The distributional impact of austerity and the recession in Southern Europe

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aim of paper

- estimate changes in income distribution associated with the austerity and the recession
- in Greece, Spain, Italy, Portugal
- over the period from 2009 to 2013

what we know (1/2)
from GDP to income distribution

- the distributional effects of a recession cannot be taken for granted

- may vary substantially, depending on interactions between:
  - the income position of those affected
  - the employment status and earnings of other members of the households in which those affected live
  - the capacity of the tax-benefit system to absorb macroeconomic shocks

what we know (2/2)
austerity policies interact with wider economy

- 'Keynesian effects' of fiscal consolidation (via aggregate demand)
- IMF : fiscal multipliers in countries worst hit by the crisis in the range of 0.9 - 1.7, rather than 0.5 as assumed initially
- lessons from previous research:
  - the nature of this interaction depends on the size and content of fiscal consolidation, and on the characteristics of the economy in question
  - the direction and magnitude of the relevant effects remains a matter of debate

methodology (1/5)
general approach

- as economic activity slows down, policy makers may react
  - either by taking (counter-cyclical) measures to reduce taxes or increase public spending
  - or by attempting (pro-cyclical) fiscal consolidation
- in the latter case, the income distribution will change
  - as a result of the direct impact of fiscal consolidation policies
  - as a result of decreases in market incomes due to developments in the wider economy
    - both unrelated to policies and *indirectly* related to policies

methodology (2/5)
what we estimate

- the full distributional impact of the crisis between two consecutive years t and t-1:

$$\mathbf{C} = f(Y_{\mathrm{t}}, P_{\mathrm{t}}) - f(Y_{\mathrm{t}-1}, P_{\mathrm{t}-1})$$

- the effects of changes in tax-benefit policies between years t and t-1 as assessed on the income distribution in year t-1:

$$\mathbf{A} = f(Y_{\mathrm{t}-1}, P_{\mathrm{t}}) - f(Y_{\mathrm{t}-1}, P_{\mathrm{t}-1})$$

methodology (3/5)
some warnings...

- the effect of changes in government policies (**A**) is assessed on the income distribution which is prevalent at the time policies are announced/legislated
  - the only distribution known to policy makers when they take decisions

- the difference between the two scenarios (**C** – **A**) should <u>not</u> be interpreted as equal to the independent effect of changes in market incomes over and above the effect of government policies
- it also incorporates the *indirect* effects of policy changes

methodology (4/5)
…and some caveats

- changes in non-monetary incomes (such as those resulting from cuts in the funding of public services) are not taken into account
- changes in indirect taxes are not taken into account
- some developments in the wider economy (modelled here as part of **C**) are in fact directly attributable to government policy (e.g. changes in minimum wage legislation)

methodology (5/5)
data and model

- we use the European tax-benefit microsimulation model EUROMOD
- we draw on EU-SILC 2010
- we account for changes in employment status by using EU-LFS data to adjust EUROMOD input data (see Navicke et al. 2013, Leventi et al. 2013)
- incomes are updated and policies are simulated up to 2013
- tax evasion and benefit non take-up are (partly) taken into account

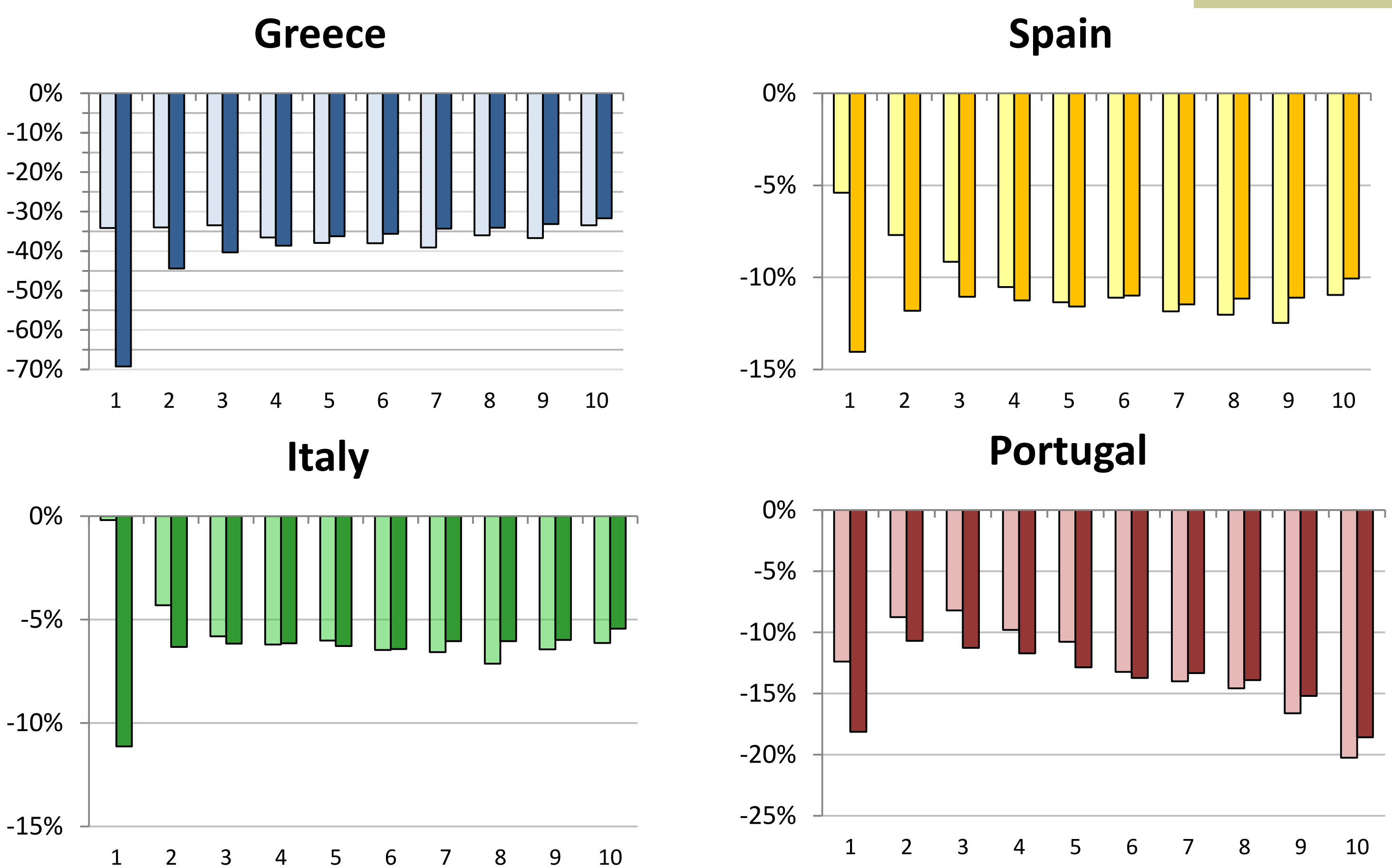
results (1/5)
changes in poverty rates

Table 1. Changes in anchored poverty rates by sex and age (2009-2013)

	EL	ES	IT	PT
all	25.8	4.5	3.0	6.3
men	26.5	4.7	3.0	6.1
women	25.2	4.3	3.0	6.5
0-17	25.9	5.6	3.5	7.2
18-29	32.4	8.9	3.7	6.8
30-44	25.9	4.2	2.9	5.9
45-64	25.9	5.0	2.1	5.8
65+	20.4	-1.1	3.5	6.4

Notes: : Changes in anchored poverty rates (2013 vs. 2009) in percentage points. Poverty threshold at 60% of 2009 median equivalised disposable income (in real terms). All estimated changes are statistically significant at 99% confidence level.
Source: EUROMOD version G1.0.

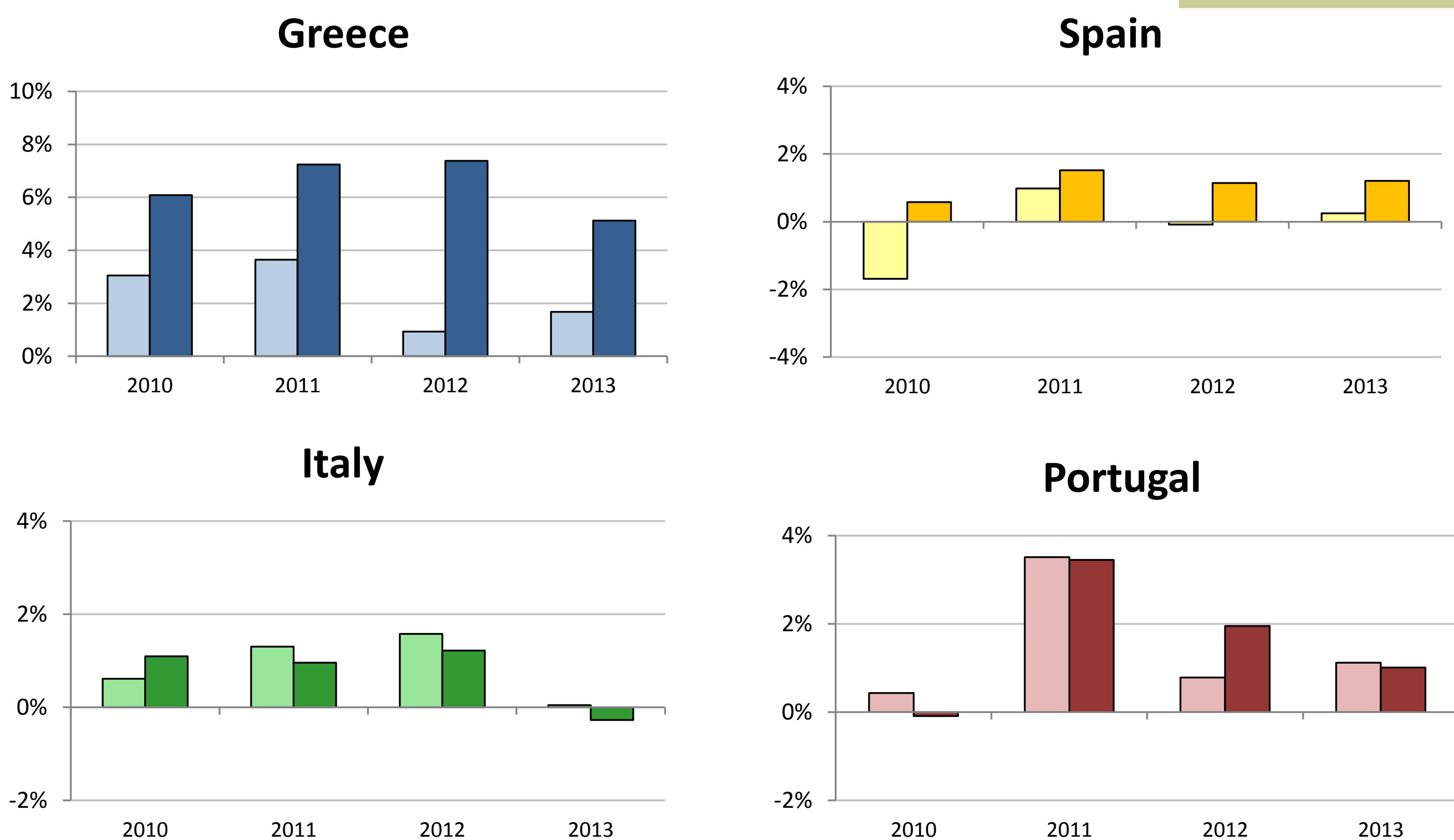
results (2/5)
changes in real disposable income (2009-2013) re-ranking effects



Light bars: deciles fixed in 2009	Dark bars: deciles recalculated

Source: EUROMOD version G1.0.

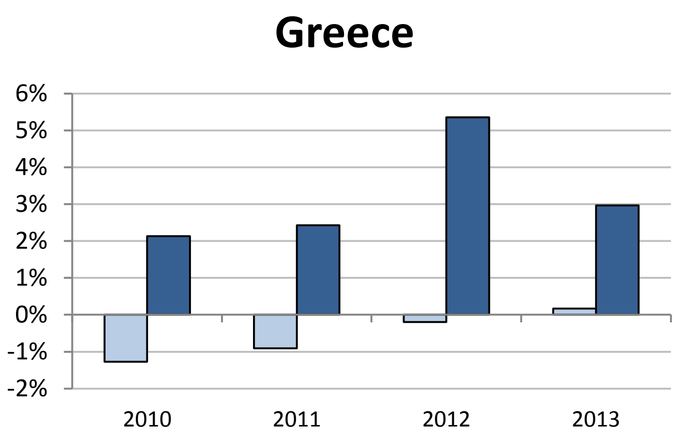
results (3/5)
effect of policies vs. full effect: changes in anchored poverty rates (in ppts)

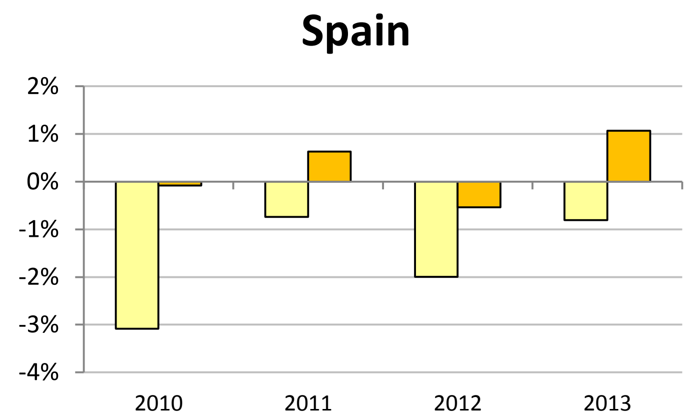


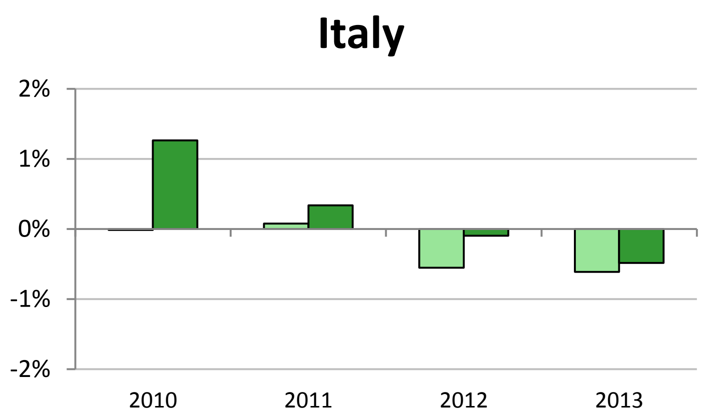
Light bars: policies alone   Dark bars: full effect

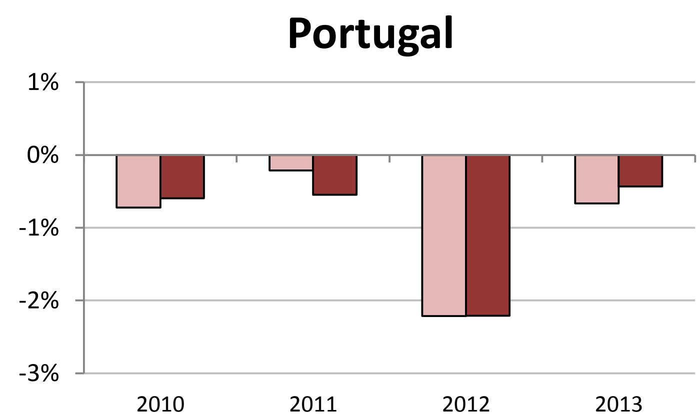
Source: EUROMOD version G1.0.

results (4/5)
effect of policies vs. full effect: changes in Gini (%)









Light bars: policies alone — Dark bars: full effect

Source: EUROMOD version G1.0.

results (5/5)
inequality effects of policy changes by policy area

	change in the value of the Gini index (%)			
	2010	2011	2012	2013
Greece				
public sector pay	-0.57	-0.10	-0.31	-0.52
taxes / SIC	-0.84	-0.13	0.07	0.98
pensions and related policies	-0.30	-0.06	-0.41	0.90
other social benefits	0.35	-0.16	0.25	-1.47
Spain				
public sector pay	-0.12	-0.12	-0.23	:
taxes / SICs	-0.47	0.04	-1.11	-0.02
pensions and related policies	-0.06	-0.04	-0.04	-0.02
other social benefits	-0.30	-0.01	-0.23	0.07
Italy				
public sector pay	0.06	0.00	0.02	0.01
taxes / SICs	0.01	-0.52	-0.42	0.00
pensions and related policies	0.00	0.00	-0.01	0.00
other social benefits	-0.04	-0.06	-0.06	-0.20
Portugal				
public sector pay	:	-0.53	-1.04	0.96
taxes / SICs	-0.39	-1.93	-0.60	-3.67
pensions and related policies	-0.16	-0.01	-1.15	0.69
other social benefits	-0.18	1.97	-0.13	1.15

Note: Percentage change between the values of the Gini index if the policy in question had remained as in year t-1 relative to its actual value after the implementation of each policy in year t.
Source: EUROMOD version G1.0.

conclusions (1/4)
overall distributional effects of the crisis

- as a result of the current crisis, poverty and inequality in Greece have risen to alarming levels
- in Portugal and Spain, where median incomes also declined considerably, anchored poverty went up by much less than in Greece (and by even less in Italy)
- older persons on low incomes, though not fully protected, suffered lower income losses than other groups
  - however: funding cuts and other changes in health care (not considered here) may have raised the costs of healthcare services

conclusions (2/4)
re-ranking

- the crisis has changed the composition of the population in poverty: those at the bottom of the income distribution are younger than before the crisis, and more likely to be unemployed (or on low pay) than pensioners
- as a result, income changes are less pronounced when deciles are fixed as in the base year (in this case, 2009) than when they are recalculated each year
- those in the bottom of the income distribution today are considerably poorer than those occupying the same position before the outbreak of the current crisis

conclusions (3/4) **interactions**

- we have attempted to clarify the various interactions between austerity, recession and inequality (or between tax-benefit policies, growth and income distribution)
- tax-benefit policies act both directly and indirectly (through their effects on jobs and earnings)
- as a result, the full effects of tax-benefit policies <u>cannot</u> be reduced to the first-order effects estimated here
- isolating the first-order effects of policies is of interest
- … and may help identify policies that reduce budget deficits while minimising adverse distributional effects

conclusions (4/4)
fiscal consolidation 'progressive'?

- *'micro-simulation studies indicate that these fiscal adjustments relied on progressive measures'* (IMF 2014 p. 51)

- while the first-order impact of policies on inequality can be described as neutral to positive (i.e. inequality-reducing), this does not imply that fiscal adjustment has been a success in overall distributional terms

- our estimates suggest that in all countries examined here poverty increased, and the policies implemented accounted for a major part of that increase

Thank you very much for your attention!