Stabilising Effects of Tax-Benefit Systems in the EU

Counterfactual Simulations based on EUROMOD

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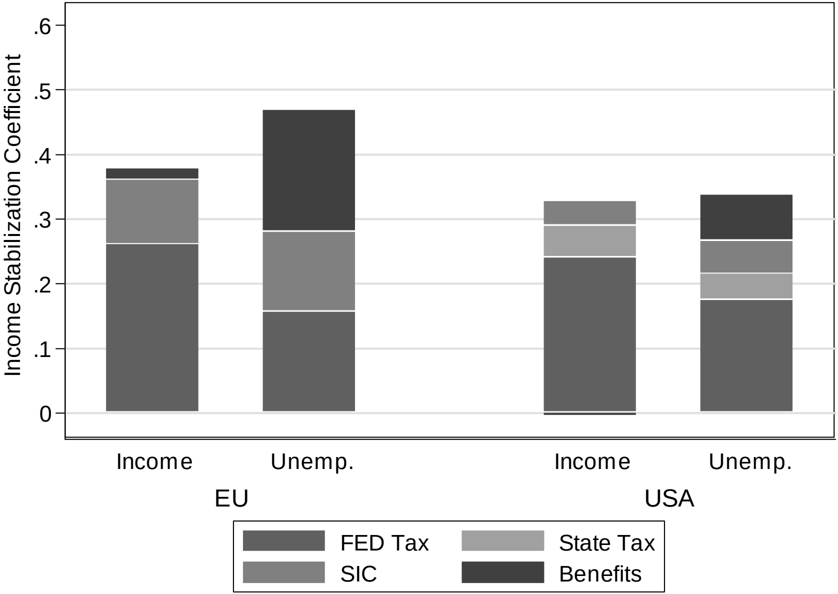
Microsimulation for Policymaking in Times of Crisis
DG EMPL, Brussels, 21 November 2012

- **Automatic Stabilisers and Economic Crisis: US vs. Europe**
  (with C. Fuest and A. Peichl, Journal of Public Economics, 2012)
- **Fiscal Union in Europe? Redistributive and Stabilising Effects of a European Tax-Benefit System and Fiscal Equalisation Mechanism**
  (with O. Bargain, C. Fuest, D. Neumann, A. Peichl, N. Pestel and S. Siegloch, IZA DP No. 6585, Presented at the 56th *Economic Policy* Panel)

- Recent economic crisis has led to lower incomes and higher unemployment
- Tax benefit system shall provide (temporary) income insurance through build-in **automatic stabilisers**
- Automatic stabilisers mitigate output fluctuations without discretionary government action
  - progressive tax system
  - (unemployment) benefits
- However, "*very little work has been done on automatic stabilisation [...] in the last 20 years*" (Blanchard 2006)

- **Simulation experiment:** Calculate different shocks to *gross income* and analyze how these shocks translate into changes of *disposable income*
- Requires tax-benefit microsimulation models:
  - EUROMOD: 19 EU countries (EU-15 + Estonia, Hungary, Poland, Slovenia)
  - NBER's TAXSIM model: US
  - assume full benefit take-up, no tax evasion, no behavioral responses
- Micro vs. Macro approach: income stabilisation for population subgroups
- Models allow for *exogenous variation in key parameters* (avoid identification problems) $\Longrightarrow$ **disentangle automatic stabilisers from discretionary fiscal policy and behavioral responses**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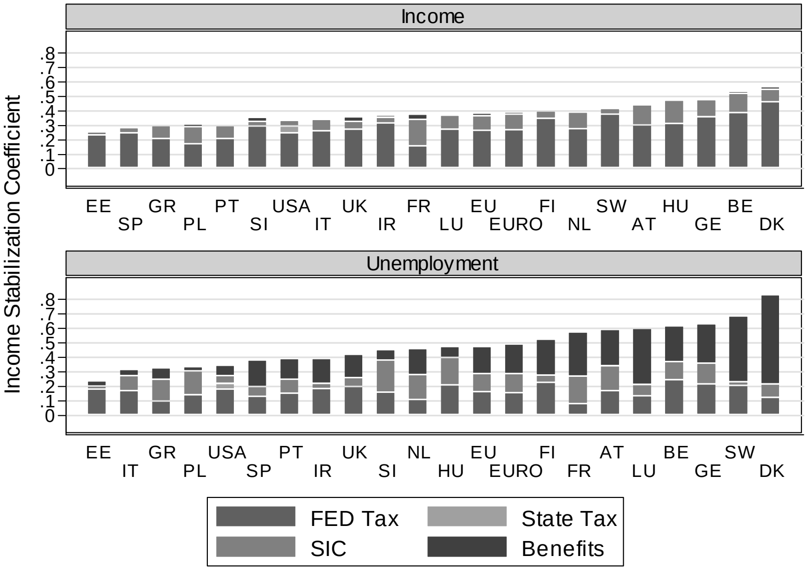
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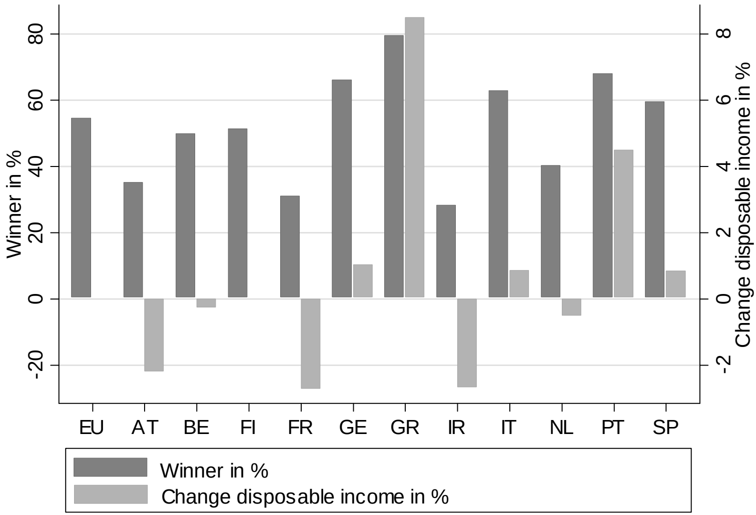
Benefits

- Amount of automatic stabilisation depends strongly on the type of macro shock
- **Social transfers play a key role** for stabilisation of disposable income (confirmed by the decomposition of stabilisation effects, as benefits absorb 19% of unemployment shock in EU-group vs. 7% in the US)
- **Large heterogeneity** within the EU
  - some Eastern and Southern European countries provide little income stabilisation for low-income groups
- Some evidence that countries with lower automatic stabilisers have engaged in more discretionary fiscal policy action

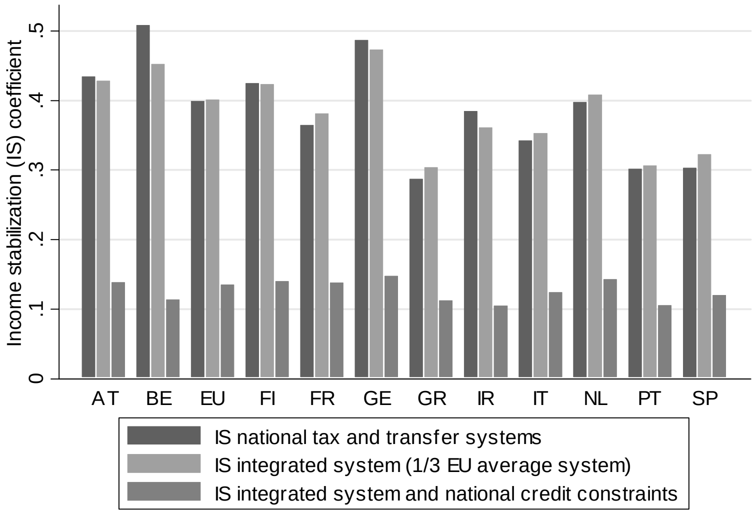
1. Massive redistribution from high to low income countries/individuals
2. Adverse effects on incentives to work in the poorer countries as people receive higher transfers
3. Adverse incentives to work in the richer countries as people face higher tax burdens
4. Many other concerns like e.g. unequal compliance with tax law or administrative issues (not analysed in this paper)

Quantitative analysis of two key elements of fiscal integration:

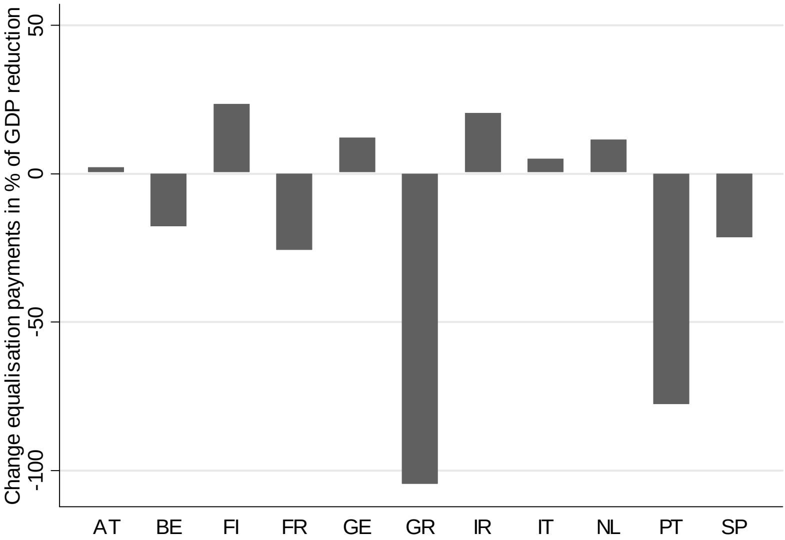
- **Simulation experiment 1:** Introduce an EU-wide integrated tax-transfer system
  - Estimate the average EU system
  - Analyse redistributive and welfare effects as well as impact on automatic stabilisers
  - Redistribution (of *income*) across *households*
- **Simulation experiment 2**: Introduce a system of fiscal equalisation based on taxing capacity of countries
  - Redistribution (of *revenues*) across *countries*
  - Impact on automatic stabilisation



Source: Own calculations based on EUROMOD.



Source: Own calculations based on EUROMOD.



Source: Own calculations based on EUROMOD.

- Introduction of a common tax and transfer system would lead to significant effect on income redistribution and labour supply
- Common tax and transfer system would create automatic fiscal stabilisers in the union
- Replacing one third of the national tax and transfer systems would provide ‘federal’ automatic stabilisers of 10-15 per cent (USA: appr 25 per cent)
- Introduction of a fiscal equalisation scheme leads to large redistributive effects and has ambiguous implications for automatic fiscal stabilisers in the currency union; poor countries may be destabilised

Thank you for your attention!

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