The distributional effects of fiscal consolidation in 9 EU countries

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DG-EMPL conference
Microsimulation for Policymaking in Times of Crisis
21st November 2012, Brussels
Motivation

The economic crisis and the fiscal consolidation measures have an **impact on income distribution**: 
- inequality, and any driver of growth in it, matters in its own right 
- prospects for macroeconomic recovery depend on composition of fiscal adjustment 
- political acceptability
Motivation

- Fiscal consolidation literature is mainly macro-oriented and often overlooking the distributional effects
  - “The crucial question, however, remains the impact of fiscal consolidations on the distribution of disposable income. On this, there is very little information, because very rarely does the timing of income-distribution surveys allow an analysis of its evolution before and after a fiscal consolidation, and because there are well-known difficulties in assessing the impact of the various budget items on income distribution” (Perotti, AER, 1996)
Introduction

- Based on a microsimulation approach, we provide ex ante estimates of the distributional impact of fiscal consolidation measures implemented in the EU countries since the start of the Great Recession and up to mid-2012.

- Focus on **measures** of fiscal consolidation with a direct impact on **income distribution**
  - Public wages, public pensions, cash benefits, direct taxes/SIC
  - VAT

- A follow up to last year first comparative study (Callan et al. 2011)
Methodological issues

- Emphasis on consistent cross-country analysis
- Counterfactual: How would tax-benefit systems have evolved by now (2012) without fiscal consolidation?
  - Pre-FC policies indexed using national rules/conventions
  - Compare with actual 2012 systems
- Period: all fiscal consolidation up to mid-2012
- Measures of fiscal consolidation
  - Fiscal measures aimed to cut the public deficit or limit its growth
  - Exclude measures part of other policy agenda, rolling back of stimulus measures and expired measures
- [Adjustment for labour market changes]
  - Simulating transitions into and out of unemployment using info from LFS
Model, data and countries

- EUROMOD + 2008 EU-SILC data
  - Market incomes adjusted to 2012 levels
- 9 countries: Estonia (EE), Greece (EL), Spain (ES), Italy (IT), Latvia (LV), Lithuania (LT), Portugal (PT), Romania (RO) and the UK
- Measures introduced since 2009-10 (except IT: 2011)
  - All (but UK): cuts in public wages (or freezing)
  - All: cuts in public pensions/benefits (or freezing)
  - Majority: increased income taxes and worker SIC
  - Some: increased employer SIC and property taxes
  - All: increased standard rate of VAT
- Interactions between policy instruments
  - Taxes on public wages and (some) benefits; means-testing
## Types of fiscal consolidation measure: summary

<table>
<thead>
<tr>
<th>Country/Start of FC measures</th>
<th>EE 09</th>
<th>EL 10</th>
<th>ES 10</th>
<th>IT 11</th>
<th>LV 09</th>
<th>LT 09</th>
<th>PT 09</th>
<th>RO 10</th>
<th>UK 09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuts in benefits or public pensions (or freezing)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Increased income taxes and/or reduced tax concessions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Increased worker social insurance contributions (SICs)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Public sector pay cuts (or freezing)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>(Yes)</td>
</tr>
<tr>
<td>Increased employer SICs</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Increased property taxes</td>
<td>No</td>
<td>Yes</td>
<td>(Yes)</td>
<td>Yes</td>
<td>(Yes)</td>
<td>(Yes)</td>
<td>No</td>
<td>(Yes)</td>
<td>No</td>
</tr>
<tr>
<td>Increased standard rate of VAT</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Aggregate change in household disposable income by income component %

-4.0
-11.6
-4.3
-1.6
-9.1
-2.8
-6.3
-5.7
-1.9

EE  EL  ES  IT  LV  LT  PT  RO  UK

(net) public wages public pensions means-tested benefits non means-tested benefits income taxes workers SIC

change in average disposable income, %
Extent of changes by income component %

Interval for grid lines: 5pp

Note: results for taxes and benefits also include effects due to the changes in public wages.
Change in household disposable income by income decile group %

Interval for grid lines: 2pp

![Graphs showing change in average disposable income by income decile group across different countries. The graphs display data for IT, LT, UK, EE, ES, RO, EL, LV, and PT.]
Change in hh disposable income by household type (and by decile group) %

Interval for grid lines: 5pp
What differences do VAT increases make?

*Interval for grid lines: 5pp*

![Graphs showing changes in VAT increases as a percentage of average disposable income across income decile/quintile groups for various countries.](image)
Distribution of Austerity measures taking into account Labour Market Adjustments

Interval for grid lines: 5pp

change in average disposable income, %
income decile group
without adjustments with adjustments

EE
EL
ES
IT
LV
LT
PT
RO
UK

income decile group

without adjustments
with adjustments
Fiscal consolidation in context: the effect of all tax-benefit changes 2008-2012

Interval for grid lines: 5pp
Summary

- Distributional implications of gov-s choices about fiscal consolidation: effects on income up to mid 2012

<table>
<thead>
<tr>
<th>Type</th>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>Greece</td>
<td>– though large even for bottom decile</td>
</tr>
<tr>
<td></td>
<td>Spain</td>
<td>– low income pensioners lose more</td>
</tr>
<tr>
<td></td>
<td>Italy</td>
<td>– flat with VAT</td>
</tr>
<tr>
<td></td>
<td>Latvia</td>
<td>– top decile children lose more</td>
</tr>
<tr>
<td></td>
<td>Romania</td>
<td>– pensioners lose more</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>– top decile and children lose more</td>
</tr>
<tr>
<td>Inverted U-shape</td>
<td>Lithuania</td>
<td>– children lose more, regressive with VAT</td>
</tr>
<tr>
<td></td>
<td>Portugal</td>
<td>– low income children lose more</td>
</tr>
<tr>
<td>Regressive</td>
<td>Estonia</td>
<td>– especially for pensioners</td>
</tr>
</tbody>
</table>
Acknowledgements and further information

- The process of extending and updating EUROMOD is financially supported by the Directorate General for Employment, Social Affairs and Inclusion (DG-EMPL) of the European Commission.

- EUROMOD is made generally available for academic and not-for-profit use. Contact euromod@essex.ac.uk

- For more information see www.iser.essex.ac.uk/euromod

- Funding for this analysis from the Social Situation Observatory http://www.socialsituation.eu/
  - Paper will be published as an SSO Research Note in December.
Extent of changes by income component % - LMA

Interval for grid lines: 5pp

public wages

public pensions

benefits

income taxes/workers SIC

employer SIC

Note: results for taxes and benefits also include effects due to the changes in public wages.
Change in household disposable income by income decile group %

Interval for grid lines: 2pp

-4
-2
0
1 2 3 4 5 6 7 8 9 10
income decile group
IT LT UK
-8
-6
-4
-2
0
1 2 3 4 5 6 7 8 9 10
income decile group
EE ES RO
-14
-12
-10
-8
-6
-4
-2
0
1 2 3 4 5 6 7 8 9 10
income decile group
EL LV PT
change in average disposable income, %
Aggregate change in household disposable income by income component % - LMA

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<tbody>
<tr>
<td>EE</td>
<td>-4.0</td>
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<tr>
<td>EL</td>
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<td>-11.7</td>
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<tr>
<td>ES</td>
<td></td>
<td>-4.4</td>
<td>-1.6</td>
<td></td>
<td></td>
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<td>IT</td>
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<td>LV</td>
<td></td>
<td></td>
<td>-2.9</td>
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<td>LT</td>
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<tr>
<td>PT</td>
<td>-6.9</td>
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<tr>
<td>RO</td>
<td>-5.7</td>
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</tbody>
</table>

Change in average disposable income, %
Change in hh disposable income by household type (and by decile group) % - LMA

Interval for grid lines: 5pp

Change in average disposable income, %
iccome decile group
all hh-s hh-s with elderly hh-s with children

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All hh-s
hh-s with elderly
hh-s with children
Vat con LMA