

# 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 of years and involving a large team of people. For more information on the design and development of EUROMOD [click here](#).

[www.euromod.ac.uk](http://www.euromod.ac.uk)



## Reducing child poverty in Scotland: the challenge that lies ahead

Following the passing of the Child Poverty (Scotland) Act 2017 in December 2017, the Scottish Government announced its first delivery plan to reduce child poverty in Scotland in April 2018

Dr Paola De Agostini, from ISER's EUROMOD team, has collaborated with Nicola Hudson from the Scottish Parliament Information Centre (SPICe) to produce analyses that enable the Scottish Parliament to assess if and how well the policy reforms proposed by the Government will contribute to meet the final child poverty targets and make informed suggestions of policies that may perform more effectively and efficiently.

The analysis published by SPICe joins previous research (Reed and Stark, Resolution

Foundation and IPPR Scotland) in showing that, if no action is taken, child poverty will continue to rise due to the effect of measures such as the freeze in certain benefit payments and the introduction of the two child limit, combined with forecast economic performance. It provides further evidence to inform the debate around child poverty by considering how an illustrative sum of £0.8 billion could be used to fund a range of changes to the tax-benefit system and assesses the potential impact on child poverty in Scotland in the next five years. Continued on next page

*Continued from previous page* On the basis of current policy plans and economic forecasts, the analysis shows that even with a substantial investment – but everything else being equal – none of the policy measures considered alone would achieve the relative child poverty (interim) target level of 18% for 2023-24 (see figure below). A higher level of investment might achieve a bigger impact, but non-linear interactions in the tax-benefit system means it is not guaranteed that (for example) doubling spending would double the number of children taken out of poverty.

As the Scottish Government implements its plan and explores options for introducing an income supplement for children and families that need it most, it is important to consider how such a policy would interact with the rest of the tax and benefit rules and whether it would create any disincentive to work or to take-up. It is also important to understand how the policy would interact with other policy interventions and with the rest of the economy and whether it would trigger any behavioural response that may intensify or offset the expected outcomes. April 2023 is only four years ahead and the target is ambitious.

Since 2015, SPICe has been using EUROMOD to provide impartial evidence-based analyses to inform the Members of the Scottish Parliament (MSPs) and the Scottish parliamentary committees as well as to answer political parties' inquiries on a range of issues including in some cases analysis of the costs and effects of proposed policy reforms.



A different sort of UKMOD

## The first UKMOD training course held in London

**In April 2019 ISER organised the first UKMOD training course**

This was part of a Nuffield Foundation-funded project to adapt and extend the UK component of EUROMOD in order to meet the demand for tax-benefit modelling capacity in the UK and to promote its use more widely as a way to improve the evidence base to better inform current policy debates.

The course, hosted by the Open University in London, lasted for two days and included a variety of lectures, live demonstrations and hands-on training exercise sessions tailored to the needs of those wanting to use tax and benefit microsimulation to inform their policy work.

The course was attended by 22 participants from public sector and parliamentary bodies (including the House of Commons Library and their devolved equivalents, and civil servants from national and local governments), third sector and academia.

In order to promote the use of microsimulation as a way to improve the evidence base to inform policy debates, the project team will provide a second training course on UKMOD in October 2019 targeted at third sector organisations. If you are interested in finding out more or attending the next course, please contact [Jack Kneeshaw](#).

Click [here](#) to find out about all EUROMOD training courses.

**EUROMOD training and visit opportunities supported by InGRID-2: apply now!**

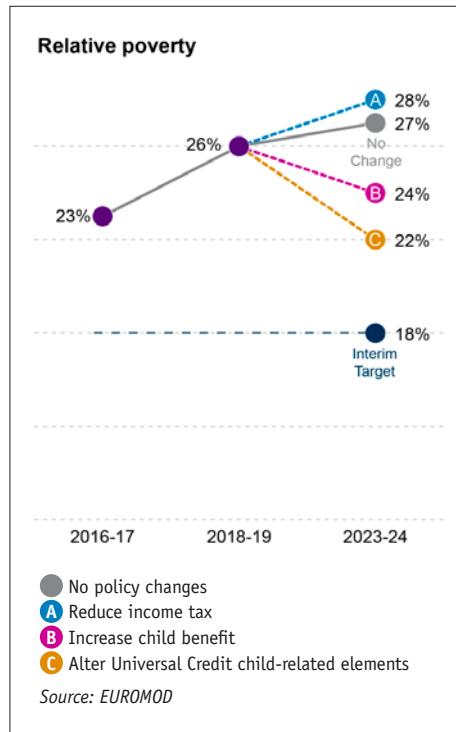
**Three-day winter school 'Using EUROMOD in cross-country microsimulation', University of Essex, 20-22 November 2019**

Applications deadline: 2 September 2019

**Opportunity for a funded 5-15 day visit to ISER between November 2019 and April 2020**

Applications deadline: 28 August 2019

Find out more about InGRID [here](#).



# Annual SOUTHMOD meeting kicks off latest round of development

The SOUTHMOD team met in Cape Town this year to kick-off a new round of country updates and developments to the SOUTHMOD models, funded by UNU-WIDER

The existing National Teams from Ecuador, Ghana, Mozambique, Tanzania, Viet Nam and Zambia have been joined by a new team from Uganda. In addition, Chimwewe Magalasi, a PhD student at ISER, presented his model for Malawi which also relies on the EUROMOD platform.

The meeting – co-organised by UNU-WIDER and SASPRI – offered an opportunity to learn from other countries' experiences in terms of how to engage policy makers and encouraging the use of the models within the countries. The project so far has trained more than 300 government officials and researchers in Sub-

Saharan Africa, Ecuador and Viet Nam. As such, it provides an opportunity for capacity building and networking in the participating countries. In most cases for the first time, policy makers are equipped with a tool that helps them to pre-test their ideas for policy change and to assess the social and fiscal impact of these ideas. And indeed, the model has been used to assess the introduction of a universal child benefit and other social security measures on poverty in Mozambique and Zambia. Last year's work on the underpinning input datasets have furthermore triggered improvements of the surveys in some of the countries due to the

cooperation with National Statistical Offices. In addition, a fairly recent initiative in several countries promotes the use of administrative data, a development that will improve the quality of results in the near future and opens up new research possibilities.

The following SOUTHMOD models are freely accessible for non-commercial research use through UNU-WIDER: ECUAMOD (Ecuador), GHAMOD (Ghana), MicroZAMOD (Zambia), MOZMOD (Mozambique), and TAZMOD (Tanzania). The model for South Africa (SAMOD) is available from SASPRI. You can find more information here.



The SOUTHMOD team



Enjoying a trip to Kirstenbosch Botanical Gardens

## Where they turned up

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

Figari, F., K. Hollan, M. Matsaganis and E. Zólyomi (2019) Fiscal vs. Social Welfare: Support for Affordable Housing in Seven EU Countries, *Social Policies* 2019:1 67-92, <https://www.rivisteweb.it/doi/10.7389/93733>

Urban, I. and M. Pezer (2019) Compensation for Households with Children in Croatia, Slovenia and Austria, *Social Indicators Research* 1-33, <https://link.springer.com/article/10.1007/s11205-019-02150-8>

Urban, I. (2019) Measuring Redistributive Effects of Taxes and Benefits: Beyond the Proportionality Standard, *FinanzArchiv* 1-31, <https://doi.org/10.1628/fa-2019-0008>

Ayala, L. and M. Paniagua (2019) The impact of tax benefits on female labor supply and income distribution in Spain, *Review of Economics of the Household* 17:3 1025-1048, <https://dx.doi.org/10.1007/s11150-018-9405-5>

Coda Moscarola, F., U. Colombino, F. Figari and M. Locatelli (2019) Shifting taxes away from labour enhances equity and fiscal efficiency, *Journal of Policy Modeling*, <https://doi.org/10.1016/j.jpolmod.2019.07.002>

Estévez Schwarz, D. and E. Sommer (2019) Feasible smooth income tax schedules: benefits and distributional implications, *Applied Economics*, <https://doi.org/10.1080/00036846.2019.1638500>

Martinelli, L. (2019) A Basic Income trilemma: affordability, adequacy, and the advantages of radically simplified welfare, *Journal of Social Policy*, <https://doi.org/10.1017/S0047279419000424>

Barrios, S., M. Dolls, A. Maftei, A. Peichl, S. Riscado, J. Varga and C. Wittneben (2019) Dynamic scoring of tax reforms in the European Union, *Journal of Policy Analysis and Management* 38:1 239-262, <https://doi.org/10.1002/pam.22105>

Gasior, K. and P. Recchia (2019) The use of hypothetical household data for policy learning: comparative tax-benefit indicators using EUROMOD HHoT, *Journal of Comparative Policy Analysis: Research and Practice*, <https://doi.org/10.1080/13876988.2019.1609784>

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



# The growing use of administrative data with EUROMOD: how, why and where?

In this edition of *EUROMOD News*, we document an exciting new development: the use of administrative, rather than survey-based, input data as a means of extending the capabilities of national and regional models

Advances to the EUROMOD software, as well as the platform's flexibility, mean that previous limits imposed by the size of an input dataset on processing speed are a thing of the past. Several government ministries are beginning to take advantage of this, specifically with the use of large administrative datasets which allow for a range of policy extensions to be implemented and new policies to be tested. We focus on four such projects, each at a different stage of development.

## Greece

Over the last two years, the microsimulation team of the Council of Economic Advisors of the Greek Ministry of Finance has received technical assistance from the Joint Research Centre of the European Commission (JRC-Seville). One of the main outcomes of this assistance was the construction of an alternative EUROMOD spine using input data based on a large sample of personal income tax returns.

The aim of this project was to address the urgent need for a concrete and timely assessment of policy proposals in the context of the 3rd Economic Adjustment Programme of the country. This alternative model serves as a complement to the standard EUROMOD version based on EU-SILC data; it allows for a more accurate simulation of some policies that cannot be simulated that precisely

with EU-SILC data due to the latter's lack of information.

For example, for the 2017 Social Dividend, the use of tax data was more appropriate because this one-off, means-tested benefit was based on taxpayers' most recent tax returns. The administrative version of the model was also intensively used for simulating actual or planned reforms in several taxes (such as personal income tax, solidarity contribution and property tax) and other means-tested benefits (such as family and housing benefits).

The project, funded by the EC's Structural Reform Support Service, is expected to continue in 2019-2020. Among its planned outcomes are to include the alternative spine running with administrative data into the standard EUROMOD SILC-based spine, incorporate more recent samples of tax returns, and merge them with other datasets

containing information on the contribution history of individuals, as well as their periods of unemployment, in order to better analyse pension and social security contribution reforms. These reforms are linked to the Enhanced Post-Program Surveillance of Greece and to the process of the European Semester.

## Estonia

Statistics Estonia in collaboration with Praxis Centre for Policy Studies - the EUROMOD national team for Estonia - has constructed the first EUROMOD input dataset using information from various administrative registers for the whole Estonian population. The project was initiated by the Ministry of Finance as part of their broader activities to enhance their microsimulation competence and tools, and specifically to increase the timeliness, precision and detail of EUROMOD simulations to facilitate its use for official fiscal policy impact assessments and government budget forecasts.

It follows a special EUROMOD training course for the ministry staff in 2017 and the feasibility study on using Estonian administrative registers for EUROMOD, *Continued on next page*

*Continued from previous page* carried out by Praxis earlier in 2018, which mapped the expectations, opportunities, risks and problems of such a development; assessed its technical feasibility and provided a roadmap.

The construction of the dataset greatly benefitted from Statistics Estonia's earlier experience of using register information for the Estonian SILC and their preparations for the register-based population census in 2020/21. The initial dataset contains cross-sectional annual information for about 1.3 million people, while further plans will also seek to make use of monthly information and the panel data dimension.

### Lithuania

In 2018 the Ministry of Social Security and Labour of the Republic of Lithuania launched a project aimed at the creation of a system for policy monitoring, evaluation and decision making. In the scope of the project, the Lithuanian component of EUROMOD is being adapted for the Ministry's needs. It is planned that the model will help assess the distributional impact of proposed policy changes. The Ministry and the Government are also very much interested in a methodology for nowcasting socio-economic indicators, such as at-risk-of-poverty and Gini.

Following the experience of the Estonian colleagues, a feasibility study of using merged administrative records for fiscal policy analysis within EUROMOD's framework was conducted at the beginning of 2019. Administrative data could help improve the scope and precision of simulations, provide a

possibility to disaggregate the results at the municipal level, and potentially ensure better correspondence between the model's results and administrative statistics. The study was presented and discussed with a number of stakeholders, including the Lithuanian Statistical Office and the Information Society Development Office at the Ministry of Economy and Innovation. Representatives of the Lithuanian Government demonstrated a high level of interest and involvement in the process.

As a result of the consultations, it was agreed on the changes to legislation, which need to be made to be able to merge and use administrative records for fiscal policy analysis. The legislative proposals are currently under development and should be approved by the end of the year. It is then planned to construct a pilot administrative database to be used for tax-benefit simulations, policy monitoring and evaluation.

### Belgium

The BELMOD project – coordinated by the Belgian Federal Ministry for Social Security (FPS-SS) and involving the Universities of Antwerp, Essex and KU Leuven, as well as the Belgian Federal Planning Bureau – has begun work on the two-year development of a new microsimulation tool for Belgium.

BELMOD will integrate the strengths of MIMOSIS – the current microsimulation model used by the Social Security ministry – with the advantages of EUROMOD, to deliver a model capable of being run on the large-

scale administrative datasets available to the ministry.

Making use of large administrative datasets will allow for both the reliable estimation of relatively small target population groups and also allow the model to better align the income concepts measured in the data to those used by administrators and social workers when actually applying means-testing. In turn, employing the EUROMOD platform as the basis for the model will make the tool more user-friendly and simplify the process of updating and maintaining the model content.

The platform's flexibility will also permit the implementation of a range of policy extensions – to income support, unemployment insurance and sickness benefits – which will be made possible by the use of admin data rather than the SILC which is used by the 'standard' Belgian EUROMOD model.

Basing the model on EUROMOD will allow for comparability with other models based on that platform and the project plans to disseminate the lessons learned in constructing BELMOD so that other Belgian ministries – and, indeed, other interested ministries throughout the EU – may consider taking the same approach.

A more applied reason for creating BELMOD is the project's aim to devise ways of improving access to social protection in Belgium. The new tool will be used to design a national reform plan, simulating reforms in order to test the procedures and outcomes of moving towards greater automation in the granting of means-tested benefits.

## EUROMOD-related research presented at conferences

### 3rd ESPAnet Austria Research Conference on Social Policy, April 26 2019, Innsbruck

- Michael Fuchs presented 'Distributional and fiscal outcomes family tax credit 'Familienbonus Plus' vs Basic Security for Children'
- Paola De Agostini presented 'Child Poverty in Scotland: forecasting the impact of policy options'

### IMA 7th World Congress, 19-21 June 2019, Galway

- Vincent Vergnat presented 'Intensity of poverty among young adults in Europe: what are the strategies of European countries?'
- Eric Sommer presented 'Feasible Smooth Income Tax Schedules: Benefits and Distributional Implications' (co-author Diana Estévez Schwarz)
- Denisa Sologon presented 'Accounting for the distributional effects of the 2007-2008 crisis and the Economic Adjustment Program in Portugal' (co-authors Vanda Almeida and Philippe Van Kerm)
- Stefano Boscolo presented 'The Contribution of Proportional Taxes and Tax-Free Cash Benefits to Income Redistribution Over the Period 2005-2018: Evidence from Italy'

- Maxime Bercholz presented 'A Comparison of EUROMOD and SWITCH, Two Microsimulation Models of the Irish Tax and Benefit System' (co-authors Karina Doorley and Tim Callan)
- Chrysa Leventi presented 'The Tax Structure of an Economy in Crisis: Greece 2009-2017' (co-author Fidel Picos) and also 'Assessing the Anti-Poverty Effects of Social Transfers: Net or Gross? And does it really matter?' (co-authors Andrea Papini and Holly Sutherland)
- Diego Collado presented 'Tax-benefit reforms and the anti-poverty marginal benefit of public funds in Belgium'

### 8th Meeting of the Society for the Study of Economic Inequality (ECINEQ), 3-5 July 2019, Paris

- Daria Popova presented 'Do welfare state taxes and transfers reduce gender income inequality? Evidence from eight European countries' (co-author Silvia Avram)
- Adrián Hernández presented 'Moving towards a subjective right approach: regional minimum income schemes in Spain' (co-authors Fidel Picos and Sara Riscado)
- Gerlinde Verbist presented 'An assessment of wealth taxes in a joint income-wealth perspective' (co-authors Sarah Kuypers and Francesco Figari)



# EUROMOD: introducing the team

**In this edition of *EUROMOD NEWS*, Louise Cullen, ISER Communications and Engagement Manager, describes her work**

## What is your background?

I worked in public sector communications for a long time before joining ISER in May 2012. I've previously been head of communications at the National Union of Students and at a large children's charity supporting children of prisoners and children on the edge of care. Prior to that I worked as a journalist, as commissioning editor for *Marie Claire* in Britain and even a period doing research for *Marie Claire* in France, as well as writing features for the UK national newspapers, like the *Guardian*, the *Independent* and the *Daily Telegraph*.

## What are your EUROMOD-related responsibilities?

When I first joined ISER, the EUROMOD communications output was quite modest. Working alongside the EUROMOD team, I helped launch this newsletter series in the Autumn of 2012 and we then went on to develop a standalone website, as well as some really interesting publications, [Taking the European View](#) in 2014 and the fantastic booklet [Celebrating 20 years of EUROMOD](#), after the anniversary conference in 2016. I have also helped our EUROMOD researchers launch their work here, with press releases and events aimed at policy audiences, such as a great event last year in Westminster for Iva Tasseva's research on Universal Basic Income. On a day-to-day basis I work with the researchers on news stories for our websites and for promoting the research through social media channels.

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

I love the energy of the team here – they are such a collaborative bunch of people, with lots of ideas and enthusiasm for their work. I've also really enjoyed getting to know the whole international EUROMOD community – through their visits to the UK



**Louise Cullen**

and on our visits to the project meetings and conferences. These meet-ups are legendary for a great sharing of friendship and warmth among colleagues and collaborators, and I've loved seeing Vienna, Zagreb, Athens and Lisbon through the guidance of some excellent host teams! What I have enjoyed most is seeing the different research presentations too. I remember the first meeting I went to in Lisbon and I was so impressed by the way researchers from so many different countries were using EUROMOD to test and experiment with policy ideas. I found it fascinating and it has greatly increased my understanding of the value of this important scientific tool. I'm also hugely impressed by their language and presentation skills!

## Would you like to share any recent highlights?

One of my proudest moments is getting EUROMOD on the front page of a national newspaper here in the UK – it was research on the impact of austerity by Paola De Agostini, John Hills and Holly Sutherland.

I think we were all especially pleased to see our microsimulation model cited as a resource in such a prominent way for the very first time. Shortly after this we attended a fantastic European Commission conference, on the use of microsimulation, in Brussels, featuring presentations by many of our team. This really brought home how important EUROMOD had become to policy advisors. Right now, I am working with the team here at ISER on our Nuffield-funded project to open up access to the UK model and we are making a short film to promote it to civil servants, charities and campaign organisations who might want to test out policy ideas. I think this is going to be an important project for the UK and for raising the profile of our work here. I am also helping Matteo and the team to develop communications to highlight the international reach of our microsimulation expertise at Essex through our work in Africa, Asia and South America, and that's opening up lots of exciting communications opportunities.

**'One of my proudest moments is getting EUROMOD on the front page of a national newspaper here in the UK – it was research on the impact of austerity by Paola De Agostini, John Hills and Holly Sutherland. I think we were all especially pleased to see our microsimulation model cited as a resource in such a prominent way for the very first time'**

# Meet the EUROMOD national teams: the Ireland team

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

**All five work at the Economic and Social Research Institute (ESRI), an independent research institute in Dublin. The team took over the national team responsibility in 2019.**

**Claire Keane** is a Senior Research Officer and Research Area Coordinator for Taxation, Welfare & Pensions research at the ESRI. She holds a PhD from University College Dublin since 2012. Her research interests include labour economics, taxation, welfare and pension policy as well as poverty and income distribution analysis. Between 2015 and 2017 she worked in the social policy division at the OECD. She coordinates work on the ESRI tax-benefit microsimulation model, SWITCH. Prior to taking on the national country team work in 2019 Claire previously worked as part of the Irish national EUROMOD team in 2012.

**Karina Doorley** is also a Senior Research Officer at the ESRI. She received her PhD from University College Dublin in 2012. Her thesis focused on the effect of fiscal and social policies on labour supply and redistribution in Europe. She worked at the Institute for the Study of Labor (IZA) as a Research Associate from 2012 until 2014. She joined the Luxembourg Institute of Socio-Economic Research (LISER) as a Research Associate in 2014 and worked there before starting at the ESRI in 2017. She is also currently a Research Fellow at IZA. Her research interests include labour market policy evaluation, inequality and demographic change. Karina worked as part of the French national team for EUROMOD between 2012 and 2014.

**Barra Roantree** is a Research Officer at the ESRI. His work is focused on taxation, welfare and pensions. He joined the ESRI in Autumn 2018 after completing a PhD at University College London. He previously worked as an

economist at the Institute for Fiscal Studies in London. While at the IFS Barra worked on TAXBEN the IFS tax-benefit model.

**Mark Regan** joined the ESRI in 2016 as a Research Assistant. Mark holds B.A. and M.Sc. degrees in Economics from Trinity College, Dublin. His work at the ESRI focuses on taxation, welfare and pensions. Aside from his work at the ESRI, Mark is also an economics PhD student at University College Dublin.

Finally, **Maxime Bercholz** joined the ESRI as a Research Assistant in October 2017. He holds a BA in Philosophy, Political Science, Economics and Sociology and an MSc in Economics, both from Trinity College Dublin. His work in the ESRI focuses on micro-simulation modelling of the tax-benefit system and broader tax, welfare and pension topics.

## Use of EUROMOD in Ireland

Until now the team at the ESRI have used EUROMOD most frequently in cross country research on the tax-benefit system. The team also develop and maintain the Irish tax-benefit model, SWITCH. The main difference between the two is that the SWITCH model runs on a more detailed, but restricted access, national version of the SILC dataset. This allows the SWITCH model to more accurately model entitlements to social welfare benefits. The SWITCH model also captures entitlements to things like childcare subsidies and free public health insurance due to the fact that the national SILC data contains information on eligibility related characteristics. The SWITCH model is funded by, and used in, five government departments. Its use in government includes pre- and post-Budget analysis to examine the cost, distributional and poverty impact of tax-benefit changes. It

is also used in the Department of Employment Affairs and Social Protection's annual Social Impact Assessment (SIA). The SIA examines the impact of the main tax and welfare changes in each year's Budget on the income distribution and poverty rates in Ireland.

Due to the high time costs involved in maintaining and developing both models the Irish team intend to use the EUROMOD platform, along with the more detailed national SILC, so that the EUROMOD model would be used as the main microsimulation model for Ireland. This would be used both by researchers at the ESRI as well as Irish government users. The use of EUROMOD is, therefore, set to become more intensive in Ireland in the coming years.

## Imagine that you had the power to propose a major policy reform for your country – what would it be?

Ireland has a social welfare payment for low income families in work known as the Working Family Credit in order to ensure they have a minimum level of income. Only those with children qualify however. It would be interesting to expand out entitlement of the payment to low income singles/couples without children to examine the impact on in-work poverty.

## What are the best/worst things about working on the EUROMOD project?

Starting with the worst thing about working on the EUROMOD project it has to be validation of the model! This can be time consuming (and a bit boring!) but is essential to ensure the model accurately captures the rules of the Irish tax-benefit system and provides confidence in the results produced by the model. The best thing about working on the EUROMOD project is being part of the wider EUROMOD network. This ensures that the national team are using international best practices in their work. The network also allows us to learn from, and make use of, new developments and improvements – for example the SWITCH model is not able to model hypothetical households or construct budget constraints and we are interested in using this feature of EUROMOD for Ireland.



Claire Keane



Karina Doorley



Barra Roantree



Mark Regan



Maxime Bercholz

# ISER experts advise on designing policies to tackle poverty and inequality in Colombia

ISER experts in microsimulation have been working closely with colleagues in Colombia on the development of a new tax-benefit model for the country, COLMOD, based on EUROMOD.

International and Colombian experts presented their research on microsimulations and discussed their importance for the current debate on poverty and inequality in Colombia at an international conference on Public Policies to Tackle Poverty and Inequality, in Bogotá.

COLMOD was introduced to an audience of academics and policy makers, with a training session on the use of EUROMOD for researchers, analysts and officials from several public institutions including the Finance Ministry (Ministerio de Hacienda y Crédito Público), the Central Bank (Banco de la República) and the National Planning Department (Departamento Nacional de Planeación).

The conference included sessions with contributed papers on microsimulation research on countries around the world and a panel discussion including Roberto Angulo (Colombian Development Plan coordinator) Monica Ospina (Professor of Public Finances at the Department of Economics, Universidad EAFIT) and Xavier Jara (Research Economist at ISER at University of Essex), chaired by Federico Corredor (Lecturer at Externado). Describing the benefits of research using microsimulation, Roberto Angulo said: "It is not possible to build bridges between public policy and frontier knowledge without the use of microdata and microsimulations. The value added of simulation models is that these help to keep public policies implementation accountable". Mónica Ospina highlighted that "In this country, the academic community commonly discusses new tax reforms, but seldom its empirical evidence. Consequently, microsimulations improve the quality of the debate in terms of the consequences that tax reforms could have on wellbeing".



Delegates attending the conference in Bogotá

## EUROMOD working paper series

### Distributional and welfare effects of replacing monetary benefits with Universal Basic Income in Spain

**EUROMOD Working Paper Series EM8/19**

**Authors** Nuria Badenes-Plá, Borja Gambau-Suelves and María Navas Román

**Publication date** 22 April 2019

**Abstract** This paper quantifies the redistributive effects on progressivity, poverty and welfare, that would occur if the monetary benefits currently in place in the Spanish system were to be replaced by a neutral alternative in terms of spending, granting a universal basic income (UBI) to everyone. We have calculated two scenarios: one in which the benefit system is replaced by a basic income, and another in which retirement pensions are maintained, with the rest of monetary benefits being distributed via a UBI. The simulations are carried out using EUROMOD. The implementation of a UBI, even a very radical one that eliminates the existing benefits system, could be: economically sustainable; as redistributive as the current one; almost as poverty reducing as the one in force (or more in some dimensions), and a generator of greater welfare.

### Falling through the social safety net? Analysing non-take-up of minimum income benefit and monetary social assistance in Austria

**EUROMOD Working Paper Series EM9/19**

**Authors** Michael Fuchs, Katarina Hollan, Katrin Gasior, Tamara Premrov and Anette Scopetta

**Publication date** 24 April 2019

**Abstract** Non-take-up of means tested benefits is a wide spread phenomenon in European welfare states. The paper assesses whether the reform that replaced the monetary social assistance benefit by the minimum income benefit in Austria has succeeded in increasing take up rates. We use EU-SILC register data together with the tax-benefit microsimulation model EUROMOD/SORESI. The results show that the reform led to a significant decrease of non-take-up from 53% to 30% in terms of the number of households and from 51% to 30% in terms of expenditure. Estimates of a two-stage Heckman selection model show that pecuniary determinants (higher degree of need), lower applications costs (unemployment, low education, renting one's home) and lower psychological barriers (size of municipality and lone-parenthood) are predictors of taking up the benefit.

### Second earners and in-work poverty in the EU EUROMOD Working Paper Series EM10/19

**Authors** Holger Xavier Jara Tamayo and Daria Popova

**Publication date** 2 May 2019

**Abstract** Dual or multiple earnership has been considered an important factor to prevent in-work poverty. The aim of this paper is to quantify the impact of second earnership on the risk of in-work poverty and the role of the tax-benefit systems in moderating this risk. Our analysis refers to 2014 and employs EU-SILC data and EUROMOD, the tax-benefit microsimulation model for EU-28. We apply a pre-post analysis in combination with microsimulation techniques to assess the role of second earners in preventing in-work poverty. This is done by simulating a counterfactual scenario where second earners become unemployed. Our results show that the effect of net replacement rates of second earners on the probability of in-work poverty is negative and statistically significant, but in relative terms it appears to be small compared to the effects of individual labour market characteristics, such as low pay and part-time employment. [Continued on next page](#)

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**The probability of poverty for mothers after childbirth and divorce in Europe: the role of social stratification and tax-benefit policies**

**EUROMOD Working Paper Series EM11/19**

**Authors** Daria Popova and Jekaterina Navicke

**Publication date** 8 May 2019

**Abstract** This paper looks at the effects of tax-benefit systems and social stratification determinants on the probability of poverty among mothers after childbirth and divorce/separation. The analysis was carried out for twelve EU countries, which represent a variety of welfare regimes providing different degrees of defamilialisation. We applied the stress-testing methodology using microsimulation techniques as proposed by Atkinson (2009) and carried out a regression analysis of the simulated results. We show that the degree of income replacement provided by the welfare state is higher for childbirth than for divorce. Countries with low post-childbirth poverty include those with an explicit pro-natalist orientation and socio-democratic regimes. High post-childbirth poverty rates are found in pro-traditional and South European conservative countries, and especially in the liberal regimes. The same is true for the post-divorce poverty rates. Moreover, our findings confirm that the mother's occupational class has a statistically significant effect for predicting poverty in the case of both events, with a stronger social gradient in case of divorce. Cross-country variation in the social gradient for post-childbirth poverty was insignificant. For post-divorce poverty we find weaker social class effects in the highly defamilialised welfare systems (Scandinavian countries and France) and stronger social class effects in the UK and the post-socialist countries.

**Recent changes in housing policies and their distributional impact across Europe**

**EUROMOD Working Paper Series EM12/19**

**Authors** Francesco Figari, Katarina Hollan, Manos Matsaganis and Eszter Zolyomi

**Publication date** 6 June 2019

**Abstract** This paper aims to explore how housing allowances and mortgage interest tax relief have evolved in recent years, against the background of falling disposable incomes and rising housing costs. The analysis focuses on seven EU countries (Greece, Italy, Austria, Hungary, the Netherlands, Sweden and the UK), covering a range of housing market developments and housing policy responses. The first part of the paper provides an overview of housing market trends over the period following the financial crisis and examines recent changes in housing policies in the countries concerned. The next part discusses the main features of two specific housing policy instruments, housing allowance and mortgage interest tax relief, also exploring recent changes there and the motives behind these. The last part estimates the distributional impact of housing allowances and mortgage tax relief in 2016 as compared with 2007 using the European tax-benefit model EUROMOD. The paper concludes with a discussion of the results and of the policy implications.

**Static microsimulation research on Citizen's Basic Income for the UK: a personal summary and further reflections**

**EUROMOD Working Paper Series EM13/19**

**Author** Malcolm Torry

**Publication date** 24 July 2019

**Abstract** A Citizen's Basic Income, sometimes called a Basic Income, a Universal Basic Income, or a Citizen's Income, is an unconditional and nonwithdrawable income paid to every individual. The purpose of this paper is to summarise the results of microsimulation research on Citizen's Basic Income schemes undertaken by this author during the past fifteen years; to update recent research; and to reflect on the journey taken by that research. The paper explores the ways in which the contemporary policy context and constructive criticism of previous research

projects have resulted in changes to the methods employed, discusses ways in which the research has influenced the policy process, and draws comparisons with the work of other microsimulation researchers. The increasingly-lively debate on Citizen's Basic Income has generated a wide variety of questions relating to Citizen's Basic Income's feasibility, and the penultimate section of this paper addresses some of the most pressing of those questions. A final section draws lessons from the research journey recounted in this paper, and suggests avenues for future research activity.

**A comparison of the fiscal and distributional effects of alternative basic income implementation modes across the EU28**

**EUROMOD Working Paper Series EM14/19**

**Authors** Luke Martinelli and Kathryn O'Neill

**Publication date** 25 July 2019

**Abstract** This paper examines the fiscal and distributional effects of a number of alternative basic income implementation modes across 28 European welfare states. The paper aims to make three contributions to the literature. Firstly, through the use of EUROMOD's advanced 'add-on' and 'loop' features, we develop an innovative methodological approach to comparing the effects of revenue neutral basic income reforms across countries. As a consequence, the study is more ambitious in scope than previous basic income microsimulation research. Our second contribution is to generate rich and detailed comparative data regarding the fiscal and distributional effects of different ways of implementing basic income, thus contributing to the burgeoning literature on policy design features and trade-offs. Thirdly, we compare these effects and trade-offs across a large sample of European countries, and thus derive some tentative insights into basic income's congruence with different types of welfare state.



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