

# 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)



## EUROMOD at Ministry of Social Affairs, Vilnius

A EUROMOD information day took place in Vilnius, Lithuania on 18 September 2013, in an effort to boost interest, awareness and use of this powerful EU-wide tax-benefit microsimulation tool

**EUROMOD team members for Lithuania**  
 – Romas Lazutka, Viginta Ivaškaitė-Tamošiūnė, Lina Salanauskaitė and Jekaterina Navickė – presented the model and possibilities of applying it to policy oriented and academic research.

Targeted at Lithuanian policy-makers, academics, statisticians and administrative agents, the event was held at the Ministry of Social Affairs and Labour. It started with a general introduction to EUROMOD, followed by results of the recent applied research at the national and cross-national level, and a discussion on the relevant topics that EUROMOD-based analysis could address in the Lithuanian context.

A special issue of the policy brief dedicated to EUROMOD was also launched at the event. The turn-out and the enthusiasm of the Ministry to host the event demonstrated



The Lithuanian EUROMOD team members

interest and demand for tools and research facilitating evidence-based policy-making. The EUROMOD research community, with its expertise and a developed infrastructure at hand, has a strong potential for making impact and a challenge to live up to.

## Discussing poverty nowcasting in Europe



EUROMOD Director Professor Holly Sutherland being interviewed by Portuguese news about the event

Over 60 economists and researchers from across Europe met in Lisbon for the annual EUROMOD project meeting in October.

The delegates discussed new research including nowcasting poverty, the impact of incentives to work, non-take up of benefit and measures to combat child poverty, with representatives from the EU Commission Directorate General for Employment, Social Affairs and Inclusion, funders of EUROMOD.

Senior representatives from the Portuguese social affairs and employment ministries and the government statistical office also attended.

Professor Holly Sutherland said; "Our thanks to the Portuguese national team for their wonderful hospitality and to all their colleagues at the ISEG at the University of Lisbon."

# Final celebrations of Belgian team's FLEMOSI success

On September 16, the Belgian team organised the concluding conference for its FLEMOSI project

It introduced its microsimulation models and research to a diverse audience of academics, policy makers, civil servants and members of civil society. FLEMOSI (FLEMish MOdels of SImulation) is a four-year project conducted by five international partners under the coordination of Prof. A. Decoster of the Center for Economic Studies at KU Leuven.

The project is aimed at tailoring models based on EUROMOD in two ways. First, a user interface was built which allows policy makers, civil society and general public to enter the most essential parameters online, then launch EUROMOD on the server in Leuven, and getting back stylised results again on the web interface. Secondly, EUROMOD was specifically tailored to regional Flemish competences.

Two models are available online: MEFISTO and MOTYFF. The first model, MEFISTO (Modelling and Evaluating Flanders' FIsical and Social T0morrow), uses EUROMOD – and hence the underlying SILC-dataset – as an engine to simulate the effects of policy changes on the income distribution, poverty and budget of Flanders. Besides extensions with specific competences for the Flemish region, the Flemosi team also used the Belgian Household Budget Survey-data to incorporate effects of price changes in response to changes in VAT-rates. The second model, MOTYFF (MOdelling TYPical Families in Flanders), is likewise a EUROMOD-spinoff which is publicly available. However it focusses on a so-called 'typical' family or individual. MOTYFF allows the user to define its own typical individual or household by entering information on characteristics such as age, sex, family size, current labour



market status etc. but also on longitudinal career information. This allows to extend the simulation for this specific family to much broader policy domains (such as pension rights), and also to simulate the effect on disposable income of socio-demographic changes (e.g. getting an extra child).

Since their launch online, MEFISTO and MOTYFF have drawn a lot of attention from the public. MEFISTO was already extensively used by Flemish policy makers and media to pre-assess policy-proposals in the light of the campaign for the federal and regional elections next year—the main subject of the upcoming elections being tax reforms.

FLEMOSI also offers a platform for researchers to introduce their research to the public. During the four years of the project, the platform recorded a production of 28 academic and policy related research papers. Four overview papers were presented at the conference: Families in Flanders, Ageing in Flanders, Green Taxes and Housing in Flanders. All these papers and presentations are available online on the FLEMOSI website. ●

## Projects using EUROMOD

In each newsletter we highlight a research project that uses EUROMOD. This time, we look at the Social Situation Monitor

The Social Situation Monitor carries out policy-relevant analysis and research on the current EU socio-economic situation on the basis of the most recent available data.

Each year it examines major issues which are features of the situation or affect it with the aim of providing evidence on which to base policy-making across the EU.

This initiative is directed by Applica (Belgium) on behalf of the European Commission. It includes the European Centre for Social Welfare Policy and Research (Austria), Tárki Social Research Institute (Hungary), ISER at the University of Essex (UK) and the Athens University of Economics and Business (Greece). For more information click here. ●

## UK Universal Credit and ISER research for Gingerbread

Leading parenting charity Gingerbread has published a major academic report by Professor Mike Brewer, Director of the ESRC Centre for Research on Micro-social Change at ISER and Dr Paola De Agostini, that looks at the impact on single parent families of the Government's flagship welfare programme, Universal Credit.

The study finds that, far from achieving the reform's stated goal of 'making work pay', many single parents could actually lose out in cash terms under the new system. Universal Credit, which since October has started to be introduced gradually across the country, is rolling together six separate benefits into one payment. This is being done in order to simplify the system. The Government has emphasised that this new welfare scheme is being designed to 'make work pay – at each and every hour': encouraging people to move into work, or increase their working hours.

The research suggests that for many single parents, work still won't pay under Universal Credit. In particular the study found that:

- As a group, single parents face a real-terms cash loss under universal credit
- Universal Credit does achieve one of its aims: single parents who aren't working will be better off if they move into work than is currently the case
- But of all household types, working single parents are the worst affected when it comes to benefitting from working more hours, meaning many families will be trapped in low hours, low paid jobs.

Gingerbread has produced a briefing for policy makers, based on this new ISER research, including clear, costed recommendations on ways that the Government could improve the scheme, and make work pay for single parents.

**REMINDER** New process in place for researchers wishing to access Eurostat microdata (including use of the EU-SILC with EUROMOD) First, your institution must be recognised by Eurostat as a research entity that is allowed access to microdata. Then an application to use the EU-SILC for a project using EUROMOD must be approved. This affects the EU-SILC-based input data supplied with the next release of EUROMOD, scheduled for summer 2014. Find out more by clicking here (PDF download). ●

# Working papers

## ● PDF Increasing labour market activity of the poor and females: let's make work pay in Macedonia EUROMOD Working Paper Series: em16/13

**Authors** ● Nikica Mojsoska Blazevski

● Marjan Petreski

● Despina Petreska

**Publication date** 31 October 2013

**Abstract** The objective of this paper is to simulate the effects of two alternative social policies – individual and family in-work benefits – on labour market choices in Macedonia, with special focus on the poor and females. To that end, we use ex-ante analysis relying on a combination of a tax and benefit micro-simulation model for Macedonia (MAKMOD) and a structural model for labour supply, both utilising the 2011 Survey of Income and Labour Conditions. Results suggest that the proposed reforms will have a considerable effect on the working choices of Macedonians. The family in-work benefit is found to be more effective for singles and would potentially increase employment by six percentage points. On the other hand, the individual in-work benefit works better for couples where employment would increase by 2.5 per cent. In addition, the effects are found to be larger for the poor and for females, the categories that are most prone to inactivity in Macedonia.

## ● PDF Distributional implications of tax evasion and the crisis in Greece EUROMOD Working Paper Series: em17/13

**Authors** ● Chrysa Leventi

● Manos Matsaganis

● Maria Flevotomou

**Publication date** 7 November 2013

**Abstract** The current Greek crisis and the Government's fiscal consolidation effort have elevated tax evasion to one of the most crucial policy issues in the domestic debate. The paper attempts to shed light on one aspect of the phenomenon, namely its distributional implications. We compare a large panel data sample of personal income tax returns in 2006-2010 (incomes earned in 2005-2009) with data from the European Union Survey of Income and Living Conditions of the same years. We show that the deviation of incomes between the two data sources is greater in the case of farming and self-employment income. Based on these findings we then calculate stylised factors of income under-reporting by income source. These factors are fed into a tax-benefit microsimulation model to provide tentative

estimates of the size and distribution of income tax evasion in Greece in 2009. We estimate income under-reporting at 12.2 per cent, resulting in a shortfall in personal income tax receipts of 29.7 per cent. The paper shows that the effects of tax evasion in Greece are higher income inequality and much lower progressivity of the income tax system.

## ● PDF Testing the statistical significance of microsimulation results: often easier than you think. A technical note EUROMOD Working Paper Series: em18/13

**Authors** ● Tim Goedemé

● Karel Van den Bosch

● Lina Salanauskaitė

● Gerlinde Verbist

**Publication date** 14 November 2013

**Abstract** In the microsimulation literature, it is still uncommon to test the statistical significance of results. In this paper we argue that this situation is both undesirable and unnecessary. Provided the parameters used in the microsimulation are exogenous, as is often the case in static microsimulation of the first-order effects of policy changes, simple statistical tests can be sufficient. Moreover, standard routines have been developed which enable applied researchers to calculate the sampling variance of microsimulation results, while taking the sample design into account, even of relatively complex statistics such as relative poverty, inequality measures and indicators of polarisation, with relative ease and a limited time investment. We stress that when comparing simulated and baseline variables, as well as when comparing two simulated variables, it is crucial to take account of the covariance between those variables. Due to this covariance, the mean difference between the variables can generally (though not always) be estimated with much greater precision than the means of the separate variables.

## ● PDF Full childcare coverage: higher maternal labour supply and childcare usage? EUROMOD Working Paper Series: em19/13

**Author** ● Pieter Vanleenhove

**Publication date** 14 November 2013

**Abstract** According to many studies, childcare is an important input for children's development but it is also used to free up time for parents to work. However, many households are still confronted with availability constraints in childcare. In the recent past, many governments implemented policy reforms in order to increase the coverage rate of childcare. The empirical part of this paper focuses on the Flemish childcare market and

analyses how maternal labour supply and childcare usage is affected by a new Flemish decree which provides full childcare coverage. This paper adopts a modeling framework for analysing labour supply developed by Aaberge, Colombino and Strøm (1999) and Dagsvik (1994). To account for the possible interaction between labour supply and childcare choices the model also treats childcare type as an endogenous variable. The results of the policy reform analysis show that households switch to formal childcare when confronted with higher childcare availability. Total labour supply also increases but these effects are less pronounced as some households also reduce working hours.

## Where they turned up

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

Bargain O., Decoster A., Dolls M., Neumann D., Peichl A., and Siegloch S., 2012a. Welfare, Labor Supply and Heterogeneous Preferences: Evidence for Europe and the US. *Social Choice and Welfare*, 2013, 41(4), 789-817.

Bargain, O., M. Dolls, C. Fuest, D. Neumann, A. Peichl, N. Pestel, and S. Siegloch (2013). Fiscal union in Europe? Redistributive and stabilizing effects of a European tax-benefit system and fiscal equalization mechanism. *Economic Policy* 28(75), 375–422.

Colombino, U. and E. Narazani (2013), Designing a Universal Income Support Mechanism for Italy. An Exploratory Tour, *Basic Income Studies*, 2013, 8(1), 1-17.

Figari, F., M. Matsaganis and H. Sutherland (2013). Are European social safety nets tight enough? Coverage and adequacy of minimum income schemes in 14 EU countries *International Journal of Social Welfare*, 22, 3-14.

Matsaganis, M. and C. Leventi (2013). The distributional impact of the Greek crisis in 2010. *Fiscal Studies* 34(1), 83–108.

Salanauskaitė, L. and G. Verbist (2013). Is the neighbour's grass greener? Comparing family support in Lithuania and four other New Member States. *Journal of European Social Policy* 23(3), 315–331.

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

# EUROMOD: introducing the team

**In this edition of EUROMOD NEWS, Chrysa Leventi, Senior Research Officer with the EUROMOD team based at ISER, describes her work**

**What is your background?** I originally come from Euboea island but I grew up in Athens. I graduated from Athens University of Economics and Business with a degree in International and European Economic Studies. I was awarded an MSc in Economic and Social Policy Analysis from the University of York. I then moved back to Athens in order to start a PhD on the distributional impact of public policies in Greece. My thesis supervisor, Manos Matsaganis, was the one who introduced me to microsimulation and in 2009 I joined the Greek EUROMOD national team. In June 2013 I became a member of the EUROMOD core team in ISER.

**What are your research interests?** My research interests lie in the fields of tax-benefit microsimulation modelling for policy analysis, tax evasion, pension policy and reforms.

**Do you have any special responsibilities?** I am actively involved in the organisation of the Joint Empirical Social Sciences seminar series. I am also chairing the EUROMOD communications committee meeting. The purpose of this committee is to facilitate the dissemination of our work in a broader, diversified audience.



Chrysa Leventi

**“...I had the opportunity to meet and exchange opinions with most of the members of this wide network of researchers from all over Europe that constitute the big ‘EUROMOD family’...”**

**Which countries do you work on?**

I am currently working on building the very first version of EUROMOD for Croatia, and for updating the existing EUROMOD models for Portugal and Greece.

**What are you working on at the moment?**

Apart from the work related to these three countries, I am also involved in the ImPROvE research project. ● This is a fascinating project that attempts to deepen our understanding of issues related to poverty,

inequality, social policy and social innovation in Europe. My contribution is related to the analysis of the distributional implications of the crisis and the austerity measures in seven EU countries. I am also working on the final chapter of my PhD on disentangling annuities and transfers in Greek retirement benefits.

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

I believe that bringing poverty and inequality issues into the European political agenda is of utmost importance nowadays. The fact that EUROMOD can do precisely that in a timely and high-quality way is the aspect of the work that fulfills and fascinates me most. Besides that, my new colleagues have been more than helpful and supportive during these first months of my stay in ISER; they have contributed to turning the process of my integration to this new working environment into a smooth and enriching experience.

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

The biggest highlight has been the yearly EUROMOD project meeting and workshop that was held in October in Lisbon. While there, I had the opportunity to meet and exchange opinions with most of the members of this wide network of researchers from all over Europe that constitute the big ‘EUROMOD family’. My paper on ‘Poverty and inequality during the Great Recession in Greece’ (co-authored with Manos Matsaganis) was recently accepted for publication in *Political Studies Review*. Finally, I very much enjoyed presenting the outcomes of EUROMOD-related work in the first ImPROvE conference in Brussels (November 2013) and in the 2013 IEA/ISI Strategic Forum on ‘The Measurement of the Cost of Long and Deep Recessions: Beyond GDP’ in Rome (July 2013). ●



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