

# 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.iser.essex.ac.uk/euromod](http://www.iser.essex.ac.uk/euromod)



University of Essex, home of the Institute for Social and Economic Research

## Understanding Changes in Income Inequality in the Austerity Period Workshop

**Registration is now open for this workshop at the University of Essex UK, on 15-16 September 2014, jointly organised by the ESRC Research Centre on Micro-Social Change and the EUROMOD Project, both based at the Institute for Social and Economic Research (ISER)**

**The workshop will provide the opportunity for academics to discuss different aspects of inequality in economic outcomes (household income, consumption, wealth, earnings, employment) in developed societies and to assess how welfare states are responding, or might respond to economic shocks such as the recent financial and economic crisis.**

The keynote speaker will be Professor Richard Blundell (UCL and Institute for Fiscal Studies). Other speakers include Philippe Van Kerm (CEPS/INSTEAD, Luxembourg) on 'Household income mobility during Great Recession years in Europe' and Rolf Aaberge (Statistic Norway): 'The ins and outs of top income mobility'; Mathias Dolls (ZEW), Karina Doorley (IZA), Alari Paulus (University of Essex) and Hilmar Schneider (CEPS/INSTEAD) on 'Decomposing changes in the income distribution in Europe in 2030'; Anne-Catherine Guio (CEPS/INSTEAD),

Eric Marlier (CEPS/INSTEAD) and Marco Pomati (University of Bristol) on 'Evolution of material deprivation during the crisis'.

On the second day there will also be presentations from Andreas Peichl (ZEW) on 'Crisis, austerity and automatic stabilisation'; Daniel Waldenström (Uppsala University) and Jacob Lundberg (Uppsala University) on 'Wealth inequality and the Great Recession: Evidence from Sweden'; Rachel Griffith (IFS), Martin O'Connell (IFS) and Kate Smith (IFS) on 'Shopping around? Households' ability to maintain nutritional quality over the Great Recession'; and Marianne E. Page (University of California, Davis) and Xiaohan Zhang (University of California, Davis) entitled 'The Kids Will Be Alright: Long Term Effects of 'Growing Up' During a Recession'.

The programme and online registration form as well as details about the workshop can be found here. ●

## The latest G2.0+ EUROMOD release is available

The latest release of EUROMOD G2.0+ is now available and includes:

- tax-benefit policies up to 2013 for 27 EU countries;
- input data from 2010 SILC for most EU countries;
- revisions to 2008 data for four EU countries.

Access to this EUROMOD release can be obtained by emailing us here. ●

EUROMOD country reports covering 2009-2013 policies are available to download by clicking here. ●

## New EU27 statistics from EUROMOD are now available to download

The latest EUROMOD statistics on the distribution and decomposition of disposable income in are now ready to download.

They include information on 27 EU Member States: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden and the United Kingdom.

The statistics, which can be downloaded here ● provide estimates of:

- income components (taxes and benefits) by household income decile group;
- effects of tax-benefit components on inequality;
- effects of tax-benefit components on poverty risk;
- effects of tax-benefit components on poverty gap;
- poverty thresholds;
- marginal effective tax rates.

The policy years simulated are 2007-2013 (as at June 30). This release of the statistics uses EUROMOD version G2.0.

# Poverty levels in Europe are expected to rise despite first signs of recovery

## New research from EUROMOD showing little improvement in the social situation across Europe despite the first signs of recovery

According to the March edition of the **EU Employment and Social Situation Quarterly Review** published by the EU Commission, the recent and currently fragile economic recovery has not yet been able to create new jobs and the social situation in the EU shows little signs of improvement so far.

Poverty and social exclusion continued to rise in 2011 and 2012 and, according to the latest available data, using EUROMOD, a

further increase is estimated in 2013 for those countries where economic and labour market conditions have continued to deteriorate.

The analysis reflects significant differences among countries. In Greece and Portugal, further reforms of the tax and benefit systems in 2012-13 reduced incomes across the income distribution. In other countries (i.e. Estonia, Latvia, Lithuania and Romania) the overall impact on household incomes was positive, with lower income households benefiting most in proportional terms from the changes in the most recent year. In the UK and Spain, households in the bottom of the distribution have seen the strongest reductions in their income due to policy changes in 2012-13. Click here ● for the EU Commission press release.



The Meuse River in Maastricht

## European Meeting of the IMA in October



International  
Microsimulation  
Association

The United  
Nations University  
– Maastricht

**Economic and Social Research Institute on Innovation and Technology (UNU-MERIT) and its School of Governance have launched a call for papers for the upcoming European Meeting of the International Microsimulation Association, 23-24 October 2014, Maastricht, The Netherlands.**

The conference is open to all areas of microsimulation including static, behavioural and spatial microsimulation methodologies, covering a wide range of policy domains. Holly Sutherland, Director of EUROMOD, will be one of the two keynote speakers. Participants are invited to register and submit abstracts by 1 August 2014. More information here. ●

## Where they turned up

**A selection of newly-published journal articles using EUROMOD**

Fernández Salgado M., F. Figari, H. Sutherland and A. Tumino (2014). Welfare compensation for unemployment in the Great Recession. *Review of Income and Wealth*, 60(S1), 177–204

Matsaganis M. and C. Leventi (2014). Poverty and Inequality during the Great Recession in Greece. *Political Studies Review*, 12(2), 209-223

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

# Meet the EUROMOD national teams: the Austrian team

Home to the Austrian EUROMOD team, the European Centre for Social Welfare Policy and Research in Vienna is a UN-affiliated intergovernmental organisation concerned with all aspects of social welfare policy and research



Michael Fuchs



Katrin Gasior

The two members of the Austrian EUROMOD team are Michael Fuchs and Katrin Gasior.

Michael has been Researcher at the European Centre for Social Welfare Policy and Research ● in Vienna since 2000. He studied Sociology at the University of Vienna. His research focuses on family policy, social-insurance related benefits, poverty and social assistance, microsimulation of taxes and benefits. Katrin is Sociologist and Educational Scientist at the European Centre. Her research focuses on poverty and social inclusion, social mobility as well as comparative research on modern welfare states and their social security systems.

They have been part of the EUROMOD team since 2002. The first contact with the network took place at a user workshop in Cambridge. Since then they were responsible for the modelling of the Austrian tax-benefit-system within EUROMOD.

One of the recent highlights of the Austrian EUROMOD team recent research is SORESI – a web application that offers web users the possibility to get informed about the current Austrian social benefits and tax regulations as well as to test the effects of reforms on the social situation of the Austrian population. Users can implement reforms on a user friendly input mask, these changes are then implemented into the EUROMOD model running in the background of the website. Users can change parameters of social insurance contributions, income tax as well as monetary benefits. A wide range of output tables present

the results of these changes and provide a base to analyse their social impact. The model uses the latest Austrian national EU-SILC 2012 dataset for the input micro-data. Compared to EUROMOD, SORESI makes more extended use of the underlying EU-SILC data instead of simulating specific income components. With this approach, the status quo can be modelled more accurately, although this also implies that some components cannot be modified by the user of the web-tool. The model is available in German and in English. For more information, click here. ●

In 2007, the Austrian team used EUROMOD to provide the first estimates ever on non-take-up of monetary social assistance based on empirical data in Austria. The analysis investigated the functioning and relevance of a 'last resort' safety net by providing up to date estimates on the size and determinants of non-take-up. The results also contributed to the objective of promoting and supporting comparative research, methodologies and data generation by revising poverty and income distribution statistics derived from tax/benefit microsimulation models without correcting for errors in targeting benefits. The analysis was carried out as part of the AIM-AP project, funded by the 6th Framework Programme of the European Commission and coordinated by the EUROMOD team in ISER. For more information, click here. ●

Research with EUROMOD in Austria is used by both policy makers and others. The starting point of SORESI was the Regulatory Impact

Assessment (RIA) in the framework of the Austrian federal budget law 2013 (BHG 2013), which entered into force on 1 January 2013.

It introduced a new system of outcome-oriented impact assessment for drafts of acts and regulations which also takes into account the social impact of reforms. Altogether nine different impact dimensions have to be taken into account. SORESI aims at providing impact assessment in the field of social affairs including the Europe 2020 social target group. However, the web-based tool is not only available for policy-makers and representatives of Austrian Federal Ministries responsible for the RIA but also for the broader public. Everyone interested in the effects of policy reforms and the Austrian tax-benefit system can register and use the website. To try out the model, click here. ●

The results of the non-take-up estimates contributed to a discussion both in politics and media on the targeting of social assistance benefits in Austria. In the meantime, monetary social assistance was replaced by the minimum income benefit in 2010. The principle of a one-stop-shop approach for applying for the benefit was adopted and so, for example, receivers of unemployment benefits can apply for supplemental minimum income benefit directly at the offices of the labour market service. Furthermore, maintenance obligations by relatives and the obligation for the beneficiary to pay back benefits received once an employment is taken up, altogether so called regress-obligations, were reduced or abolished. As a result of these reforms, the new benefit reduced some of the access barriers.

## Would you like to learn how to use EUROMOD?

The next training course providing a hands-on introduction to the use of EUROMOD will be held at the ISER on 12-14 November 2014.

The aim of the course is to introduce new users to EUROMOD. The course will cover the following topics: structure, concepts, input data, documentation and applications of EUROMOD. It will combine lectures and demonstrations with hands-on exercises using the model.

If you are interested in attending or would like more information, please email us by clicking here. ● The closing date for applications is 1 October 2014.

## Working papers

### ● [The distributional effects of personal income tax expenditure EUROMOD Working Paper Series: EM14/14](#)

**Author** ● Silvia Avram

**Publication date** 4 July 2014

**Abstract** Less visible than benefit expenditure, spending channelled through the tax system via tax concessions and advantages can amount to substantial amounts of foregone revenue. In this paper we use EUROMOD, a tax-benefit micro-simulation model covering all EU member states, to investigate the size and distributional effects of tax allowances and tax credits in six European countries. We also investigate in detail which types of policy instruments have the most potential to redistribute towards the bottom and which are likely to be mostly benefitting households at the top of the income distribution. We examine both categorical targeting (i.e. eligibility rules that depend on some individual or household general characteristics) and explicit income targeting. We find that with a few exceptions the impact of tax allowances and tax credits on inequality is small. Tax credits are generally more progressive than tax allowances. However, with the exception of refundable tax credits, the design of the allowances/credits appears to be less important than the characteristics of the population they are targeting and/or other features of the income tax system in determining the redistributive effect. Consequently, tax concessions appear ill-suited to target resources towards households in the bottom part of the income distribution.

### ● [Re-weighting EUROMOD for demographic change: an application on Slovenian and Lithuanian data EUROMOD Working Paper Series: EM13/14](#)

**Authors** ● Nataša Kump

● Jekaterina Navicke

**Publication date** 25 June 2014

**Abstract** This paper discusses an application of re-weighting to account for demographic change within a comparative micro-simulation setting. We use the Slovenian and Lithuanian components of the EUROMOD micro-simulation model with data referring to demographic characteristics of the population in 2010 to test the proposed procedures. The data are re-weighted to reflect demographic change up to 2012 and 2020 as indicated in the Eurostat Population Projections (Europop).

### ● [Integrating VAT into EUROMOD. Documentation and results for Belgium EUROMOD Working Paper Series: EM12/14](#)

**Authors** ● André Decoster

● Richard Ochmann

● Kevin Spiritus

**Publication date** 16 June 2014

**Abstract** This paper documents the integration of microsimulation tools for direct taxation, indirect taxation, and social benefits in the context of the European tax and benefit simulator, EUROMOD. Integration has been developed in parallel for two countries: Belgium and Germany. The paper at hand documents the process and presents simulation results for the case of Belgium. An integrated database underlying EUROMOD that contains household level information on income and consumption is generated. Consumption micro data from the 2009 cross section of the household budget survey for Belgium is used to impute information on spending for durable and non-durable commodities into EU-SILC data, applying regression-based imputation techniques. Engel curves are estimated at the household level for total non-durable spending, expenditures on durable goods, as well as non-durable expenditure share equations. The imputed household spending is then used to simulate the baseline VAT system in EUROMOD, for which we report an incidence analysis. Finally, several arbitrary policy reforms implementing VAT rate uniformity are analysed with respect to their distributional impact.

### ● [Nowcasting risk of poverty and income distribution in the EU in 2013 EUROMOD Working Paper Series: EM11/14](#)

**Authors** ● Chrysa Leventi

● Jekaterina Navicke

● Olga Rastrigina

● Holly Sutherland

**Publication date** 11 June 2014

**Abstract** The at-risk-of-poverty rate is one of the three indicators used for monitoring progress towards the Europe 2020 poverty and social exclusion reduction target. Timeliness of this indicator is critical for monitoring the effectiveness of policies. However, due in part to the complicated nature of the European Union Statistics on Income and Living Conditions (EU-SILC), estimates of the number of people at risk of poverty are published with a two to three year delay. This paper presents a method of estimating ('nowcasting') the current distribution of income between households, including the at-risk-of-poverty rate, using a tax-benefit microsimulation model

(EUROMOD) based on the EU-SILC, combined with up-to-date macro-level statistics. The method is applied to 13 EU Member States experiencing differing economic conditions over the period, including those which have been affected comparatively little by the crisis as well as those which have suffered a major reduction in economic activity and employment.

### ● [The introduction of a GMI scheme in Cyprus: family structure, equivalence scales and policy challenges EUROMOD Working Paper Series: EM10/14](#)

**Author** ● Christos Koutsampelas

**Publication date** 11 June 2014

**Abstract** Nowadays, Cyprus has engaged in an effort of reforming its tax-benefit system so as to adapt to the economic and social challenges of the post-crisis era. Among the most important social reforms is the introduction of a Guaranteed Minimum Income scheme (GMI). In this paper, we construct a number of hypothetical reform scenarios using the EUROMOD microsimulation model aiming at examining how certain features of the policy design affect the policy outcomes of the reform. The empirical analysis is accompanied with a wider discussion of the driving forces of the reform and the challenges which policymakers are expected to confront when implementing the new welfare scheme in the particular context of Cyprus.

### ● [The effect of tax-benefit changes on the income distribution in EU countries since the beginning of the economic crisis EUROMOD Working Paper Series: EM9/14](#)

**Authors** ● Paola De Agostini

● Alari Paulus

● Holly Sutherland

● Iva Valentinova Tasseva

**Publication date** 2 May 2014

**Abstract** We compare the distributional effects of policy changes introduced in the period 2008-2013 in twelve EU countries using the EU microsimulation model EUROMOD. The countries, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Latvia, Lithuania, Portugal, Romania and the UK, chose different policy mixes to achieve varying degrees of fiscal consolidation or expansion. We find that comparisons of the size and distributional effects of policy changes over time are sensitive to the counterfactual assumption that is adopted in adjusting 2008 policies for changes in prices and incomes over the period. Nevertheless, it is clear that the direct tax, public pension and cash benefit changes had broadly progressive effects across the pre-

policy change income distributions, except in Germany, Estonia and Lithuania. Including increases in VAT alters the comparative picture by making the policy packages appear more regressive, to varying extents. The paper also explores the implications of the policy changes for measures of risk of poverty and examines the incidence of the changes by age.

● **Income redistribution in the European Union EUROMOD Working Paper Series: EM8/14**

**Authors** ● Silvia Avram  
● Horacio Levy  
● Holly Sutherland

**Publication date** 30 April 2014

**Abstract** The systems of direct taxes and cash benefits in the 27 Member States of the EU vary considerably in size and structure. We explore their redistributive effects using EUROMOD, the tax-benefit microsimulation model for the EU. As well as describing redistributive effects in aggregate this allows us to assess and compare the effectiveness of individual types of policy in reducing income disparities. We consider the following categories of benefits and taxes: income taxes, tax allowances, tax credits, social contributions, cash benefits designed to target the poor or redistribute inter-personally (through means-testing) as well as cash benefits intended to redistribute intra-personally across the lifecycle (through social insurance or contingency-based entitlement). We derive results for the 27 members of the European Union using policies in effect in 2010 and present them for each country separately as well as for the EU as a whole.

● **NAMOD: a Namibian tax-benefit microsimulation model EUROMOD Working Paper Series: EM7/14**

**Authors** ● Gemma Wright  
● Michael Noble  
● Helen Barnes

**Publication date** 25 April 2014

**Abstract** This paper provides an account of the construction of a tax-benefit microsimulation model for Namibia (NAMOD) which is based on the EUROMOD platform F6.0. Previous research on social security provision in Namibia is reviewed and the current social security, personal income tax and value added tax arrangements are outlined. Various strengths and weaknesses of the Namibian Household Income and Expenditure Survey (NHIES) as an underpinning dataset for NAMOD are highlighted. In particular, the income data in the NHIES is problematic and so analysis

of the impact of policies on poverty should be treated with caution. In spite of these challenges, NAMOD provides a starting point from which government can explore issues such as promoting take-up of grants or making changes to the social security system.

● **The redistributive effect and progressivity of taxes revisited: an international comparison across the European Union EUROMOD Working Paper Series: EM6/14**

**Authors** ● Gerlinde Verbist  
● Francesco Figari

**Publication date** 9 April 2014

**Abstract** Over the last few years concern for income inequality in European countries has increased remarkably. In this context, taxation is an important redistributive instrument and we investigate the redistributive role of direct taxes. We focus on the EU-15 countries and the evolution over the period 1998-2008, using EUROMOD, the EU-wide tax-benefit model. The research aim of this paper is twofold. First, we investigate empirically whether there is a link between pre-tax income inequality and redistribution through taxes. Second we hereby test whether there is a relationship between progressivity and the average tax level, the two building stones of the redistributive impact of taxes.

● **The implications of an EMU unemployment insurance scheme for supporting incomes EUROMOD Working Paper Series: EM5/14**

**Authors** ● Holguer Xavier Jara Tamayo  
● Holly Sutherland

**Publication date** 8 April 2014

**Abstract** In this paper we explore the potential of a new unemployment insurance benefit at EMU level to improve the income protection available to the unemployed and their families. The benefit is designed to be additional to existing national provision where this falls short in terms of eligibility (coverage) and the amount payable. The 'EMU-UI' has a common design across countries, which is intended to reduce the extent of current gaps in coverage where these are sizeable due to stringent eligibility conditions, to increase generosity where current unemployment benefits are low relative to earnings and to extend duration where this is shorter than 12 months. Our analysis compares the extent of the effect of these improvements across selected countries from the Monetary Union (Germany, Estonia, Greece, Spain, France,

Italy, Latvia, Austria, Portugal and Finland) using EUROMOD to simulate entitlement to the national and EMU-UIs and to calculate the effect on household disposable income. We find that the EMU-UI reduces the risk of poverty for the new unemployed and has a positive effect on income stabilisation. The extent of these effects varies in size across countries for two main reasons: notable differences in design of national unemployment insurance schemes and differences in labour force characteristics across countries, mainly in the proportion of self-employed workers who are typically not covered by national schemes. In countries such as France and Finland there is little effect of EMU-UI on poverty risk and stabilisation, while Greece, Italy and Latvia benefit the most, in particular from the EMU proportional scheme. Our analysis highlights potential areas of future research in terms of improving the design of the EMU-UI and accounting for national or EMU level ways of financing, as well as refinements to the methodology used to assess the effects of transitions to unemployment.

● **Between a risk society and a welfare state: social risk resilience and vulnerability to poverty in Lithuania EUROMOD Working Paper Series: EM4/14**

**Author** ● Jekaterina Navicke

**Publication date** 4 April 2014

**Abstract** This paper looks into the role the tax-benefit system plays in mitigating the effects of widespread socio-economic risks in the context of individualization, welfare state transformation and recent austerity. We analyse the drivers behind the changing role of the risk-mitigating social policies looking through the theoretical lenses of the risk society. The performance of the tax-benefit system in providing a safety net against income loss in cases of unemployment and childbirth is evaluated using the stress-testing approach suggested by Atkinson (2009). The analysis suggests that the role of the welfare state shifts towards promotion of individual responsibility for risk management. The welfare state policies can produce substantially different levels of vulnerability to poverty among population groups facing different risks. In the context of the recent economic crisis in Lithuania, the lack of the counter-cyclical protection provided by the welfare state is apparent, while the traditional mutual support among the household members still plays a major role in the risk management process.

# EUROMOD: introducing the team

**In this edition of EUROMOD NEWS, Cara McGenn, Project Co-ordination Assistant with the EUROMOD team based at ISER, describes her work**

**What is your background?** I have lived in Colchester most of my life, growing up in a small village called Langenhoe. I studied Art, Law and Geography at Colchester Sixth Form College. After this I decided to join Her Majesty's forces (army) and become part of the Adjutant General Corp (based in Winchester). Unfortunately I suffered an injury during basic training which resulted in a medical discharge. I started a career at AXA Insurance soon after. During my 13 years there I completed various roles ranging from sales to planning and governance and soon realised that project management and coordination was my preferred field. This also gave me the opportunity to visit the AXA offices in Bangalore, India (allowing me to experience different cultures and ways of working). I have always been keen to keep growing as an individual which resulted in me studying English Literature and Creative Writing at night school.

## **What made you apply for this post?**

Essex University and ISER have such a good reputation. When I saw the role advertised there were so many elements that I was already doing (and enjoyed) in my current



Cara McGenn

**“...I am new to the world of microsimulation and it has been really interesting to see how the EUROMOD model is developed and to see the research that the team and other users have been able to complete...”**

role and I knew I could bring a lot to the role with my background and experience.

## **How long have you been working with EUROMOD? What are your main responsibilities?**

I joined the EUROMOD team over 2 years ago. I work closely with Holly Sutherland, EUROMOD Director and the EUROMOD team supporting where ever possible. My key responsibilities are managing the various contracts we have in place, providing users access to the

EUROMOD model /datasets (and ensuring the correct process has been followed), budget monitoring, managing the EUROMOD email inbox (answering requests or forwarding when required) updating records (e.g. the EUROMOD website, EUROMOD user details), event organising (EUROMOD training sessions, workshops, visits etc) and providing project /administrative support to Holly and the team as an when is required. I am also part of the ISER internal audit team (which has involved Information security awareness training and the auditing various processes and departments) and a member of the ISER admin support team.

## **What do you enjoy most about working with EUROMOD?**

My role is very varied, which I particularly enjoy. No two days are the same. It has been great working in such a diverse team who originate from all over Europe. They are a pleasure to work with and are very supportive. There is also a real feeling of trust and respect within the team, I am given the autonomy to manage my workload which in turn wants me to ensure all deadline and key deliverables are achieved. The team are also very understanding when I have to turn down lunches with them as I always have my beloved dogs to walk. I am also new to the world of microsimulation and it has been really interesting to see how the EUROMOD model is developed and to see the research that the team and other users have been able to complete using the model and various data sets.

## **Would you like to share any recent highlights?**

I have really enjoyed being involved in the InGRID project (the Winter School and transnational visits in ISER). I have met some really interesting people and it is really rewarding when they provide positive feedback following their workshop/visit.



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