EUROMODNE

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 is nearly here!

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

EUROMOD, the EU wide tax-benefit microsimulation model, is 20 years old in 2016 - and we're celebrating with a conference

The conference will mark EUROMOD's achievements so far and will look forward to future developments. The event will showcase the many ways in which EUROMOD can 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 future developments to EUROMOD. And a party!

THE SCIENTIFIC/ORGANISING COMMITTEE

- Holly Sutherland
- Francesco Figari
- Chrysa Leventi
- H. Xavier Jara
- Iva Valentinova Tasseva

CONFERENCE LOCATION

Essex Business School, University of Essex, UK

To register and find out more about this special event please visit our Eventbrite page, where you will also find a link to the full preliminary programme of the conference.



EUROMOD 20th Anniversary Conference preliminary programme

The preliminary conference programme is shown below. To download the most up-to-date details, click here. Remember that the deadline for conference registration is 15 July 2016 so don't delay - register for your delegate place here!

Monday 5 September 2016

08.30-09.00 REGISTRATION

09.00-09.15 WELCOME

09.15-10.00 SESSION I

• KEYNOTE EUROMOD: past present and future Holly Sutherland, ISER, University of Essex

10.00-11.00 SESSION II

POSTERS

11.00-12.45 SESSION III

- KEYNOTE Welfare comparison in Europe Olivier Bargain, Aix-Marseille School of Economics
- Putting subjective well-being to use for ex-ante policy evaluation H. Xavier Jara, ISER, University of Essex; and Erik Schokkaert, KU Leuven
- A tax shift for Belgium: Investigating labour supply responses with a Random Utility (Random Opportunity)

André Decoster, Willem Sas and Toon Vanheukelom, KU Leuven

12.45-14.00 LUNCH

14.00-15.45 SESSION IV

- KEYNOTE A basic income in EU countries: Far from it? Herwig Immervoll, OECD
- The impact of social and fiscal policies: Addressing extreme poverty in Greece (2013-2015) Chrysa Leventi, ISER, University of Essex; and Manos Matsaganis, Politecnico di Milano
- Convergence of minimum benefit schemes in Europe: evidence at the micro level

Chrysa Leventi, Mattia Makovec, Olga Rastrigina and Holly Sutherland, ISER, University of Essex

15.45-16.45 SESSION V

POSTERS

16.45-18.00 SESSION VI

 KEYNOTE Using EUROMOD to address MACROeconomic questions

Andreas Peichl, ZEW

 Social stratification and life-course vulnerability to poverty among families with children in European welfare regimes: a stress-testing exercise Jekaterina Navicke, Vilnius University and Daria Popova, ISER, University of Essex

19.00 RECEPTION/PARTY

Tuesday 6 September 2016

09.30-10.15 SESSION VII

• KEYNOTE From poverty in the UK in the 1960s, to poverty in Europe twenty years ago, and to global poverty today

Sir Tony Atkinson, LSE, Nuffield College, University of Oxford and INET, University of Oxford

10.15-11.30 SESSION VIII

POSTERS

11.30-12.30 SESSION IX

- Tackling inequality: the distributional impact of implementing Atkinson's alternative tax/benefit reform packages and the Living Wage in the UK Chrysa Leventi, ISER, University of Essex; Brian Nolan, INET, University of Oxford; Holly Sutherland, ISER, University of Essex; and Iva Valentinova Tasseva, ISER, University of Essex
- Europe through the crisis: decomposing changes in the household income distribution in 2007-11 Alari Paulus and Iva Valentinova Tasseva, ISER, University of Essex

12.30-13.30 SESSION X

 Panel on developments to EUROMOD to meet the future needs of research and policy

13.30-14.30 BEST POSTER AWARD AND LUNCH 14.30 END OF CONFERENCE

There will be three poster sessions during the event, featuring over 40 posters to view. There will be an award for the best poster, presented during lunch on the second day. You can find a list of the posters as part of the preliminary conference programme available here.

work related

homeownership







SOUTHMOD training course: simulating tax and benefit policies for five African countries using EUROMOD

The SOUTHMOD training course took place from 29 February to 4 March 2016 in Johannesburg, South Africa

The course gathered participants from several African countries - Ethiopia, Ghana, Mozambique, Tanzania and Zambia - as well as from Vietnam.

Over the five days, participants learned about the general structure and applications of EUROMOD and how to use it to develop spin-off tax-benefit microsimulation models for their countries. The training course was jointly organised by the United Nations University UNU-WIDER, ISER - University of Essex and the Southern African Social Policy Research Insights (SASPRI) and was funded by UNU-WIDER as part of their research project on developing microsimulation models for developing countries.

The first day of the course started with an introduction to microsimulation and EUROMOD by Holly Sutherland, after which the course participants gave each a presentation on the future spin-off models for their countries, describing the main tax and benefit policies available, feasibility of simulating them and availability of household survey data. There were presentations on future ETMOD (Ethiopia), GHANAMOD (Ghana), MicroZAMOD (Zambia), MOZMOD (Mozambique) and TAZMOD (Tanzania) which, together with the existing

EUROMOD spin-off models SAMOD (South Africa) and NAMOD (Namibia), will form SOUTHMOD. There was also a presentation on the future model for Vietnam, i.e. VN. After lively discussions on the spin-off models, ISER colleagues Iva Tasseva and Sanja Vujackov showed the EUROMOD design in greater detail and demonstrated the summary statistics tool. On the second day participants were busy learning how to work with EUROMOD functions under the guidance of Olga Rastrigina. Lectures on modelling indirect taxes with EUROMOD were given by SASPRI's members Gemma Wright and Michael Noble as well as André Decoster from KU Leuven, Belgium. The last lecture was given by ISER colleague Kostas Manios, who demonstrated the new Hypothetical Household Tool (HHoT) as part of the EUROMOD model. On the last day of the course, participants shared what they learned during the course and discussed eagerly the next steps in developing, using and promoting

By the end of the five day course, there was a functioning first version of all spin-off models in EUROMOD providing encouragement and excitement over the remaining months of the UNU-WIDER project.

EUROMOD-related research presented at conferences

2016 APPAM International Conference on 'Inequalities: Addressing the Growing Challenge for Policymakers Worldwide', 13-14 June 2016, London School of **Economics** H. Xavier Jara presented 'The Role of an EMU Unemployment Insurance Scheme on Income Protection in Case of Unemployment'; John Hills presented 'A Lost Decade? Decomposing the Effect of 2001-11 Tax-Benefit Policy Changes on the Income Distribution in EU Countries'; Holly Sutherland presented 'Improving Poverty Reduction in Europe: What Works (best) Where?'; and Iva Tasseva presented 'Tackling Inequality: The Distributional Impact of Implementing Atkinson's Alternative Tax/Benefit Reform Packages and the Living Wage in the UK'.

Workshop on 'Fiscal Welfare in Europe', Science Po, Paris, 26-27 May 2016 Francesco Figari presented 'The fiscal and equity impact of tax expenditures in the EU: evidence from microsimulation modelling' and Silvia Avram presented 'Who benefits from the 'hidden welfare state'? The distributional effects of personal income tax expenditure in six countries'.

Workshop on 'How and why use EUROMOD?', Slovenian Institute for Economic Research, Ljubljana, 26 May 2016 Attended by officials from four Slovenian ministries and government agencies. Alari Paulus, Mattia Makovec and Holly Sutherland gave presentations and demonstrations on what EUROMOD can do.

Where they turned up

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

Popova D. (2016) Distributional impacts of cash allowances for children: a microsimulation analysis for Russia and Europe, Journal of European Social Policy, 26(3) 1-20.

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

EUROMOD-based analysis recently published by the Social Situation Monitor

The Social Situation Monitor (SSM) is an initiative directed by Applica on behalf of the European Commission. It 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. Two SSM Research Notes making use of EUROMOD have been recently published.

Nowcasting: estimating developments in median household income and risk of poverty in 2014 and 2015

Research Note 1/2015 by Olga Rastrigina, Chrysa Leventi, Sanja Vujackov and Holly Sutherland

The at-risk-of-poverty rate (AROP) 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 crucial for monitoring of the social situation and of the effectiveness of tax and benefit policies. However, partly due to the complexity of EU-SILC data collection, estimates of the number of people at risk of poverty are published with a significant delay. This paper extends and updates previous work on estimating ('nowcasting') indicators of poverty risk using the taxbenefit microsimulation model EUROMOD. The model's routines are enhanced with additional adjustments to the EU-SILC based input data in order to capture changes in the employment characteristics of the population since the data were collected. The nowcasting method is applied to twenty-five EU Member States. AROP rates are estimated up to 2015 for twenty countries and 2014 for the remaining five countries. The performance of the method is assessed by comparing the predictions with actual EU-SILC indicators for the years for which the latter are available.

The most important findings of this research note can be summarised as follows. Mean and median incomes in 2014 or 2015 are significantly different from their 2013 levels in all countries except for Greece. The highest increases in the median are predicted for Estonia, Latvia, Romania and Bulgaria. A reduction in the median is only predicted for Cyprus. Changes in relative income poverty are found to be statistically significant in twelve out of the twenty-five EU member states. The

countries where the AROP rate for the total population is predicted to increase the most are Latvia, Romania and the Netherlands. The biggest decreases in the AROP rate are estimated for Hungary, followed by Cyprus, Bulgaria and Portugal. In Hungary, this seems to be the result of a significant rise in employment levels between 2013 and 2014. The rises in income poverty predicted for Latvia and Romania are mostly driven by the increased AROP rates for the elderly population. This finding suggests that in countries with high nominal increases in median incomes, pensions have not been able to follow given the existing indexation mechanisms. Changes in child poverty are expected to be relatively small and not statistically significant in the majority of countries considered in this analysis.

Nowcasting the main income-related poverty indicators has the potential to facilitate monitoring of the effects of the most recent changes in tax-benefit policies and macroeconomic conditions on poverty risk. Given the relevance of these issues to evidence-based policy making and the encouraging results of the comparison of the nowcasting estimates with actual EU-SILC indicators, we believe that this approach constitutes a sound alternative to waiting until official statistics are made available and can provide valuable ex-ante information on potential distributional effects of contemporary economic and policy-related developments.

The effect of changes in tax-benefit policies on the income distribution in 2008-2015 Research Note 2/2015 by Paola De Agostini, Alari Paulus and Iva Tasseva

How household incomes and wealth are distributed, what socio-economic consequences that has and how the distribution is affected by public policies have gained considerable and increasing attention in academic and policy debates in recent years (e.g. Atkinson and Bourquignon, 2015; OECD, 2015). Among others, this reflects growing awareness that policy changes are rarely distribution-neutral (if ever). Raising legitimate questions about who gains and who loses from a given policy change and - more importantly - whether this

is acceptable, is a healthy sign of transparent policy decision-making processes. The general public is entitled to be informed about the distributive effects of public policies, both short-term and long-term, and such assessments should be(come) a standard

In this research note, we provide such an assessment by analysing how changes in direct taxes and cash benefits since the outbreak of the economic crisis in 2008 affected the size and distribution of household disposable income, poverty and inequality levels. We isolate policy effects such as reforms to the design of the tax-benefit system or changes to tax levels and benefit amounts (relative to price changes or market incomes growth) from other factors shaping the income distribution, e.g. changes in population characteristics and market income distribution. Using the EU tax-benefit model EUROMOD in combination with the EU-SILC 2012 micro-data, we provide comparative estimates for EU-27 in 2008-2014 as well as for 21 EU member states in 2014-2015.

Our analysis shows that policy effects in the first half of period (2008-2011) were more drastic than in the second half of period (2011-2014) and, on average, affected household budgets in opposite directions (positive in the early period and negative later). At the EU-27 level, there was a small poverty-increasing policy effect in both periods. There are however large differences across countries in terms of policy effects on poverty, inequality and mean incomes, in both periods. In 2014-2015, policies had a large effect on poverty measures in Greece (rising) and Estonia (falling), especially for a single year. The same countries had also the largest positive and negative policy effect on inequality, though here the differences with other countries were less pronounced. It is notable that similar to Greece, several other countries (Portugal, Spain, Latvia) which had previously gone through fiscal consolidation, pursued policies in 2015 with a positive effect on mean incomes but also (in some cases) increasing poverty or inequality.

The two research notes can be accessed here.

Summer school on cross-country microsimulation using EUROMOD

The third winter/summer school on **EUROMOD** cross country microsimulation was recently held at ISER, University of Essex, over 18-20 May 2016.

The 23 participants who attended originated from a variety of institutions across the European Union including universities, financial institutions and ministries and involved academics, policy practitioners and other interested users. The summer school forms part of the policy pillar of the InGRID project.

Dr Silvia Avram, a member of the EUROMOD team led the event with the support of colleagues Chrysa Leventi, Daria Popova and Sanja Vujackov. The course covered the basics of taxbenefit microsimulation, the logic and structure behind EUROMOD, working with EUROMOD's user interface, input data, EUROMOD 'language' and using existing documentation. The bulk of the course was dedicated to teaching EUROMOD functions which form the building blocks of the EUROMOD 'language'.

Time was allocated throughout the three days for practice hands on exercises, allowing time to get used to the tool. These exercises can be found here. Participants were also provided with the opportunity to present their projects to the group, explaining how they would be using EUROMOD to push these forward.

Initial feedback following the course has been very positive, with participants expressing satisfaction both with the lecture sessions and especially with the practical hands-on ones.

New EU28 statistics from EUROMOD for download

EUROMOD statistics on the distribution and decomposition of disposable income can now be downloaded from our website

They include information on all EU Member States: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, 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

- effect 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 (as at 30 June) are 2011-2014 for Lithuania, Luxembourg, Hungary, Malta, Romania and Slovenia and 2011-2015 for the remaining 22 EU countries. The current release of statistics is using EUROMOD version G3.0+.

Projects using EUROMOD

This time we highlight the research project 'Convergence of minimum benefit schemes in Europe: evidence at the micro level'.

This project, funded by the European Commission and realised by ISER researchers Chrysa Leventi, Mattia Makovec, Olga Rastrigina and Holly Sutherland, aims to inform the EU policy agenda for greater upward convergence towards best practices in the area of minimum income benefits by exploring the implications of reforms that move national minimum income benefit systems towards common benchmarks.

The countries covered are Bulgaria, Estonia, Croatia, Latvia, Poland, Portugal, Slovakia and Greece and the starting point for the analysis are their 2015 tax-benefit systems. Using EUROMOD, a number of reform scenarios will be simulated, namely a 25%, 50%, 75% and 100% increase in the 2015 minimum income benefit level in each country. An additional scenario will consider the percentage benefit increase necessary to lift the disposable income of a single-person household with no earnings to the level of disposable income of a singleperson household earning 40% of the OECD average wage.

The study attempts to estimate the first-order effects of these reforms on household income as well as their net budgetary cost and effects across the income distribution (e.g. on those at risk of financial poverty) for different household types (e.g. with versus without children, elderly vs. non elderly). The policy implications of the results and the feasibility of different reform scenarios will be discussed, considering the specificities of the schemes in each of the countries of interest and the challenges for policy implementation.

Forthcoming training events

An InGRID summer school on the use of EUROMOD for model family simulations will be held at the Herman Deleeck Centre for Social Policy, University of Antwerp, over 28-30 September 2016.

The aim of this course will be to provide academics, policy practitioners and other interested users with an introduction to the concepts, structure and functioning of HHoT and EUROMOD. HHoT, or the Hypothetical Household Tool, is a tool for the simulation of hypothetical families, based on EUROMOD. It generates datasets that EUROMOD then applies for policy simulations instead of using regular micro data files, allowing for a better understanding of changes in tax-benefit policies and cross-national differences in social outcomes. The full call for applications can be found here. The deadline for applications is 25 July 2016.

An InGRID winter school on cross country microsimulation using EUROMOD is also planned to be held at the Institute for Social and Economic Research, University of Essex, in late 2016; further details will be announced later this year. Potential applicants can stay informed by signing up to receive EUROMOD email alerts or by taking a look at the latest edition of EUROMOD News.



Meet the EUROMOD national teams: the Maltese team

In this edition of EUROMOD NEWS, we introduce you to the five members of the Maltese EUROMOD team

The Maltese EUROMOD team is based at the Economic Policy Department within the Ministry for Finance.

The Department provides economic advice on matters relating to the formulation of economic policy, matters of structural economic relevance and Malta's trade policy. The Department contributes to discussions on various aspects of the Maltese economy with international bodies and organisations, in particular through participation in meetings within the European Council and with the European Commission, the IMF and credit rating agencies on matters relating to trade policy, structural, fiscal and financial policy issues. In particular, the Department contributes to the national dimension of the European Semester, including through the drafting of the National Reform Programme and the Stability Programme.

The EUROMOD team in Malta is composed of Godwin Mifsud, Pauline Saliba, Stephanie Mifsud, Simon Bugeja and Melchior Vella. Godwin Mifsud is the Director General of the Department while the rest of the team work on a day to day basis on EUROMOD. The EUROMOD project requires a coordinated effort and for this reason the team works in close contact with statistical and tax-benefit experts in Malta.

The team has also excellent relations with ISER staff. Over the past years, the team has benefited from three visits in Malta by EUROMOD experts and this has contributed to improve our technical knowledge of EUROMOD, in particular the modelling and interpretation of results. During 2015, a member of the team, also attended an in-depth training course in Essex which provided a much appreciated hands-on experience.

How long the team have been working with EUROMOD

The Department has been involved in the EUROMOD project since 2007. Since then, involvement of the Department has evolved and deepened with the result that the resources committed to EUROMOD have increased over time.

In the early years, work on EUROMOD involved the updating of the country report, however since then we are increasingly applying EUROMOD to inform the policy making process, especially with regards to the tax-benefit reforms.

Some highlights of recent research by the Maltese EUROMOD team

The Department is increasingly using EUROMOD for policy purposes, especially when evaluating the impact of policy options, however due to the very nature of such exercises, the research results are not always published.

The Department has been working on simulations using EUROMOD with the scope of evaluating the tax and benefit measures that were introduced in the Budget for 2016, highlighting the impact on households and individuals at different income groups. This consisted of the modelling of three specific budget measures, mainly the increase in the national minimum pension, the extension of the in-work benefit and changes in the income tax thresholds. A draft version of the study has been concluded and is being reviewed for feedback.

Upcoming research includes an evaluation of broader policy reforms including those in the areas of Active Labour Market Policies, income taxation and pensions.

How research with EUROMOD used by policy makers and others in Malta?

EUROMOD is an important analytical tool and its use in Malta is expected to increase.

As highlighted above, EUROMOD is enabling policymakers in Malta to evaluate the impact of tax-benefit reform proposals by adding an additional dimension i.e. the distributional impact apart from the financial impact of policy measures. Hence, EUROMOD is enabling policymakers to adopt a more holistic approach to policy making.

In addition, EUROMOD is also useful in estimating the ex post impact of policy measures as well as to understand better the developments of the income distribution in Malta in reflection of past policy decisions as well other broader socio-economic developments such as migration, ageing population and the emergence of new sectors of growth.

Working papers

An evaluation of a strictly revenue neutral Citizen's Income scheme

EUROMOD Working Paper Series EM5/16

Authors Malcolm Torry Publication date 17 Jun 2016

Abstract A Citizen's Income - an unconditional and nonwithdrawable income for every individual - would offer many advantages: but because the UK's current benefits and tax systems are complex, transition to a benefits system based on a Citizen's Income could be difficult to achieve. Two previous EUROMOD working papers have studied some of the effects and financial feasibilities of a variety of Citizen's Income schemes. The advent of EUROMOD G3.0, and the availability of new FRS data, has made possible a more up to date evaluation of one of the schemes discussed in the second of the earlier working papers: a strictly revenue neutral scheme that could be paid for by raising Income Tax rates by 3%, by abolishing Income Tax Personal Allowances, and by making adjustments to National Insurance Contributions, and that would leave in place the existing social security structure and reduce households' means-tested benefits by taking into account their Citizen's Incomes. The earlier working papers show that such a scheme would impose almost no disposable income losses on low income households at the point of implementation, and would impose only manageable losses on households in general. This new working paper updates the previous research on such a scheme, offers a variety of additional evaluations, and studies the possibility of paying a Citizen's Income to a single year cohort as a first step in rolling out such a Citizen's Income scheme to the entire working age population.

Getting tired of work, or re-tiring in absence of decent job opportunities? Some insights from an estimated Random Utility/Random Opportunity model on Belgian data **EUROMOD Working Paper Series EM4/16**

Authors Bart Capéau

André Decoster

Publication date 19 May 2016

Abstract This paper exploits the distinction between preference and opportunity factors in a Random Utility and Random Opportunity (RURO) model of job choice (Aaberge, Dagsvik and Strøm, 1995, and Aaberge, Colombino and Strøm, 1999). We estimate the model on Belgian data (SILC 2007). To investigate to

what extent lower labour market participation of elderly is due to changing preferences (executing a job might become less enjoyable with age) or to differences in opportunities (elderly getting less, or less attractive job offers), we use the estimated model to simulate two counterfactuals. In the first, we remove partly the age heterogeneity in opportunities, in the second we remove age heterogeneity in preferences. A comparison of labour market behaviour in these two counterfactuals with the baseline shows that opportunities which decline with age are at least as an important factor in explaining low participation rates for the elderly, as is increasing preference for leisure. The effect of opportunities seems to work primarily through the extensive margin, whereas the effect of preferences is more outspoken in the intensive than in the extensive margin.

Baseline results from the EU28 EUROMOD (2011-2015)

EUROMOD Working Paper Series EM3/16

Authors Chrysa Leventi

Sanja Vujackov

Publication date 18 May 2016

Abstract This paper presents baseline results from the latest version of EUROMOD (version G3.0+), the tax-benefit microsimulation model for the EU-28. 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 indicators across countries and over time between 2011 and 2015 (or 2014 in some cases). 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. Throughout 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 reported in EUROMOD Working Paper EM18/2014.

The importance of income-tested benefits in good times and bad: lessons from EU countries

EUROMOD Working Paper Series EM2/16

Authors Chrysa Leventi

Olga Rastrigina

Holly Sutherland

Publication date 7 Mar 2016

Abstract Policy over the past years has seen a gradual movement away from universal social benefits towards the provision of more targeted benefit schemes. Using the European tax-benefit microsimulation model EUROMOD,

this paper aims to compare the effectiveness of income-tested benefits at different points in the economic cycle. This objective is considered in terms of coverage of households with incomes falling below various thresholds and importance in terms of the fraction of total resources that these benefits provide. The prevalence and relative weight of income-tested benefits throughout the income distribution is also examined. We compare the situation in 2009 with that in 2014 (or 2013) for fifteen EU Member States experiencing differing economic conditions over the period in question, including those which have been affected comparatively little by the crisis as well as those which have witnessed severe reductions in economic activity and employment levels and those in strong recovery by 2014. As EU-SILC micro-data containing household income for 2013 or 2014 are not available yet, standard EUROMOD routines are enhanced with additional adjustments to the EU-SILC based input data in order to take into account changes in the labour market. We attempt to indicate the sensitivity of the estimated policy effectiveness indicators to these particular changes. We conclude by discussing the methodological pitfalls and main findings of this research

Fiscal sustainability and demographic change: a micro approach for 27 EU countries **EUROMOD Working Paper Series EM1/16**

Authors Mathias Dolls

Karina Doorley

Alari Paulus

Hilmar Schneider

Sebastian Siegloch

Eric Sommer

Publication date 6 Jan 2016

Abstract The effect of demographic change on the labor force and on fiscal revenues is topical in light of potential pension shortfalls. This paper evaluates the effect of demographic changes between 2010 and 2030 on labor force participation and government budgets in the EU-27. Our analysis involves the incorporation of population projections, and an explicit modeling of the supply and demand side of the labor market. Our approach overcomes a key shortcoming of most existing studies that focus only on labor supply when assessing the effects of policy reforms. Ignoring wage reactions greatly understates the increase in fiscal revenues, suggesting that fiscal strain from demographic change might be less severe than currently perceived. Finally, as a policy response to demographic change and worsening fiscal budgets, we simulate the increase in the statutory retirement age. Our policy simulations confirm that raising the statutory retirement age can balance fiscal budgets in the long run.



EUROMOD: introducing the team

In this edition of EUROMOD **NEWS**, Dr Daria Popova, Senior Research Officer. describes her work

What is your background? I joined the EUROMOD team in May 2015. Before that I worked as a lecturer at the Political Science Department of the University of Michigan in Ann Arbor and as a post-doctoral researcher at the Department of Social and Political Science of European University Institute in Florence, where I defended my thesis. My PhD project has been devoted to the comparative analysis of public policies for families and children in Sweden, Germany, Belgium, the UK and Russia and their impact on income distribution and child poverty using microsimulation techniques. I used EUROMOD as a platform to build the Russian tax-benefit microsimulation model and this is how I got to know the EUROMOD team back in 2010.

What are your research interests? My

substantive research interests include comparative social policy, in particular European welfare regimes, the analysis of family and demographic behaviour of households, social and economic inequality. My methodological interests are policy modeling and microsimulation models, panel data analysis, measurement of well-being.

Which countries do you work on? I am responsible for Belgium, the Czech Republic



EUROMOD is financially supported by the European Union Programme for Employment and Social Innovation 'Easi' (2014-2020). For further information please consult here. The information contained within this document does not necessarily reflect the position or opinion of the European Commission.



"...I have an opportunity to work alongside the best scholars and practitioners in microsimulation modelling..."

and Lithuania and I continue to develop the microsimulation model for Russia.

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. This year I will be responsible for the public release of the model.

What are you working on at the moment?

Together with Jekaterina Navicke from the University of Vilnius, I am currently working on a paper which attempts to disentangle the effects of tax-benefit systems, social stratification determinants and life course events on unequal distribution of vulnerability to poverty in Europe. We analyse how different types of tax-benefit systems contribute to families'

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capacity to avoid poverty after two types of life-course events, the childbirth and divorce/separation. To assess the crossnational variation in the role of welfare systems we use EUROMOD and the EU-SILC data for 12 European countries. We simulate hypothetical income shocks due to childbirth and family dissolution for each vulnerable household in the sample by applying the 'stress-testing' methodology developed by Atkinson (2009). We then examine whether each of these events has different poverty-triggering effect across social groups and how different types of tax-benefit arrangements, parental leave benefits and child maintenance schemes in particular, help mitigate these risks, i.e. whether they reduce or reinforce inequalities by gender and social class.

What do you enjoy most about working with EUROMOD? I believe that high quality research should be used to inform the political process and to improve policy with the goal of bringing about positive social change. The tax-benefit models can be an effective tool in improving design of the tax-benefit systems. They can contribute to the expansion of the capacities of governments in implementing the evidence based approach to social intervention. In that sense I hope that my research which I enjoy doing very much would contribute to the development of more effective social programmes to combat social and economic inequalities around the world.

Would you like to share any recent highlights? Working at EUROMOD allows me to use a wide range of analytical, research and communication skills and provides great experience in analysing social policies from the comparative perspective. I am happy that I have an opportunity to work alongside the best scholars and practitioners in microsimulation modelling.

