The EUROMOD platform: an introduction

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### Tax-benefit microsimulation models

- Micro-data on households (and individuals), representative of the population
- Tax-benefit policy rules
- Calculations of benefit entitlements and tax liabilities
  - for each household
  - for the existing system and a policy reform
- Weighted results can be used to calculate
  - Distributional impact of changes
  - Budgetary cost of changes
  - Work incentive indicators
- Potential to link to behavioural/macroeconomic models
- Key data issues
  - Micro-data requirements
  - Policy scope driven by micro-data content









### What is special about EUROMOD?

- 1. Many (EU-28) countries in a common framework
  - Cross country comparisons, EU-level analysis, "policy swaps"
- 2. Open access: "the most used microsimulation model in the world"
  - (Data access to managed separately)
- 3. Highly flexible and transparent
  - Easy to simulate major reforms to policy structures









### What is special about EUROMOD?

- Purpose-built software
  - Tax-benefit modelling "language"
  - User-friendly interface (UI)
  - Regular updates and improvements
  - A "community" of users
- Short cut to non-EU model building (South Africa, Namibia, Serbia, Russia, Australia etc.)
- Long term support from European Commission (since 2009)
- 2016 is EUROMOD's 20<sup>th</sup> birthday!









### EUROMOD: ways it can be used

- Simulate actual, proposed or illustrative changes to tax-benefit rules
- Complex reforms (e.g. revenue-neutral packages, policy swaps)
- Economic changes and the effectiveness of existing policies
  - Automatic stabilising (aggregate) effects
  - Income stabilisation (micro) effects
- Expert users can
  - Link to labour supply or macro models
  - Extend policy scope (with additional data)









# Narrowing the gap between academic research and policymaking

- EUROMOD is a tool for BOTH
  - Academic policy-relevant research and
  - Analysis of the effects of policies with direct relevance to policy-makers
- EUROMOD's flexibility and huge range of options is motivated by the varied needs of academic research
- Customised interfaces can be developed for particular policy needs
- Built-in tool producing basic statistics
- Training courses successfully involve both communities

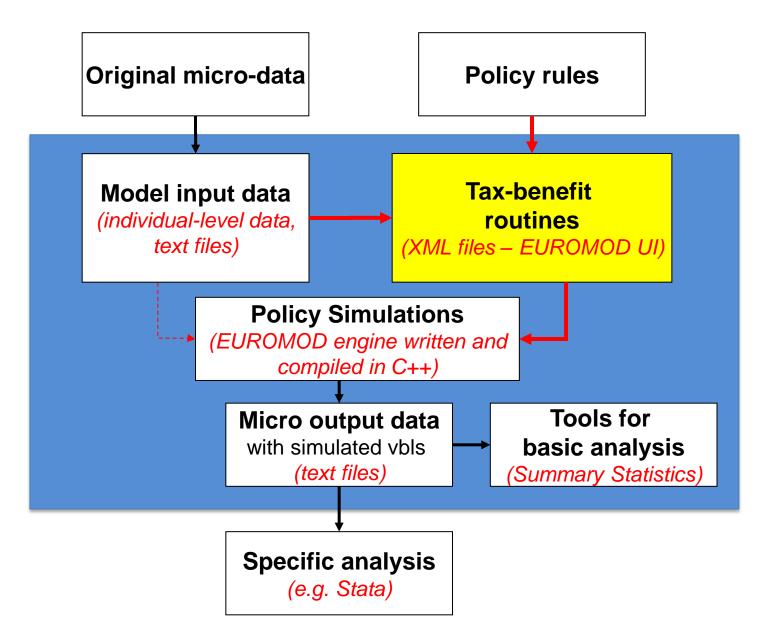








#### EUROMOD: how does it work?



### Access to EUROMOD

- EUROMOD for the EU-28 is freely available for non-commercial use
- Micro-data accessed through a separate procedure
- See <u>www.euromod.ac.uk</u>
  - Documentation: Country Reports, Working Papers etc.
  - Summary statistics
  - User resources
- EUROMOD software available for the construction of spin-off models via a licence from the University of Essex
- More detail about the procedure in this project on Friday
- Access to SOUTHMOD?









## Thank you!

www.euromod.ac.uk euromod@essex.ac.uk









### **Background reading**

- Sutherland, H. and F. Figari (2013) "EUROMOD: the European Union tax-benefit microsimulation model" *International Journal of Microsimulation* 6(1) 4-26.
- Figari, F., A. Paulus and H. Sutherland (2014) "Microsimulation and Policy Analysis", in Handbook of Income Distribution Volume 2, edited by A. B. Atkinson and F. Bourguignon, Elsevier.







