The distributional effects of fiscal consolidation in 9 EU countries

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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 are affected by the composition of fiscal adjustment
- political acceptability

Governments may not be able to control extent to which economies are hit by crisis or how this affects households; but they can control how austerity measures are distributed.

Our focus is on austerity policy decisions and particularly fiscal measures which have a direct and quantifiable effect on the distribution of income.
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)
Based on a microsimulation approach (EUROMOD), we provide ex ante estimates of the distributional impact of fiscal consolidation measures implemented in 9 EU countries since the start of the “Great Recession” and up to mid-2012

- Estonia (EE), Greece (EL), Spain (ES), Italy (IT), Latvia (LV), Lithuania (LT), Portugal (PT), Romania (RO) and the UK
- Focus on measures with a direct impact on income distribution
  - Public wages, public pensions, cash benefits, direct taxes, social insurance contributions (SICs)
  - “Sharp instruments” relative to other consolidation measures
  - VAT
- Data: 2008 EU-SILC data (FRS 2009/10 in UK)
  - Market incomes adjusted to 2012 levels
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 implemented up to mid-2012
  - Not changes announced for the future (e.g. UK)
- Measures of fiscal consolidation
  - Fiscal measures aimed to cut the public deficit or limit its growth
  - Exclude measures part of other policy agendas, rolling back of stimulus measures and expired measures
## Types of fiscal consolidation measure: summary

<table>
<thead>
<tr>
<th>Measure</th>
<th>EE</th>
<th>EL</th>
<th>ES</th>
<th>IT</th>
<th>LV</th>
<th>LT</th>
<th>PT</th>
<th>RO</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuts in <strong>benefits or public pensions</strong> (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 <strong>income taxes</strong> 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 <strong>social insurance contributions</strong> (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>
</tr>
<tr>
<td>Public sector <strong>pay cuts</strong> (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>(No)</td>
</tr>
<tr>
<td>Increased <strong>property taxes</strong></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>No</td>
</tr>
<tr>
<td>Increased <strong>standard rate of VAT</strong></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>
## Simulation details

<table>
<thead>
<tr>
<th>Country</th>
<th>Austerity period</th>
<th>Indexation conventions used in the construction of counterfactuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>2009-11</td>
<td>None except pensions (CPI+earnings) and some benefit ceilings (earnings)</td>
</tr>
<tr>
<td>Greece</td>
<td>2010-12</td>
<td>None</td>
</tr>
<tr>
<td>Spain</td>
<td>2010-12</td>
<td>None except pensions (CPI)</td>
</tr>
<tr>
<td>Italy</td>
<td>2011-12</td>
<td>Pensions and benefits indexed mainly by prices; no indexation of income tax thresholds</td>
</tr>
<tr>
<td>Latvia</td>
<td>2009-12</td>
<td>None except pensions and some small disability benefits (CPI since 2009)</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2009-12</td>
<td>None</td>
</tr>
<tr>
<td>Portugal</td>
<td>2009-12</td>
<td>Most components by CPI</td>
</tr>
<tr>
<td>Romania</td>
<td>2010-12</td>
<td>None except pensions (CPI+earnings)</td>
</tr>
<tr>
<td>UK</td>
<td>2009-12</td>
<td>Most components by prices; some by earnings.</td>
</tr>
</tbody>
</table>
Aggregate change in household disposable income by income component %

<table>
<thead>
<tr>
<th>Country</th>
<th>(net) public wages</th>
<th>Public pensions</th>
<th>Means-tested benefits</th>
<th>Non means-tested benefits</th>
<th>Income taxes</th>
<th>Workers SIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>-4.0</td>
<td>-4.0</td>
<td>-4.0</td>
<td>-4.0</td>
<td>-4.0</td>
<td>-4.0</td>
</tr>
<tr>
<td>EL</td>
<td>-11.6</td>
<td>-11.6</td>
<td>-11.6</td>
<td>-11.6</td>
<td>-11.6</td>
<td>-11.6</td>
</tr>
<tr>
<td>ES</td>
<td>-1.6</td>
<td>-1.6</td>
<td>-1.6</td>
<td>-1.6</td>
<td>-1.6</td>
<td>-1.6</td>
</tr>
<tr>
<td>IT</td>
<td>-2.8</td>
<td>-2.8</td>
<td>-2.8</td>
<td>-2.8</td>
<td>-2.8</td>
<td>-2.8</td>
</tr>
<tr>
<td>LT</td>
<td>-6.3</td>
<td>-6.3</td>
<td>-6.3</td>
<td>-6.3</td>
<td>-6.3</td>
<td>-6.3</td>
</tr>
<tr>
<td>PT</td>
<td>-5.7</td>
<td>-5.7</td>
<td>-5.7</td>
<td>-5.7</td>
<td>-5.7</td>
<td>-5.7</td>
</tr>
<tr>
<td>RO</td>
<td>-1.9</td>
<td>-1.9</td>
<td>-1.9</td>
<td>-1.9</td>
<td>-1.9</td>
<td>-1.9</td>
</tr>
<tr>
<td>UK</td>
<td>-1.9</td>
<td>-1.9</td>
<td>-1.9</td>
<td>-1.9</td>
<td>-1.9</td>
<td>-1.9</td>
</tr>
</tbody>
</table>
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
% change in household disposable income due to public sector pay cuts

% change in average disposable income, %

change in average disposable income, %
% change in household disposable income due to cuts in public pensions

% change in average disposable income, %

income decile group

poorest  2  3  4  5  6  7  8  9  richest
% change in household disposable income due to cuts in non pension cash benefits

change in average disposable income, %

income decile group

poorest  2   3  4  5  6  7  8  9  10 richest
% change in household disposable income due to increases in income tax and worker SICs
% change in household disposable income by household type %

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

Interval for grid lines: 5ppt. ppt increase in standard rate of VAT shown in brackets

Change as % of average disposable income

income decile/quintile group

EE (2)  EL (4)  ES (5)  IT (1)  LV (4)  LT (3)  PT (2)  RO (5)  UK (2.5)

simulated measures  simulated measures + VAT
Summary

Distributional implications of government choices about fiscal consolidation: effects on income up to mid 2012

<table>
<thead>
<tr>
<th>Type</th>
<th>Country</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>Greece</td>
<td>– though large even for bottom decile group</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>
Other issues / sensitivity tests

1. Changes in labour market composition: do they make a difference to the distributional effects of the policy measures?
   □ Explicit simulations of labour market transitions based on LFS 2007-11 employment by characteristics

2. Austerity in perspective: what were the effects of all tax-benefit changes 2008-12?
   □ All tax-ben policy changes (no pay cuts); common time period; common indexation

3. Comparisons with a similar analysis last year: has the picture changed?
   □ Common countries: Estonia, Greece, Spain, Portugal, UK
% change in household disposable income: adjustments for labour market change 2007-11

Interval for grid lines: 5pp

[Graphs showing the change in average disposable income for different countries and income decile groups, with lines indicating 'without adjustments' and 'with adjustments'.]
Fiscal consolidation in context: the effect of all tax-benefit changes 2008-2012

Interval for grid lines: 5pp

change in average disposable income, %

income decile group

usual indexation  HICP indexed
Compared with last year …
(Callan et al., 2011)

- **UK**: policies and hence distributional effect very similar
- **Greece**: many additional changes, the effect is larger and still progressive although less so than in 2011.
- **Spain**: the effect in 2011 was flat, now progressive.
- **Estonia**: the effect is very different due to the expiry of some policies and the continuing reductions in pensions in real terms: now regressive rather than flat.
- **Portugal**: the regressive picture in 2011 has been transformed to an inverse U-shape because of the addition of some progressive policies (public sector wage and pension cuts) to the earlier regressive package (cuts in minimum income).
Summary of main points

- Scale of changes differs across countries
  - Remembering caveat about direct effects on household income only
- Distributional effects depend on
  - Chosen policy mix
  - Position in the income distributions of those affected
- Mostly progressive; VAT reduces progressivity
- Distributional picture can change year-to-year (EE, PT)
- Distributional consequences are robust to labour market changes (as modelled)
- Fiscal drag has major distributional implications in ES, LT, RO and scale effects also in EE, EL and IT
- For the UK – the main story is still to come.....
Thank you!

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- 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

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  - Paper will be published as an SSO Research Note in December.