292	0.326	0.312	0.333	0.301	0.502	0.383
	2016	0.291	0.327	0.310	0.332	0.300	0.502	0.384

Table 5A. Comparison of baseline poverty and inequality statistics: EUROMOD output (2011 incomes and policies) vs. Eurostat EU-SILC estimates

Country	Source	Poverty Risk: All			Poverty Risk (60%)		Poverty line	Gini
		50%	60%	70%	age<18	age 65+	€/year	
Belgium	EUROMOD	6.6	12.2	19.5	13.7	14.1	11,680	0.227
	Eurostat	8.3	15.3	24.3	17.3	19.4	12,168	0.265
Bulgaria	EUROMOD	13.3	19.7	27.1	24.4	26.6	1,688	0.316
	Eurostat	15.1	21.2	28.3	28.2	28.2	1,716	0.336
Czech Republic	EUROMOD	4.8	8.9	16.3	11.8	4.9	4,685	0.238
	Eurostat	5.1	9.6	16.6	13.9	6.0	4,675	0.249
Denmark	EUROMOD	6.5	11.2	18.8	8.3	7.7	15,625	0.242
	Eurostat	6.6	12.0	20.4	10.4	12.8	16,310	0.265
Germany	EUROMOD	5.9	13.3	22.0	13.2	13.7	11,758	0.261
	Eurostat	9.6	16.1	23.6	15.2	15.0	11,757	0.283
Estonia	EUROMOD	10.6	18.2	26.6	17.0	19.3	3,630	0.315
	Eurostat	10.9	17.6	26.8	17.0	17.2	3,592	0.325
Ireland	EUROMOD	6.3	15.7	24.7	20.1	2.3	11,746	0.275
	Eurostat	9.7	16.6	24.7	19.3	12.8	11,849	0.305
Greece	EUROMOD	15.1	21.7	29.0	24.3	14.9	5,783	0.346
	Eurostat	16.0	23.1	30.5	26.9	17.2	5,708	0.343
Spain	EUROMOD	14.5	21.9	29.2	28.3	17.0	7,363	0.322
	Eurostat	14.4	20.8	28.9	27.9	14.8	8,321	0.342
France	EUROMOD	6.4	12.7	20.6	16.9	7.5	11,651	0.303
	Eurostat	6.9	14.1	21.6	19.0	9.4	12,362	0.305
Italy	EUROMOD	11.3	18.9	26.5	25.1	15.8	9,352	0.329
	Eurostat	12.4	19.5	27.2	26.2	16.1	9,587	0.324
Cyprus	EUROMOD	6.4	13.7	22.1	12.1	31.3	10,349	0.295
	Eurostat	8.0	14.7	23.9	13.9	29.3	10,156	0.310
Latvia	EUROMOD	10.6	17.3	26.9	20.8	10.2	2,519	0.338
	Eurostat	13.4	19.2	28.2	24.4	13.9	2,670	0.357
Lithuania	EUROMOD	10.7	17.7	26.8	20.0	13.5	2,479	0.319
	Eurostat	11.3	18.6	27.0	20.8	18.7	2,602	0.320
Luxembourg	EUROMOD	1.5	9.1	22.2	13.6	1.9	19,406	0.244
	Eurostat	7.1	15.1	24.7	22.6	6.1	19,668	0.280
Hungary	EUROMOD	5.5	11.7	20.2	17.3	8.4	2,632	0.252
	Eurostat	8.4	14.3	22.0	22.9	6.3	2,818	0.272
Croatia	EUROMOD	12.6	19.5	25.8	20.1	26.1	3,237	0.292
	Eurostat	14.1	20.4	27.5	23.3	25.6	3,226	0.309
Malta	EUROMOD	9.3	16.8	25.9	24.1	16.5	6,905	0.275
	Eurostat	7.4	15.1	24.5	23.1	17.3	6,869	0.271
Netherlands	EUROMOD	4.5	10.3	18.7	14.2	4.4	12,781	0.246
	Eurostat	5.2	10.1	17.9	13.2	5.5	12,337	0.254
Austria	EUROMOD	7.1	13.6	21.4	15.8	12.8	12,699	0.256
	Eurostat	8.4	14.4	21.6	17.5	15.1	13,084	0.276
Poland	EUROMOD	10.5	17.2	24.8	21.5	13.4	3,091	0.308
	Eurostat	10.4	17.1	24.9	21.5	14.0	3,036	0.309
Portugal	EUROMOD	10.9	17.6	25.0	21.5	15.0	5,277	0.329
	Eurostat	11.4	17.9	24.9	21.8	17.4	4,994	0.345
Romania	EUROMOD	15.6	21.8	28.5	32.6	13.7	1,272	0.317
	Eurostat	16.5	22.9	29.6	33.3	14.4	1,229	0.340
Slovenia	EUROMOD	7.4	13.7	21.1	12.7	18.5	7,058	0.239
	Eurostat	7.4	13.5	20.7	13.5	19.6	7,273	0.237
Slovakia	EUROMOD	5.5	11.1	17.9	17.7	4.8	3,841	0.222
	Eurostat	7.8	13.2	20.4	21.9	7.8	4,156	0.253
Finland	EUROMOD	5.3	12.2	21.0	11.3	14.6	13,267	0.249
	Eurostat	6.0	13.2	21.8	11.1	18.4	13,619	0.259
Sweden	EUROMOD	7.5	13.3	21.7	15.3	12.2	14,535	0.236
	Eurostat	7.8	14.2	22.0	14.6	17.7	14,832	0.248
United Kingdom	EUROMOD	7.9	14.5	23.2	15.3	13.3	9,481	0.310
	Eurostat	9.2	16.0	24.6	18.0	16.4	11,500	0.313

Table 6A. Mean and median Marginal effective tax rates: 2011-2016 (2012 data)

		2011	2012	2013	2014	2015	2016
Belgium	Mean	52.2	52.1	52.2	52.1	52.1	52.3
	Median	55.0	55.0	54.8	54.8	54.8	55.1
Bulgaria	Mean	20.5	20.4	20.4	20.1	20.1	20.1
	Median	21.6	21.6	21.6	21.6	21.6	21.6
Czech Republic	Mean	27.3	27.4	28.2	27.5	27.5	27.6
	Median	31.1	31.1	31.1	31.1	31.1	31.1
Denmark	Mean	44.6	44.8	44.5	44.0	43.9	43.9
	Median	41.7	41.7	42.5	41.8	42.0	42.0
Germany	Mean	51.5	45.2	44.1	44.4	49.7	45.3
	Median	44.8	44.7	44.5	44.6	45.0	45.2
Estonia	Mean	23.5	23.9	23.4	23.8	22.3	24.6
	Median	24.0	24.8	24.2	24.2	22.9	22.9
Ireland	Mean	41.9	42.3	42.0	42.1	42.3	40.7
	Median	49.6	50.1	50.0	51.3	52.0	50.0
Greece	Mean	28.8	27.4	29.5	29.0	28.5	29.9
	Median	29.0	28.0	27.0	26.9	26.7	34.5
Spain	Mean	23.9	24.9	24.8	24.7	23.7	23.3
	Median	28.8	29.5	29.5	29.5	29.3	28.8
France	Mean	32.3	33.0	36.7	37.4	37.9	39.6
	Median	30.0	30.3	32.2	33.4	37.0	36.3
Italy	Mean	34.3	34.5	34.7	36.2	36.9	37.0
	Median	38.4	38.5	38.5	40.1	40.1	40.1
Cyprus	Mean	18.2	18.6	18.5	23.1	23.1	23.0
	Median	8.5	8.5	8.5	14.6	14.6	14.6
Latvia	Mean	34.5	34.2	32.6	31.1	30.2	30.4
	Median	33.3	33.3	32.4	32.0	31.1	31.1
Lithuania	Mean	28.1	27.4	27.3	26.9	26.8	26.3
	Median	27.0	27.0	27.0	27.9	27.9	29.1
Luxembourg	Mean	43.4	42.9	44.1	44.5	45.3	45.3
	Median	42.8	42.5	44.8	45.3	46.1	46.0
Hungary	Mean	38.7	39.0	36.2	36.0	35.2	34.3
	Median	37.8	34.5	34.5	34.5	34.5	33.5
Croatia	Mean	27.5	28.2	28.4	28.5	26.9	27.0
	Median	30.2	30.2	30.2	30.2	30.2	30.2
Malta	Mean	25.7	25.9	26.0	25.2	24.8	19.3
	Median	25.0	25.0	25.0	25.0	25.0	25.0
Netherlands	Mean	39.3	39.7	39.4	39.0	38.6	38.2
	Median	42.6	45.0	42.0	44.0	44.3	46.4
Austria	Mean	40.9	41.2	41.7	42.1	42.4	39.7
	Median	44.3	44.3	44.4	44.4	44.4	43.3
Poland	Mean	27.2	27.3	27.5	27.6	27.7	28.6
	Median	30.3	30.3	30.3	30.3	30.3	30.3
Portugal	Mean	29.0	28.1	32.5	32.7	31.6	31.8
	Median	25.0	25.0	25.5	25.5	25.5	27.5
Romania	Mean	33.8	33.2	32.9	34.6	33.2	34.0
	Median	31.9	31.9	31.9	31.9	31.9	29.9
Slovenia	Mean	33.7	35.3	34.5	36.0	36.3	36.6
	Median	33.6	34.1	33.4	34.6	34.6	34.6
Slovakia	Mean	28.9	28.8	31.0	30.8	31.4	31.4
	Median	29.9	29.9	29.9	29.9	29.9	29.9
Finland	Mean	41.7	42.4	42.8	43.5	43.9	44.2
	Median	43.4	44.0	44.2	45.0	45.2	45.8
Sweden	Mean	35.9	35.9	35.9	35.3	35.6	36.2
	Median	31.8	31.9	32.0	28.6	28.7	30.1
United Kingdom	Mean	40.2	39.9	38.7	38.4	38.3	38.2
	Median	33.8	33.8	33.7	33.6	33.6	34.3

Table 7A. Marginal effective tax rates by income component: 2011-2016 (2012 data)

	Policy year	Taxes	SIC	Benefits	Total (mean)
Belgium	2011	36.3	14.9	1.1	52.2
	2012	36.4	14.7	1.0	52.1
	2013	36.2	15.0	1.0	52.2
	2014	36.3	14.8	1.0	52.1
	2015	36.3	14.8	1.0	52.1
	2016	36.2	15.0	1.1	52.3
Bulgaria	2011	8.0	11.5	1.0	20.5
	2012	8.0	11.5	0.9	20.4
	2013	8.0	11.5	0.9	20.4
	2014	8.0	11.5	0.6	20.1
	2015	8.0	11.5	0.6	20.1
	2016	8.0	11.5	0.6	20.1
Czech Republic	2011	14.4	10.6	2.3	27.3
	2012	14.1	10.6	2.7	27.4
	2013	14.9	10.6	2.7	28.2
	2014	14.4	10.6	2.5	27.5
	2015	14.5	10.5	2.4	27.5
	2016	14.7	10.5	2.4	27.6
Denmark	2011	34.6	8.0	2.0	44.6
	2012	34.8	8.0	2.0	44.8
	2013	34.4	8.0	2.1	44.5
	2014	33.9	8.0	2.1	44.0
	2015	34.0	8.0	2.0	43.9
	2016	34.0	8.0	1.9	43.9
Germany	2011	24.7	22.4	4.5	51.5
	2012	23.1	16.3	5.8	45.2
	2013	22.9	15.2	6.0	44.1
	2014	23.3	15.4	5.7	44.4
	2015	24.9	20.5	4.3	49.7
	2016	24.0	15.7	5.5	45.3
Estonia	2011	18.5	3.4	1.6	23.5
	2012	18.5	3.8	1.5	23.9
	2013	18.8	3.1	1.5	23.4
	2014	18.8	3.2	1.8	23.8
	2015	18.0	2.8	1.5	22.3
	2016	19.6	2.8	2.2	24.6
Ireland	2011	27.6	7.9	6.4	41.9
	2012	27.8	8.0	6.4	42.3
	2013	27.9	7.5	6.6	42.0
	2014	28.0	7.5	6.6	42.1
	2015	28.4	7.4	6.5	42.3
	2016	27.0	7.2	6.6	40.7
Greece	2011	17.7	11.0	0.0	28.8
	2012	16.0	11.4	0.0	27.4
	2013	17.6	11.6	0.3	29.5
	2014	16.7	11.6	0.7	29.0
	2015	16.9	11.2	0.4	28.5
	2016	17.9	11.5	0.5	29.9
Spain	2011	18.4	4.9	0.6	23.9
	2012	19.5	5.0	0.4	24.9
	2013	19.5	5.0	0.3	24.8
	2014	19.4	5.0	0.3	24.7
	2015	18.4	5.0	0.4	23.7
	2016	17.9	5.0	0.4	23.3

Table 7A (continued). Marginal effective tax rates by income component

	Policy year	Taxes	SIC	Benefits	Total (mean)
France	2011	10.0	13.0	9.4	32.3
	2012	10.4	13.0	9.6	33.0
	2013	12.3	14.7	9.7	36.7
	2014	12.6	14.9	9.9	37.4
	2015	13.0	14.9	10.1	37.9
	2016	14.3	14.8	10.5	39.6
Italy	2011	24.0	9.4	0.9	34.3
	2012	24.0	9.7	0.9	34.5
	2013	24.1	9.7	0.9	34.7
	2014	25.4	9.8	0.9	36.2
	2015	26.1	9.9	0.9	36.9
	2016	26.1	10.0	0.9	37.0
Cyprus	2011	9.9	6.3	2.0	18.2
	2012	10.4	6.5	1.7	18.6
	2013	10.1	6.6	1.8	18.5
	2014	9.7	7.7	5.7	23.1
	2015	9.6	7.7	5.8	23.1
	2016	9.3	7.8	6.0	23.0
Latvia	2011	19.7	10.3	4.4	34.5
	2012	20.0	10.6	3.6	34.2
	2013	19.4	10.3	3.0	32.6
	2014	18.9	9.8	2.5	31.1
	2015	18.3	9.8	2.1	30.2
	2016	18.6	9.8	2.0	30.4
Lithuania	2011	14.4	9.4	4.2	28.1
	2012	14.4	9.5	3.6	27.4
	2013	14.5	9.5	3.4	27.3
	2014	14.4	9.5	3.1	26.9
	2015	14.6	9.5	2.8	26.8
	2016	14.1	9.5	2.7	26.3
Luxembourg	2011	23.8	12.5	7.1	43.4
	2012	23.6	12.2	7.2	42.9
	2013	25.3	11.8	7.0	44.1
	2014	25.5	11.9	7.1	44.5
	2015	26.0	11.8	7.5	45.3
	2016	26.1	11.8	7.5	45.3
Hungary	2011	19.4	18.8	0.5	38.7
	2012	18.3	19.6	1.1	39.0
	2013	15.6	19.6	1.0	36.2
	2014	15.6	19.4	1.0	36.0
	2015	15.6	19.4	0.1	35.2
	2016	14.6	19.6	0.1	34.3
Croatia	2011	11.2	16.0	0.3	27.5
	2012	11.9	16.0	0.3	28.2
	2013	12.0	16.0	0.4	28.4
	2014	12.0	15.9	0.6	28.5
	2015	10.3	16.0	0.6	26.9
	2016	10.5	16.0	0.5	27.0
Malta	2011	17.0	5.2	3.6	25.7
	2012	17.1	5.4	3.4	25.9
	2013	16.8	5.7	3.6	26.0
	2014	16.0	5.7	3.4	25.2
	2015	15.6	5.7	3.6	24.8
	2016	16.1	5.7	-2.6	19.3

Table 7A (continued). Marginal effective tax rates by income component

	Policy year	Taxes	SIC	Benefits	Total (mean)
Netherlands	2011	21.4	13.1	4.9	39.3
	2012	21.9	13.1	4.6	39.7
	2013	20.5	14.2	4.8	39.4
	2014	20.6	14.2	4.2	39.0
	2015	22.4	12.3	3.9	38.6
	2016	21.1	13.0	4.0	38.2
Austria	2011	21.0	16.0	3.8	40.9
	2012	21.4	16.0	3.8	41.2
	2013	21.4	16.1	4.2	41.7
	2014	21.5	16.3	4.2	42.1
	2015	21.6	16.6	4.2	42.4
	2016	19.1	16.2	4.4	39.7
Poland	2011	15.2	11.5	0.5	27.2
	2012	15.3	11.5	0.5	27.3
	2013	15.4	11.5	0.7	27.5
	2014	15.4	11.5	0.7	27.6
	2015	15.6	11.5	0.6	27.7
	2016	15.6	11.5	1.6	28.6
Portugal	2011	16.5	10.1	2.5	29.0
	2012	15.3	10.1	2.6	28.1
	2013	20.8	10.2	1.5	32.5
	2014	20.9	10.2	1.6	32.7
	2015	19.7	10.2	1.6	31.6
	2016	19.6	10.1	2.1	31.8
Romania	2011	19.3	8.3	6.2	33.8
	2012	19.4	8.5	5.4	33.2
	2013	19.5	8.3	5.1	32.9
	2014	19.5	8.3	6.8	34.6
	2015	19.5	8.4	5.3	33.2
	2016	19.4	8.3	6.3	34.0
Slovenia	2011	14.9	15.2	3.5	33.7
	2012	15.3	15.2	4.9	35.3
	2013	14.1	15.2	5.1	34.5
	2014	14.3	16.3	5.4	36.0
	2015	14.5	16.4	5.4	36.3
	2016	14.4	16.4	5.9	36.6
Slovakia	2011	13.1	11.5	4.3	28.9
	2012	13.1	11.5	4.2	28.8
	2013	12.4	14.4	4.2	31.0
	2014	12.4	14.7	3.7	30.8
	2015	12.6	15.6	3.1	31.4
	2016	12.7	15.7	3.0	31.4
Finland	2011	29.8	6.9	5.0	41.7
	2012	29.5	7.4	5.5	42.4
	2013	30.3	7.3	5.2	42.8
	2014	30.4	7.9	5.2	43.5
	2015	30.5	8.0	5.5	43.9
	2016	30.0	8.5	5.7	44.2
Sweden	2011	27.3	6.2	2.3	35.9
	2012	27.1	6.3	2.6	35.9
	2013	27.0	6.4	2.5	35.9
	2014	26.5	6.3	2.5	35.3
	2015	27.0	6.3	2.4	35.6
	2016	28.5	5.3	2.4	36.2

Table 7A (continued). Marginal effective tax rates by income component

	Policy year	Taxes	SIC	Benefits	Total (mean)
United Kingdom	2011	19.7	10.5	10.0	40.2
	2012	19.4	10.5	9.9	39.9
	2013	19.1	10.3	9.2	38.7
	2014	19.0	10.3	9.1	38.4
	2015	19.0	10.3	9.0	38.3
	2016	19.0	10.6	8.6	38.2

Table 1B. EUROMOD poverty and inequality statistics: 2013-2016 (2014 data)

	Policy year	Poverty risk: all			Poverty risk (60%)		Poverty threshold	Gini coefficient
		50%	60%	70%	age <18	age>=65	(€/year)	
Bulgaria	2013	14.5	20.5	28.0	28.6	22.5	1,989	0.335
	2014	14.5	20.9	28.4	28.2	24.8	2,087	0.335
	2015	15.0	21.2	28.7	28.0	26.7	2,223	0.339
	2016	15.1	21.2	28.6	27.9	26.9	2,292	0.340
Greece	2013	14.2	20.0	27.3	24.4	10.9	4,900	0.336
	2014	12.9	19.3	26.2	23.7	9.3	4,890	0.329
	2015	13.7	20.4	27.6	24.4	10.4	4,955	0.329
	2016	13.2	19.5	26.7	22.8	10.9	4,856	0.322
Spain	2013	16.1	22.3	29.6	30.5	11.1	7,943	0.338
	2014	16.2	22.4	29.6	30.6	11.4	7,930	0.337
	2015	16.2	22.4	29.8	30.1	12.0	8,017	0.337
	2016	16.2	22.4	29.7	30.1	12.0	8,052	0.338
Italy	2013	12.4	18.5	26.6	25.0	11.1	9,208	0.316
	2014	12.3	18.5	26.5	24.8	11.6	9,328	0.314
	2015	12.2	18.5	26.2	24.3	11.9	9,384	0.312
	2016	12.1	18.4	26.3	24.2	11.9	9,431	0.311
Cyprus	2013	7.3	14.2	24.2	11.4	26.9	9,023	0.338
	2014	5.9	13.3	23.1	11.7	21.1	8,826	0.333
	2015	5.8	13.2	23.1	11.7	21.0	8,795	0.333
	2016	5.5	13.1	22.9	12.0	18.9	8,662	0.333
Lithuania	2013	11.7	19.2	26.5	24.4	17.6	2,782	0.340
	2014	12.6	19.2	26.3	24.5	17.3	2,929	0.340
	2015	12.7	20.2	27.1	24.7	21.7	3,024	0.346
	2016	13.6	21.1	27.5	25.7	23.8	3,219	0.347
Croatia	2013	11.3	17.9	25.9	17.4	22.8	3,192	0.285
	2014	12.0	18.1	25.8	18.0	22.8	3,188	0.286
	2015	12.3	18.3	26.1	18.3	23.2	3,234	0.290
	2016	12.2	18.5	26.0	18.1	24.8	3,267	0.290
Malta	2013	6.2	14.5	24.9	17.4	18.7	7,837	0.270
	2014	6.3	14.7	25.2	17.6	18.1	7,982	0.272
	2015	6.0	15.1	24.8	17.3	20.2	8,144	0.276
	2016	6.4	15.0	25.0	17.6	19.0	8,210	0.276
Austria	2013	6.9	13.5	21.0	16.5	12.6	13,495	0.254
	2014	5.7	13.1	20.8	16.3	11.4	13,666	0.253
	2015	5.7	13.1	20.9	16.8	11.1	13,801	0.253
	2016	7.4	14.1	21.5	17.8	12.7	14,384	0.255

Table 1B (continued). EUROMOD poverty and inequality statistics

	Policy year	Poverty risk: all			Poverty risk (60%)		Poverty threshold	Gini coefficient
		50%	60%	70%	age <18	age>=65	(€/year)	
Poland	2013	10.7	17.8	24.9	22.5	11.9	3,039	0.305
	2014	11.2	18.1	25.3	23.3	12.0	3,290	0.306
	2015	11.2	18.0	25.3	23.1	12.2	3,367	0.306
	2016	8.2	13.8	21.9	9.1	13.5	3,526	0.285
Portugal	2013	13.4	19.2	26.1	24.7	15.0	5,080	0.331
	2014	13.3	19.2	26.2	24.6	15.1	5,086	0.332
	2015	13.7	19.4	26.6	24.7	16.1	5,167	0.335
	2016	13.4	19.4	26.7	24.4	16.4	5,235	0.329
Romania	2013	18.0	24.3	30.2	37.1	15.2	1,324	0.335
	2014	19.2	25.3	30.4	38.2	16.3	1,383	0.339
	2015	17.5	24.0	29.5	34.1	18.0	1,523	0.330
	2016	18.3	24.6	30.0	34.8	19.2	1,630	0.336
Slovenia	2013	7.2	13.6	20.4	12.6	16.2	6,986	0.242
	2014	6.7	13.4	20.7	12.7	16.4	7,026	0.240
	2015	6.7	13.5	20.6	12.6	16.5	7,096	0.244
	2016	6.0	13.1	20.5	11.9	16.4	7,129	0.242
Slovakia	2013	6.9	11.8	19.0	18.9	3.3	3,865	0.236
	2014	7.4	12.2	19.0	19.3	3.8	3,980	0.239
	2015	7.7	12.4	19.1	19.5	3.8	4,079	0.240
	2016	7.9	12.5	19.3	19.7	4.2	4,164	0.243
Finland	2013	4.8	11.4	20.6	10.7	11.7	13,874	0.244
	2014	4.7	11.4	20.4	10.9	11.3	13,968	0.242
	2015	4.6	11.3	20.2	11.4	10.8	14,068	0.242
	2016	4.6	11.5	20.5	11.5	11.4	14,215	0.241
United Kingdom	2013	7.6	14.3	23.4	15.1	13.4	10,578	0.301
	2014	7.7	14.5	23.5	15.2	13.5	11,465	0.301
	2015	7.7	14.5	23.8	15.3	14.1	11,824	0.301
	2016	8.0	14.8	24.3	15.7	14.3	11,406	0.304

Table 2B. Effects of tax-benefit components on poverty risk: 2013-2016 (2014 data)

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Bulgaria	2013	20.5	23.3	22.4	19.0	18.6	38.6	20.8
	2014	20.9	23.7	22.5	19.3	18.9	38.6	21.3
	2015	21.2	23.9	22.9	19.6	19.3	38.1	21.5
	2016	21.2	23.8	22.9	19.7	19.3	38.1	21.4
Greece	2013	20.0	23.4	21.1	18.1	15.4	43.6	17.4
	2014	19.3	23.7	20.2	17.4	14.6	44.1	17.8
	2015	20.4	23.7	21.4	18.3	15.7	44.1	17.9
	2016	19.5	23.1	20.6	17.7	14.4	43.2	17.0
Spain	2013	22.3	27.3	26.9	22.0	19.8	43.3	27.9
	2014	22.4	27.3	27.0	22.1	19.9	43.5	28.0
	2015	22.4	27.2	27.2	22.2	19.9	44.0	28.2
	2016	22.4	27.3	27.2	22.2	19.9	44.0	28.2
Italy	2013	18.5	21.6	21.5	16.5	16.2	39.8	19.2
	2014	18.5	21.6	21.4	16.7	16.2	40.0	19.3
	2015	18.5	21.5	21.3	16.7	16.2	40.1	19.4
	2016	18.4	21.5	21.2	16.9	16.1	40.2	19.5
Cyprus	2013	14.2	20.1	18.7	13.8	12.4	34.5	21.5
	2014	13.3	20.2	17.6	12.7	11.0	34.7	21.2
	2015	13.2	20.3	17.5	12.7	10.9	34.7	21.1
	2016	13.1	20.3	17.4	12.5	10.5	35.2	21.2
Lithuania	2013	19.2	20.7	22.0	18.1	17.5	37.1	19.1
	2014	19.2	20.6	21.9	18.2	17.2	37.2	19.1
	2015	20.2	21.4	23.1	18.9	18.2	36.5	19.8
	2016	21.1	22.0	23.3	20.2	18.6	36.6	20.5
Croatia	2013	17.9	22.2	21.1	17.8	14.9	37.3	19.6
	2014	18.1	22.3	21.2	18.0	15.0	37.3	19.4
	2015	18.3	22.3	21.4	18.3	15.2	37.3	19.6
	2016	18.5	22.6	21.5	18.5	15.2	37.2	19.5
Malta	2013	14.5	21.2	17.9	13.9	11.4	32.7	19.8
	2014	14.7	21.3	18.0	14.0	11.5	32.7	19.8
	2015	15.1	21.7	18.2	14.4	11.6	32.5	19.8
	2016	15.0	21.5	18.3	14.3	11.7	32.6	19.8
Austria	2013	13.5	16.2	21.4	12.5	9.9	35.3	17.1
	2014	13.1	16.1	21.2	12.1	9.7	35.2	16.9
	2015	13.1	16.2	21.2	12.0	9.7	35.2	16.9
	2016	14.1	16.8	21.7	13.5	10.3	36.0	17.7

Table 2B (continued). Effects of tax-benefit components on poverty risk

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Poland	2013	17.8	19.5	19.9	12.8	12.3	33.9	12.2
	2014	18.1	19.6	20.2	13.1	12.6	34.1	12.4
	2015	18.0	19.6	20.2	13.1	12.7	34.0	12.3
	2016	13.8	21.6	15.9	9.5	9.6	35.1	13.9
Portugal	2013	19.2	21.3	23.0	18.3	17.4	42.7	22.2
	2014	19.2	21.3	23.0	18.3	17.3	42.7	22.2
	2015	19.4	21.5	23.2	18.6	17.7	42.9	22.5
	2016	19.4	21.7	23.3	18.6	17.6	42.9	22.8
Romania	2013	24.3	26.9	26.5	21.0	21.7	40.6	23.1
	2014	25.3	27.6	27.2	21.8	22.7	41.1	23.6
	2015	24.0	27.5	27.0	21.4	21.9	41.1	24.2
	2016	24.6	27.6	27.2	21.9	22.9	41.4	24.5
Slovenia	2013	13.6	17.9	20.2	13.0	9.8	35.0	17.2
	2014	13.4	17.9	19.9	12.8	9.6	34.8	17.1
	2015	13.5	17.9	19.8	12.7	9.6	34.2	16.9
	2016	13.1	18.0	19.5	12.4	9.4	34.2	16.9
Slovakia	2013	11.8	14.6	16.4	11.4	7.8	30.4	12.8
	2014	12.2	14.7	16.4	11.6	8.2	30.2	12.8
	2015	12.4	14.6	16.6	11.7	8.5	30.1	12.8
	2016	12.5	14.5	16.8	11.7	8.6	29.8	12.8
Finland	2013	11.4	18.7	19.1	7.7	10.5	35.9	17.0
	2014	11.4	18.7	19.0	7.5	10.3	35.8	16.8
	2015	11.3	18.5	18.6	7.6	10.1	35.7	16.8
	2016	11.5	18.6	18.6	7.8	10.2	35.7	17.0
United Kingdom	2013	14.3	29.7	22.4	11.0	13.5	36.8	29.6
	2014	14.5	29.7	22.5	11.1	13.7	36.9	29.6
	2015	14.5	29.6	22.6	11.5	13.9	37.0	29.7
	2016	14.8	29.5	22.9	11.8	14.2	36.8	29.5

Table 3B. Effects of tax-benefit components on the poverty gap: 2013-2016 (2014 data)

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Bulgaria	2013	27.7	35.3	29.7	27.1	26.5	75.3	37.3
	2014	26.9	34.6	28.5	26.7	26.1	75.2	35.8
	2015	27.6	33.7	28.7	27.5	26.6	77.2	35.4
	2016	27.8	33.2	29.0	27.8	27.2	77.3	34.8
Greece	2013	30.8	32.4	31.8	28.8	29.1	95.9	33.4
	2014	29.3	32.3	31.3	28.0	29.8	94.6	33.1
	2015	27.9	31.9	29.0	28.0	26.3	94.9	32.8
	2016	26.6	31.7	28.2	26.7	25.7	98.4	33.3
Spain	2013	31.4	41.9	37.3	31.6	30.5	73.6	47.7
	2014	31.6	41.9	37.1	31.5	30.4	74.2	47.6
	2015	30.9	42.0	37.5	31.1	29.9	75.1	47.6
	2016	31.0	41.8	37.4	31.3	29.9	75.1	47.6
Italy	2013	28.7	30.0	31.4	31.6	29.4	84.5	37.2
	2014	28.9	30.1	31.6	31.7	29.6	85.8	37.2
	2015	28.9	30.1	31.4	31.6	29.7	87.2	37.0
	2016	29.0	29.8	31.2	31.3	29.5	87.2	36.9
Cyprus	2013	17.2	19.7	18.5	16.8	16.7	61.8	23.6
	2014	13.9	20.1	17.7	13.9	14.4	61.9	23.8
	2015	14.0	20.2	17.7	14.1	14.5	61.8	24.1
	2016	13.2	20.1	16.7	13.3	14.5	60.8	24.3
Lithuania	2013	22.0	29.0	24.1	20.1	20.1	87.0	31.3
	2014	24.0	29.2	25.0	23.1	21.9	87.1	32.2
	2015	23.6	27.9	24.3	22.5	22.0	88.3	29.6
	2016	23.5	27.1	25.1	22.6	23.4	88.4	29.6
Croatia	2013	22.5	28.9	26.7	22.5	21.7	95.3	35.2
	2014	22.3	28.5	27.5	22.3	21.6	95.8	34.9
	2015	23.2	28.9	27.2	23.1	22.2	95.8	35.2
	2016	22.5	28.5	26.5	22.5	21.7	96.1	35.1
Malta	2013	14.5	24.5	18.8	14.4	13.4	80.3	28.0
	2014	14.7	24.5	19.0	14.7	13.3	80.0	28.0
	2015	13.2	24.2	18.5	13.6	12.1	79.6	27.8
	2016	14.5	24.3	18.8	14.5	13.4	79.3	27.5
Austria	2013	17.3	24.5	20.3	17.4	14.5	93.4	34.2
	2014	16.6	24.8	19.7	16.6	13.9	93.5	34.4
	2015	16.0	24.6	19.4	16.0	13.6	93.5	34.2
	2016	17.5	24.6	20.7	18.1	14.9	92.4	34.7

Table 3B (continued). Effects of tax-benefit components on poverty gap

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Poland	2013	22.3	27.3	24.6	20.9	19.1	72.8	26.4
	2014	22.3	27.9	24.8	21.3	19.4	72.7	26.0
	2015	22.9	27.9	24.9	21.7	19.4	73.0	26.0
	2016	20.7	28.9	21.5	20.0	19.2	71.5	26.4
Portugal	2013	28.6	33.6	33.1	29.0	27.4	86.3	35.2
	2014	28.5	33.4	32.8	29.0	27.5	86.1	35.6
	2015	28.9	33.7	33.3	29.3	27.7	85.8	35.3
	2016	27.3	33.7	30.4	27.1	25.3	85.7	35.0
Romania	2013	33.0	39.9	34.9	32.8	35.1	85.2	49.4
	2014	32.6	42.1	35.4	32.3	35.5	86.6	52.8
	2015	28.8	41.1	36.1	26.9	31.9	86.7	51.4
	2016	32.1	43.6	37.2	29.8	33.0	87.6	53.4
Slovenia	2013	17.6	30.2	23.3	17.5	18.0	84.9	31.8
	2014	16.7	30.1	22.0	16.5	16.9	85.2	31.7
	2015	16.6	30.3	21.9	17.0	16.6	82.8	31.8
	2016	15.4	30.6	20.1	15.3	15.6	82.7	31.8
Slovakia	2013	19.9	30.4	24.5	18.9	21.3	98.1	36.9
	2014	21.0	30.5	25.9	20.5	22.9	98.4	37.3
	2015	21.7	29.8	25.9	21.2	24.2	98.8	37.5
	2016	22.7	30.5	26.0	22.1	23.8	98.9	37.7
Finland	2013	13.9	27.6	20.5	14.2	14.0	93.4	38.6
	2014	13.4	27.9	20.6	14.0	13.7	93.6	39.2
	2015	13.5	28.2	20.4	13.6	13.7	93.7	38.9
	2016	13.5	27.8	20.4	14.1	13.9	93.7	38.0
United Kingdom	2013	18.4	47.7	19.8	19.5	19.1	74.6	61.7
	2014	18.5	47.7	20.0	20.1	19.3	74.8	61.6
	2015	18.7	47.9	20.2	19.3	19.1	74.9	61.4
	2016	19.0	48.4	20.5	19.5	19.5	75.1	61.9

Table 4B. Effects of tax-benefit components on Gini coefficient: 2013-2016 (2014 data)

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Bulgaria	2013	22.3	27.3	24.6	20.9	19.1	72.8	26.4
	2014	22.3	27.9	24.8	21.3	19.4	72.7	26.0
	2015	22.9	27.9	24.9	21.7	19.4	73.0	26.0
	2016	20.7	28.9	21.5	20.0	19.2	71.5	26.4
Greece	2013	28.6	33.6	33.1	29.0	27.4	86.3	35.2
	2014	28.5	33.4	32.8	29.0	27.5	86.1	35.6
	2015	28.9	33.7	33.3	29.3	27.7	85.8	35.3
	2016	27.3	33.7	30.4	27.1	25.3	85.7	35.0
Spain	2013	33.0	39.9	34.9	32.8	35.1	85.2	49.4
	2014	32.6	42.1	35.4	32.3	35.5	86.6	52.8
	2015	28.8	41.1	36.1	26.9	31.9	86.7	51.4
	2016	32.1	43.6	37.2	29.8	33.0	87.6	53.4
Italy	2013	17.6	30.2	23.3	17.5	18.0	84.9	31.8
	2014	16.7	30.1	22.0	16.5	16.9	85.2	31.7
	2015	16.6	30.3	21.9	17.0	16.6	82.8	31.8
	2016	15.4	30.6	20.1	15.3	15.6	82.7	31.8
Cyprus	2013	19.9	30.4	24.5	18.9	21.3	98.1	36.9
	2014	21.0	30.5	25.9	20.5	22.9	98.4	37.3
	2015	21.7	29.8	25.9	21.2	24.2	98.8	37.5
	2016	22.7	30.5	26.0	22.1	23.8	98.9	37.7
Lithuania	2013	13.9	27.6	20.5	14.2	14.0	93.4	38.6
	2014	13.4	27.9	20.6	14.0	13.7	93.6	39.2
	2015	13.5	28.2	20.4	13.6	13.7	93.7	38.9
	2016	13.5	27.8	20.4	14.1	13.9	93.7	38.0
Croatia	2013	18.4	47.7	19.8	19.5	19.1	74.6	61.7
	2014	18.5	47.7	20.0	20.1	19.3	74.8	61.6
	2015	18.7	47.9	20.2	19.3	19.1	74.9	61.4
	2016	19.0	48.4	20.5	19.5	19.5	75.1	61.9
Malta	2013	22.3	27.3	24.6	20.9	19.1	72.8	26.4
	2014	22.3	27.9	24.8	21.3	19.4	72.7	26.0
	2015	22.9	27.9	24.9	21.7	19.4	73.0	26.0
	2016	20.7	28.9	21.5	20.0	19.2	71.5	26.4
Austria	2013	28.6	33.6	33.1	29.0	27.4	86.3	35.2
	2014	28.5	33.4	32.8	29.0	27.5	86.1	35.6
	2015	28.9	33.7	33.3	29.3	27.7	85.8	35.3
	2016	27.3	33.7	30.4	27.1	25.3	85.7	35.0

Table 4B (continued). Effects of tax-benefit components on Gini coefficient

	Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
Poland	2013	0.305	0.318	0.314	0.318	0.306	0.478	0.336
	2014	0.306	0.318	0.315	0.319	0.306	0.479	0.336
	2015	0.306	0.319	0.316	0.320	0.307	0.480	0.337
	2016	0.285	0.320	0.293	0.300	0.289	0.480	0.340
Portugal	2013	0.331	0.352	0.352	0.390	0.346	0.564	0.435
	2014	0.332	0.352	0.352	0.391	0.347	0.564	0.435
	2015	0.335	0.355	0.356	0.394	0.348	0.564	0.436
	2016	0.329	0.354	0.349	0.391	0.342	0.565	0.437
Romania	2013	0.335	0.359	0.345	0.356	0.345	0.522	0.394
	2014	0.339	0.366	0.348	0.360	0.349	0.529	0.401
	2015	0.330	0.360	0.345	0.353	0.342	0.529	0.403
	2016	0.336	0.365	0.350	0.359	0.349	0.533	0.408
Slovenia	2013	0.242	0.275	0.269	0.277	0.266	0.471	0.338
	2014	0.240	0.274	0.267	0.276	0.265	0.471	0.339
	2015	0.244	0.278	0.270	0.280	0.268	0.469	0.342
	2016	0.242	0.279	0.268	0.278	0.266	0.469	0.341
Slovakia	2013	0.236	0.261	0.257	0.258	0.248	0.432	0.305
	2014	0.239	0.263	0.260	0.261	0.251	0.433	0.307
	2015	0.240	0.263	0.261	0.263	0.253	0.433	0.307
	2016	0.243	0.264	0.263	0.265	0.255	0.433	0.309
Finland	2013	0.244	0.287	0.276	0.289	0.255	0.490	0.354
	2014	0.242	0.285	0.274	0.288	0.254	0.489	0.353
	2015	0.242	0.285	0.273	0.289	0.253	0.489	0.353
	2016	0.241	0.284	0.272	0.289	0.254	0.489	0.354
United Kingdom	2013	0.301	0.389	0.331	0.340	0.319	0.508	0.460
	2014	0.301	0.388	0.331	0.340	0.319	0.508	0.460
	2015	0.301	0.387	0.331	0.341	0.319	0.509	0.460
	2016	0.304	0.388	0.333	0.343	0.322	0.509	0.461

Table 5B. Comparison of baseline poverty and inequality statistics: EUROMOD output (2013 incomes and policies) vs. Eurostat EU-SILC estimates (2014 data)

Country	Source	Poverty Risk: All			Poverty Risk (60%)		Poverty line €/year	Gini
		50%	60%	70%	age<18	age 65+		
Bulgaria	EUROMOD	14.5	20.5	28.0	28.6	22.5	1,989	0.335
	Eurostat	15.8	21.7	28.0	31.7	22.6	1,987	0.354
Greece	EUROMOD	14.2	20.0	27.3	24.4	10.9	4,900	0.336
	Eurostat	15.7	22.1	28.8	25.5	14.9	4,608	0.345
Spain	EUROMOD	16.1	22.3	29.6	30.5	11.1	7,943	0.338
	Eurostat	15.9	22.2	29.7	30.5	11.4	7,961	0.347
Italy	EUROMOD	12.4	18.5	26.6	25.0	11.1	9,208	0.316
	Eurostat	12.7	19.4	26.6	25.1	14.2	9,455	0.324
Cyprus	EUROMOD	7.3	14.2	24.2	11.4	26.9	9,023	0.338
	Eurostat	7.8	14.4	24.2	12.8	22.4	8,640	0.348
Lithuania	EUROMOD	11.7	19.2	26.5	24.4	17.6	2,782	0.340
	Eurostat	11.4	19.2	26.6	23.5	20.1	2,894	0.350
Croatia	EUROMOD	11.3	17.9	25.9	17.4	22.8	3,192	0.285
	Eurostat	13.4	19.4	27.0	21.1	23.1	3,135	0.302
Malta	EUROMOD	6.2	14.5	24.9	17.4	18.7	7,837	0.270
	Eurostat	8.4	15.9	25.7	24.1	16.9	7,672	0.277
Austria	EUROMOD	6.9	13.5	21.0	16.5	12.6	13,495	0.254
	Eurostat	8.2	14.1	21.2	18.2	14.2	13,926	0.276
Poland	EUROMOD	10.7	17.8	24.9	22.5	11.9	3,039	0.305
	Eurostat	10.5	16.8	24.5	22.3	11.7	3,202	0.308
Portugal	EUROMOD	13.4	19.2	26.1	24.7	15.0	5,080	0.331
	Eurostat	13.8	19.5	27.1	25.6	15.1	4,937	0.345
Romania	EUROMOD	18.0	24.3	30.2	37.1	15.2	1,324	0.335
	Eurostat	19.0	25.0	31.0	39.3	15.7	1,293	0.350
Slovenia	EUROMOD	7.2	13.6	20.4	12.6	16.2	6,986	0.242
	Eurostat	9.1	14.5	21.6	14.8	17.1	7,146	0.250
Slovakia	EUROMOD	6.9	11.8	19.0	18.9	3.3	3,865	0.236
	Eurostat	8.4	12.6	19.7	19.2	6.2	4,086	0.261
Finland	EUROMOD	4.8	11.4	20.6	10.7	11.7	13,874	0.244
	Eurostat	5.5	12.8	22.2	10.9	16.0	14,221	0.256
United Kingdom	EUROMOD	7.6	14.3	23.4	15.1	13.4	10,578	0.301
	Eurostat	9.5	16.8	25.6	19.7	17.7	12,317	0.316

Table 6B. Mean and median Marginal effective tax rates: 2013-2016 (2014 data)

		2013	2014	2015	2016
Bulgaria	Mean	20.7	20.3	20.2	20.1
	Median	21.6	21.6	21.6	21.6
Greece	Mean	30.2	29.2	29.0	30.3
	Median	27.0	27.0	26.7	34.5
Spain	Mean	23.5	23.5	22.4	21.9
	Median	29.5	29.5	29.3	28.7
Italy	Mean	34.7	36.3	37.0	37.0
	Median	38.7	40.5	40.5	40.5
Cyprus	Mean	17.9	23.4	23.5	23.6
	Median	7.5	13.5	13.2	12.5
Lithuania	Mean	28.2	28.1	27.8	27.1
	Median	27.0	27.9	27.9	29.1
Croatia	Mean	27.6	27.6	26.0	26.4
	Median	30.2	30.2	30.2	30.2
Malta	Mean	25.2	24.3	23.9	21.4
	Median	25.0	25.0	25.0	25.0
Austria	Mean	40.8	41.0	41.3	38.9
	Median	44.3	44.3	44.4	43.3
Poland	Mean	27.7	27.7	27.7	28.7
	Median	30.3	30.3	30.3	30.3
Portugal	Mean	31.8	31.9	31.0	31.6
	Median	25.5	25.5	25.5	28.1
Romania	Mean	33.9	35.3	34.1	35.0
	Median	31.9	31.9	31.9	29.9
Slovenia	Mean	36.1	37.3	37.4	37.7
	Median	34.0	34.6	34.6	34.6
Slovakia	Mean	31.4	31.3	32.0	32.0
	Median	29.9	29.9	29.9	29.9
Finland	Mean	43.1	43.6	43.9	44.2
	Median	44.2	45.0	45.2	45.8
United Kingdom	Mean	39.2	38.8	38.7	38.7
	Median	34.2	34.1	34.1	34.8

Table 7B. Marginal effective tax rates by income component: 2013-2016 (2014 data)

	Policy year	Taxes	SIC	Benefits	Total (mean)
Bulgaria	2013	8.0	11.4	1.3	20.7
	2014	7.9	11.5	0.9	20.3
	2015	8.0	11.4	0.8	20.2
	2016	8.0	11.4	0.8	20.1
Greece	2013	18.0	11.7	0.4	30.2
	2014	16.8	11.7	0.7	29.2
	2015	17.0	11.2	0.7	29.0
	2016	17.9	11.6	0.9	30.3
Spain	2013	18.7	4.4	0.4	23.5
	2014	18.6	4.4	0.4	23.5
	2015	17.6	4.4	0.4	22.4
	2016	17.1	4.4	0.4	21.9
Italy	2013	23.9	9.9	0.8	34.7
	2014	25.4	10.0	0.9	36.3
	2015	26.0	10.1	0.9	37.0
	2016	25.9	10.2	0.9	37.0
Cyprus	2013	8.8	6.8	2.3	17.9
	2014	8.5	7.9	7.0	23.4
	2015	8.4	7.9	7.1	23.5
	2016	8.2	7.9	7.5	23.6
Lithuania	2013	14.7	9.5	4.0	28.2
	2014	14.8	9.5	3.9	28.1
	2015	14.8	9.4	3.5	27.8
	2016	14.6	9.4	3.0	27.1
Croatia	2013	10.9	16.0	0.7	27.6
	2014	10.9	16.0	0.7	27.6
	2015	9.5	16.0	0.5	26.0
	2016	9.7	16.0	0.7	26.4
Malta	2013	17.0	5.2	3.0	25.2
	2014	16.1	5.2	2.9	24.3
	2015	15.6	5.2	3.1	23.9
	2016	15.7	5.4	0.4	21.4
Austria	2013	21.7	16.0	3.2	40.8
	2014	21.7	16.1	3.2	41.0
	2015	21.9	15.9	3.5	41.3
	2016	19.3	16.5	3.1	38.9

Table 7B (continued). Marginal effective tax rates by income component

	Policy year	Taxes	SIC	Benefits	Total (mean)
Poland	2013	15.3	11.5	0.8	27.7
	2014	15.4	11.5	0.7	27.7
	2015	15.4	11.5	0.7	27.7
	2016	15.5	11.5	1.7	28.7
Portugal	2013	19.9	10.2	1.8	31.8
	2014	20.0	10.2	1.8	31.9
	2015	19.0	10.2	1.7	31.0
	2016	19.0	10.2	2.4	31.6
Romania	2013	19.5	8.3	6.2	33.9
	2014	19.4	8.3	7.5	35.3
	2015	19.4	8.3	6.4	34.1
	2016	19.2	8.3	7.5	35.0
Slovenia	2013	14.2	15.6	6.3	36.1
	2014	14.4	16.2	6.7	37.3
	2015	14.3	16.3	6.8	37.4
	2016	14.3	16.2	7.2	37.7
Slovakia	2013	12.6	14.6	4.2	31.4
	2014	12.7	14.9	3.7	31.3
	2015	12.7	15.9	3.4	32.0
	2016	12.8	15.9	3.2	32.0
Finland	2013	30.2	7.3	5.6	43.1
	2014	30.4	7.8	5.5	43.6
	2015	30.5	7.9	5.4	43.9
	2016	30.1	8.4	5.7	44.2
United Kingdom	2013	19.2	10.5	9.5	39.1
	2014	19.0	10.5	9.4	38.8
	2015	18.9	10.5	9.3	38.7
	2016	18.9	10.8	9.0	38.7

Table 1C. EUROMOD poverty and inequality statistics for Latvia: 2014-2016 (2015 data)

Policy year	Poverty risk: all			Poverty risk (60%)		Poverty threshold	Gini coefficient
	50%	60%	70%	age <18	age>=65	€/year	
2014	13.3	21.5	29.2	22.6	30.9	3,295	0.341
2015	14.3	22.0	29.7	21.5	34.9	3,482	0.347
2016	14.9	22.7	30.1	21.7	37.3	3,637	0.349

Table 2C. Effects of tax-benefit components on poverty risk for Latvia: 2014-2016 (2015 data)

Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
2014	21.5	21.5	25.2	18.4	19.2	34.2	19.4
2015	22.0	22.0	26.1	19.2	19.9	34.1	20.3
2016	22.7	22.7	26.7	19.9	20.4	33.9	20.9

Table 3C. Effects of tax-benefit components on poverty gap for Latvia: 2014-2016 (2015 data)

Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
2014	24.4	25.1	27.8	25.8	24.4	83.8	31.4
2015	24.4	25.1	27.9	25.3	24.5	84.0	30.1
2016	25.0	25.4	28.2	25.2	25.6	84.1	29.8

Table 4C. Effects of tax-benefit components on Gini coefficient for Latvia: 2014-2016 (2015 data)

Policy year	Disposable income (DPI)	DPI less means-tested benefits	DPI less non means-tested benefits	DPI plus direct taxes	DPI plus Social Insurance Contrib.	Original Income	Original Income plus pensions
2014	0.341	0.346	0.356	0.371	0.352	0.499	0.396
2015	0.347	0.351	0.362	0.374	0.358	0.499	0.400
2016	0.349	0.353	0.364	0.377	0.360	0.499	0.402

Table 5C. Comparison of baseline poverty and inequality statistics: EUROMOD output (2014 incomes and policies) vs. Eurostat EU-SILC estimates for Latvia (2015 data)

	Poverty risk: all			Poverty risk (60%)		Poverty threshold	Gini coefficient
	50%	60%	70%	age <18	age>=65	€/year	
EUROMOD	13.3	21.5	29.2	22.6	30.9	3,295	0.341
Eurostat	14.7	22.4	30.3	23.2	34.6	3,497	0.354

Table 6C. Mean and median Marginal effective tax rates for Latvia: 2014-2016 (2015 data)

Policy year	Mean	Median
2014	30.9	32.0
2015	30.0	31.1
2016	30.3	31.1

Table 7C. Marginal effective tax rates by income component for Latvia: 2014-2016 (2015 data)

Policy year	Taxes	SIC	Benefits	Total (mean)
2014	19.4	9.8	1.8	30.9
2015	18.7	9.8	1.5	30.0
2016	19.1	9.8	1.4	30.3