

EUROMOD NEWS

The tax-benefit microsimulation model for the European Union

EUROMOD is a tax-benefit microsimulation model for the European Union (EU) that enables researchers and policy analysts to calculate, in a comparable manner, the effects of taxes and benefits on household incomes and work incentives 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.

EUROMOD is a unique resource for cross-national research, designed to produce results that are comparable across countries and meaningful when aggregated to the EU level.

EUROMOD is managed, maintained, developed and updated by a [team of researchers in ISER](#). This is done in collaboration with [national experts](#).

The current version of EUROMOD represents the accumulation of technical developments and expertise over a number years and involving a large team of people. For more information on the design and development of EUROMOD [click here](#).

www.euromod.ac.uk



EUROMOD 20th Anniversary Conference call for papers

5-6 September 2016, ISER, University of Essex, UK

In 2016 EUROMOD, the EU wide tax-benefit microsimulation model will be 20 years old! We are celebrating the occasion with a conference to mark EUROMOD's achievements so far and to look forward to future developments

We invite you to submit abstracts (or papers) that make use of EUROMOD or are strongly related to how EUROMOD might be used.

The aim is to showcase all the many ways in which EUROMOD itself, as well as models built for non-EU countries using the EUROMOD software platform and approach, have been or could be used for research and policy analysis.

The conference will combine plenary sessions with poster sessions and there will be plenty of time for discussion, exchange and reflection.

There will be keynote presentations from people with strong associations, past or present, with EUROMOD-related research including Tony Atkinson, Olivier Bargain, Herwig Immervoll, Andreas Peichl and Holly Sutherland.

There will also be a panel session on policy uses of EUROMOD. And a party!

The conference's Scientific/Organising Committee members are [Holly Sutherland](#), [Francesco Figari](#), [Chrysa Leventi](#), [H. Xavier Jara Tamayo](#) and [Iva Valentinova Tasseva](#).

Please submit abstracts/papers to Iva Tasseva at itasseva@essex.ac.uk by 1 May 2016.

We will respond by the end of May and circulate a draft programme shortly after.



Who would gain and lose from changes to the new Scottish Rate of Income Tax?

From April 2016 Scotland will introduce the Scottish rate of income tax (SRIT) (Scotland Act 2012)

All income tax rates on non-savings and non-dividends income (i.e. earnings) will be reduced by 10p for Scottish taxpayers; the basic rate will be reduced to 10p in the pound, the higher rate to 30p and the additional rate to 35p. The Scottish Parliament will then be able to set SRIT, which will apply equally across the three rates.

Comparing UK income tax rate for England, Wales and Northern Ireland with Scottish rate of income tax, 2016-17

Income tax rate	Income band (£)	England, Wales and Northern Ireland	Scotland
Standard Personal Allowance ¹	Under 100,000	£11,000	£11,000
Basic rate	0 – 32,000	20%	10% + SRIT
Higher rate	32,001 – 150,000	40%	30% + SRIT
Additional rate	Over 150,000	45%	35% + SRIT

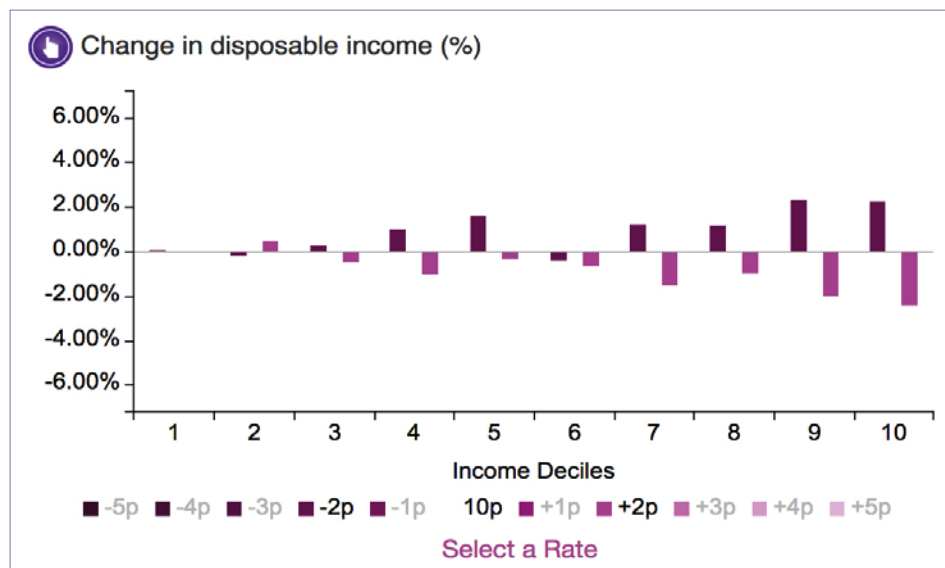
1 Personal Allowance tapers off for incomes over £100,000 at a rate of £1 for every £2, so the allowance is zero for income £121,200 or above.

SRIT can be set at zero or at any positive value with no upper limit. If SRIT is set at 10p then income tax rates will be the same in Scotland as in the rest of the UK. However, if the SRIT increases or decreases respect to the 10p baseline, it will change income tax liabilities of different income groups in different ways resulting in gains and losses across the Scottish population. The Scottish Government has proposed to set SRIT at 10p for 2016-17 ([Scottish Government 2015](#)).

Using EUROMOD, the Scottish Parliament Information Centre (SPICe) has developed a [web interactive tool](#) that allows users to see how different rates of SRIT would affect their net disposable income after benefits, taxes and national insurance contributions have been taken into account.

The online tool allows users to see how different income decile groups would be affected under five scenarios of increased and decreased SRIT from a baseline of 10p in the pound. It is pictured below comparing the policy distribution effect of different levels of SRIT (i.e. -2p and +2p)

An introduction to the Scottish Rate of Income Tax (SRIT) provided by SPICe can be found [here](#) and [here](#).



Where they turned up

Since the last edition of *EUROMOD NEWS*, newly-published journal articles using EUROMOD include:

Figari F. and Fiorio C.V. (2015) Fiscal Consolidation Policies in the Context of Italy's Two Recessions, *Fiscal Studies*, 36(4) 499–526.

Let us know of your journal publications using EUROMOD, and don't forget to submit your articles to the EUROMOD working paper series!

EUROMOD-related research presented at conferences

The **ImPRovE Final Conference** took place in Antwerp on 3-5 February 2016. Six EUROMOD-related papers were presented in the sessions on 'Measuring the Impact of Social and Fiscal Policies' and 'Identifying Policies That Work'. The full programme of the conference is available [here](#).

Summer school on cross-country microsimulation using EUROMOD

ISER will be holding a summer school on cross-national microsimulation using EUROMOD from 18-20 May 2016.

The aim of the course is to provide academics, policy practitioners and other interested users with an introduction to EUROMOD. Participants will gain a good understanding of how EUROMOD works and to be capable of using it for their own purposes. The summer school is supported by InGRID, a large multinational research infrastructure network of which ISER is a member. The full call for applications can be found [here](#). The deadline for applications is Friday 6 March 2016.

Recent tax-benefit policy changes and how they affected household incomes in all EU countries

A new report using the just-released version of EUROMOD shows on a country-by country basis how household incomes changed due to tax-benefit policies in the periods 2013 to 2014 and 2014 to 2015

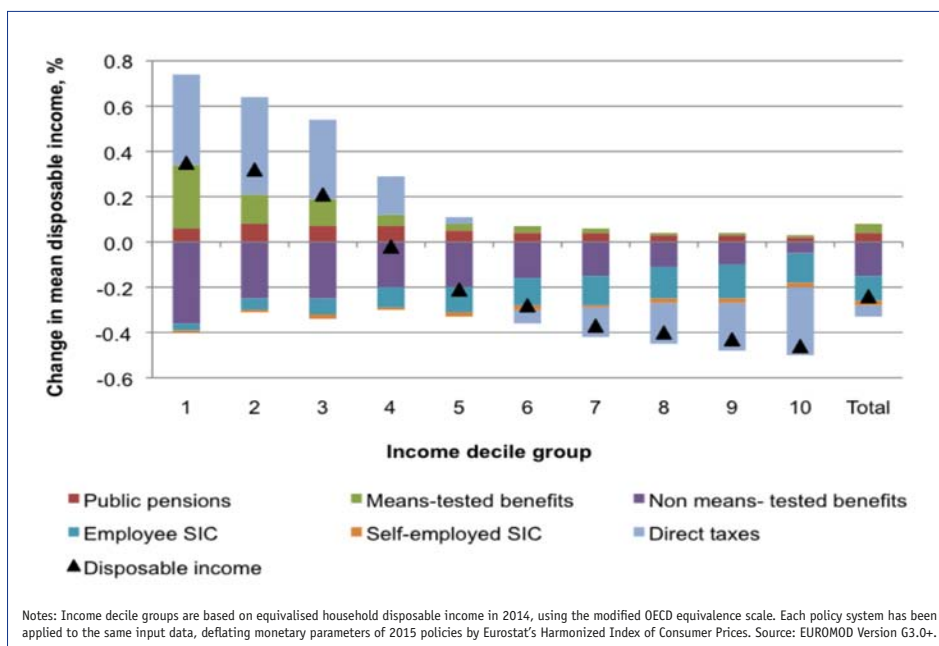


The analysis captures the first-order effect of reforms and of changes (or lack of them) to benefit levels and tax thresholds relative to what would have happened if the whole system had simply been indexed for inflation.

It shows the effects across the household income distribution and by type of policy.

As an illustration, the effects of policies in Finland in the period 2014 to 2015 are shown here. This demonstrates how changes to many of the components of the system had the net effect of a small reduction in household incomes overall (-0.24%), shown by the black triangle in the final bar. However, the effect was tilted in favour of proportionally increasing the incomes of lower income households and reducing the incomes at the top of the distribution.

To see what the picture looked like the year before, and in all of the other EU-28 countries, download the report [here](#).



'SOUTHMOD': developing EUROMOD 'spin-off' models across Africa, Asia and Latin America

Working alongside South African Social Policy Research Insights (SASPRI), in a project funded and led by UNU-WIDER, members of the EUROMOD team at ISER have begun work on an ambitious research and development project

This project will build tax-benefit microsimulation models, based on the EUROMOD platform, for a selection of developing countries. These models will collectively be known as 'SOUTHMOD'.

The main focus of the project will be on Africa where microsimulation models will be constructed for Ghana, Ethiopia, Zambia, Tanzania and Mozambique. These new models will complement existing models for South Africa (SAMOD) and Namibia (NAMOD), which are also based on EUROMOD and have been put together by SASPRI. To provide further comparability, a model will be built for one country from Latin America (Ecuador) and initial scoping for one country from Asia (Vietnam) will be undertaken.

In producing these new microsimulation models, the project aims to shed fresh light on the system-wide impacts of social protection and tax

systems in these countries, providing the analytical tools for policy makers and researchers alike to understand the current tax-benefit systems and to be able to simulate the impacts of policy changes – real and potential.

Whilst oversight of SOUTHMOD remains with UNU-WIDER, ISER and SASPRI, engaging local teams of model developers in each country is critical to the project's success. In addition to providing the technical platform for these models in the form of EUROMOD software and tools, ISER's role is to support the Ghanaian and Ethiopian teams. ISER staff will also be involved in the training of all local developers, in producing new tools and software add-ons for analysing income distributions, and in the construction of the model in Ecuador.

The project runs from 1 December 2015 until 31 January 2017.



Slavko Bezeredi and Ivica Urban of the EUROMOD Croatian team

Meet the EUROMOD national teams: the Croatian team

In this edition of *EUROMOD NEWS*, we introduce you to the two members of the Croatian EUROMOD team

The current members of the Croatian team are Ivica Urban and Slavko Bezeredi, who are both researchers at the Institute of Public Finance (IPF), Zagreb.

IPF is a scientific research organisation devoted to topics related to public sector economics. With its 13 employed researchers, IPF participates in various international projects (PROGRESS, Marie Curie, IBP). It performs policy oriented research studies of the Croatian public sector, for the ministries of finance, science, economy, and other domestic institutions. IPF publishes a scientific journal called *Financial Theory and Practice*. Among other publications, its newsletters and press releases inform the public on actual developments and advocate for a more efficient and transparent fiscal system in Croatia.

Ivica Urban obtained his PhD degree in 2010 from the Faculty of Economics, University of Ljubljana. During his doctoral research, he created a first tax-benefit microsimulation model for Croatia, which was used to study the redistributive effects of the country's fiscal system. The topic of income redistribution remains the focus of his research.

The above mentioned microsimulation model was further developed in cooperation with Slavko Bezeredi, who came to IPF in 2011. Slavko is currently a doctoral student

at the Faculty of Economics and Business, University of Zagreb, and analyses the impact of the Croatian tax-benefit system on work incentives.

How long the team have been working with EUROMOD

Before the Croatian EUROMOD team was formed, Ivica and Slavko had already participated in two EUROMOD conferences (in Bucharest and Lisbon). The activities regarding the inclusion of Croatia in EUROMOD started in 2013. However, most of the work was done in the period from December 2014 to December 2015.

On behalf of the EUROMOD development team, Chrysa Leventi led the 'induction project'. Quite a lot of work! However, very pleasant and interesting work, through which Ivica and Slavko gained valuable experience.

Some highlights of recent research by the Croatian EUROMOD team

In autumn 2015 Ivica and Slavko started a research project on the 'Application of Microsimulation Models in the Analysis of Taxes and Social Benefits in Croatia', which is financed by the Croatian Science Foundation. Their collaborators are Holly Sutherland and Chrysa Leventi from ISER, and Saša Jakšić

from the Faculty of Economics and Business, University of Zagreb.

One of the main goals of the project is to demonstrate the applicability of microsimulation models in designing the Croatian tax-benefit system. The areas that will be investigated are child benefits, personal income tax, in-work policies and local government social benefits. EUROMOD will be the basic tool for simulation and analysis.

During the project they also plan to build a model *miCROmod*. It will be based on the EUROMOD programming platform and will be consistent with the EUROMOD Croatian module. *miCROmod* will simulate two features that are not available in EUROMOD: local government social benefits and changes in labour supply. They expect to achieve significant synergies between EUROMOD and *miCROmod*.

How research with EUROMOD is used by policy makers and others in Croatia

The Croatian economy is faced with high public debt, low employment rate and relatively high poverty rate. Policy makers in Croatia are aware that the current tax-benefit system should be redesigned to cope with these problems; they also ascertain that microsimulation models are necessary in planning tax-benefit reforms.

However, tax-benefit microsimulation is not systematically used in shaping public policies. Their project attempts to change this situation. On 18 February 2016, IPF organised a round table on microsimulation, which was intended for policy makers, administration officials and the academic community. At this round table Ivica and Slavko presented the goals of their project. Participants were acquainted with EUROMOD: its purpose, structure and applications. For those interested in programming, a short overview of the EUROMOD interface took place. The team also presented the Country Report and the first results obtained by the Croatian EUROMOD module.

Microsimulation modellers rely on tax-benefit legislation, which describes the eligibility rules and the calculation of tax or benefit amounts. However, often this legislation does not tell the whole story: the modellers are also dependent on the advice of those who put these laws into practice. Therefore, during the project Ivica and Slavko have attempted to establish cooperation with public officials, whom they can consult about the precious details on how certain taxes or benefits functions in reality. They hope this cooperation will continue to be fruitful, for both parties.

EUROMOD release G3.0+ available!

The most recent G3.0+ release of EUROMOD now includes, for the EU-28 countries:

- tax-benefit policies up to 2015 for most countries and tax-benefit policies up to 2014 for six countries (Hungary, Lithuania, Luxembourg, Malta, Romania and Slovenia);
- input data from 2012 SILC for all countries and revisions to previous input data; and
- an updated version of the EUROMOD user interface, with multiple improvements and fixes.

The model includes a useful built-in Help which provides detailed information about the new features and improved functionalities of the model.

Country Reports are available to download [here](#). Information on how to access EUROMOD G3.0+ can be found [here](#).

New features now available at euromod.ac.uk

To coincide with the release of EUROMOD version G3.0+, we've added some new features to the website.

First, a set of EUROMOD exercises, based on version G3.0+, has been constructed and uploaded [here](#). The exercises are split by difficulty level, topic and country, and accompanied by explanations showing one way to solve each query. The document also contains user-friendly links which enable easier navigation through the exercises.

Second, the 'Accessing EUROMOD' pages have had a small makeover. Chief among the changes is the creation of an online form for requesting EUROMOD and input data.

This form replaces the old Word form and is designed to make life easier both for those applying for access and those administering the access process. And it will save trees. The new form can be accessed [here](#).

We would be delighted to receive feedback on any of these developments. Let us know at euromod@essex.ac.uk

Working papers

The redistributive and stabilising effects of an EMU unemployment benefit scheme under different hypothetical unemployment scenarios

EUROMOD Working Paper Series EM18/15

Authors [Holguer Xavier Jara Tamayo](#)

[Alberto Tumino](#)

[Holly Sutherland](#)

Publication date 24 December 2015

Abstract The idea of a common unemployment benefit system for the European Monetary Union (EMU) has provoked increasing interest in both the political and academic spheres because of its potential to smooth fluctuations in income across member states and to strengthen income security for the unemployed. In this paper, we simulate two hypothetical negative employment shocks and make use of the microsimulation model EUROMOD to explore the implications for income protection of the introduction of an EMU unemployment insurance (EMU-UI) scheme, for a selected number of countries of the Monetary Union. Our results show that the EMU-UI has the potential to reduce the risk of poverty for those affected by the negative employment shock and to have an additional positive effect on within-country income stabilisation, although the effects of the EMU-UI vary considerably in size across the countries analysed.

Echelles d'équivalence du temps de travail: évaluation de l'impôt sur le revenu en Belgique à la lumière de l'éthique de la responsabilité

EUROMOD Working Paper Series EM17/15

Authors [Francois Maniquet](#)

[Dirk Neumann](#)

Publication date 23 December 2015

Abstract To what extent do income taxation systems decrease poverty? We raise this question under the assumption that well-being is defined in line with the ethics of responsibility. It requires considering that not all inequalities are unjust. Here, we do consider that inequalities stemming from labor time differences are not unjust. To compare households of different sizes, we introduce a labor time equivalence scale. We apply the resulting method to the Belgian tax system.

A minimum income in Italy

EUROMOD Working Paper Series EM16/15

Author [Letizia Ravaqli](#)

Publication date 22 December 2015

Abstract Due to the worsening of economic crisis across European countries, the problem of poverty and the ways to tackle it returned at the centre of political and scientific debate. The level of poverty increased after the crisis, especially in Mediterranean countries such as Italy, Spain and Greece. One of the main measures to protect individuals against poverty and social exclusion is Minimum Income (MI). Since 1992 the European Commission, with the Council Recommendation 92/441/EEC, called for the introduction in all Member States of a guaranteed MI. In 2010, as part of the Europe 2020 Strategy, a resolution of the European Parliament emphasized the role of MI in fighting poverty and promoting an inclusive society. Almost all EU countries adopted a MI with different rules and approaches, but Italy still lacks a universal form of protection against poverty and social exclusion. Accordingly, this paper has two main aims: first, to study European experiences of MI; second, to estimate costs and benefits of a proposal for a MI in Italy. In order to achieve these goals EUROMOD, the tax-benefit microsimulation model for the European Union, will be used.

An Unemployment Insurance Scheme for the Euro Area? A Comparison of Different Alternatives Using Micro Data

EUROMOD Working Paper Series EM15/15

Authors [Mathias Dolls](#)

[Clemens Fuest](#)

[Dirk Neumann](#)

Publication date 22 December 2015

Abstract We analyse different options for the design of a common unemployment insurance system for the euro area (EA). We assess their effectiveness to act as an insurance device in the presence of asymmetric macroeconomic shocks. Running counterfactual simulations based on micro data for the period 2000-13, we quantify the trade-off between automatic stabilisation effects and the degree of cross-country transfers. In the baseline, we focus on a non-contingent scheme covering short-term unemployment and find that it would have absorbed a significant fraction of the unemployment shock in the recent crisis. However, four member states of the EA18 would have been either a permanent net contributor or net recipient. Our results suggest that contingent benefits could limit the degree of cross-country redistribution, but might reduce desired insurance effects. We also study heterogeneous effects within countries and discuss moral hazard issues at the level of individuals, the administration and economic policy.

EUROMOD: introducing the team

In this edition of *EUROMOD NEWS*, Olga Rastrigina, Senior Research Officer, describes her work

What is your background? I joined the EUROMOD family in 2010 when I became a member of the Latvian national team. At that time I was working as a research fellow at the Baltic International Centre for Economic Policy Studies (BICEPS). Together with Alberto Tumino, Anna Zasova and Kristine Vasiljeva we developed the first (ever) tax-benefit microsimulation model for Latvia. That was a very good time. Later when there was a job opening in ISER I decided to apply.

What are your research interests? I was trained as an economist. I graduated from the Central European University in Budapest. Out of many areas of economics I have always given preference to those that are closer to people and their well-being. I am interested in income inequality, poverty and social exclusion, distributional effects of fiscal policy and gender inequality.

Which countries do you work on? I am currently responsible for Latvia, Finland and Spain. Up until recently I have also worked on Belgium. I enjoy working on a mix of countries with such different welfare systems and policy issues. It helps to understand and appreciate the diversity of Europe.



Olga Rastrigina

“...I very much enjoy the multicultural environment, inspiring working atmosphere and the sense of cooperation and mutual support of the EUROMOD team...”

Do you have any special responsibilities?

I am a member of the EUROMOD Technical Committee that meets once a month to discuss technical issues related to model implementation and software development. I also prepare the Stata templates for transforming the EU-SILC micro data into EUROMOD input data. I enjoy these ‘special’ responsibilities, because in this way I feel that I am contributing to making EUROMOD a more powerful and user friendly tool. Also, as many of my colleagues know, I am obsessed with synchronisation and harmonisation across countries!

What are you working on at the moment?

One of the key directions of my work is nowcasting. Together with my colleagues Chrysa Leventi, Holly Sutherland and Sanja Vujackov we undertook the challenging task of predicting what the EU-SILC data will show in terms of poverty and income inequality for the current period (the actual EU-SILC data is usually available with a 2-3 years lag). We are developing a method based on microsimulation techniques that can be used for all EU-28 countries. This is not easy because the factors that trigger changes in the income distribution vary considerably over time and across countries.

What do you enjoy most about working with EUROMOD?

I appreciate EUROMOD as a tool that can be used for timely and policy relevant analysis to address country-specific policy issues as well as to conduct comparative EU-level studies. I enjoy seeing how EUROMOD improves and develops new features over time that make the analysis easier and faster. Last but not least, I very much enjoy the multicultural environment, inspiring working atmosphere and the sense of cooperation and mutual support of the EUROMOD team.

Would you like to share any recent highlights?

Recently I have started to work on the new project led by the the World Institute for Development Economics Research of the United Nations University (UNU-WIDER) in collaboration with the South African Social Policy Research Insights (SASPRI) and ISER. This project aims at supporting five African countries, one Latin American and one Asian country to develop their own tax-benefit microsimulation models using EUROMOD as a platform. I find this project fascinating. The work is only in its starting phase but I already feel that I learned so much about the specificities and challenges in these countries.



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