

Distributional effects of the crisis and austerity in seven EU countries

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The distributive impact of social policies: lessons for Europe 2020

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aim of paper

- estimate changes in income distribution associated with the austerity and the crisis in seven EU countries:
 - four Southern European countries, severely hit by the crisis: **Greece, Spain, Italy, Portugal**
 - one Balkan country that had to implement a large-scale austerity package: **Romania**
 - two Baltic countries that seem to be recovering faster from this economic turmoil: **Latvia, Lithuania**
- cover the period from 2009 to 2013

what we know (1) 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
- question: can there be such thing as 'equitable austerity'?

what we know (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 to 1.7, rather than 0.5 as assumed initially
- (i.e. a budget deficit reduction of €10 associated with a loss of GDP of €9 to €17, not €5)
- lessons from previous research:
 - austerity interacts with wider changes in the economy
 - 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

what we know (3)

austerity and growth interact with income distribution

- austerity does not necessarily have to be regressive ...
- ... though often is
- lessons from previous research :
 - periods of fiscal consolidation tend to be associated with rising inequality
 - static effects of individual austerity policies may be offset by dynamic effects (e.g. rising unemployment)
 - the design of fiscal consolidation packages can partly or fully neutralise adverse distributional effects
 - (especially if policies that promote growth as well as equality can be identified and successfully implemented)

methodology (1)

general approach

- as economic activity slows down, policy makers may react
 - either by taking (counter-cyclical) measures to reduce taxes or increase public spending (incl. on social benefits)
 - or by attempting (pro-cyclical) fiscal consolidation
- in the latter case, the income distribution will change in two different ways
 - as a result of the direct impact of tax increases and spending cuts
 - as a result of developments in the wider economy, where the contraction in activity will cause market incomes to fall

illustration (1)

what we think the chain of causation looks like

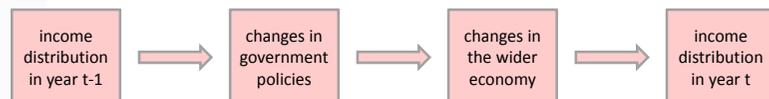


illustration (2)

what we think the chain of causation does not look like

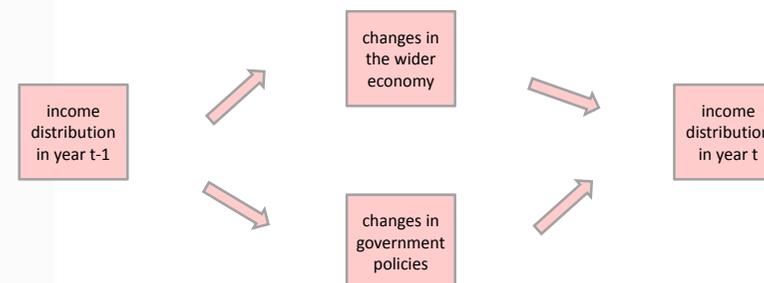


illustration (2)

what we think the chain of causation does not look like

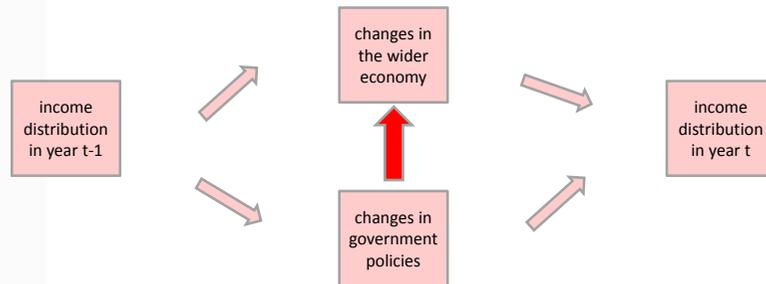
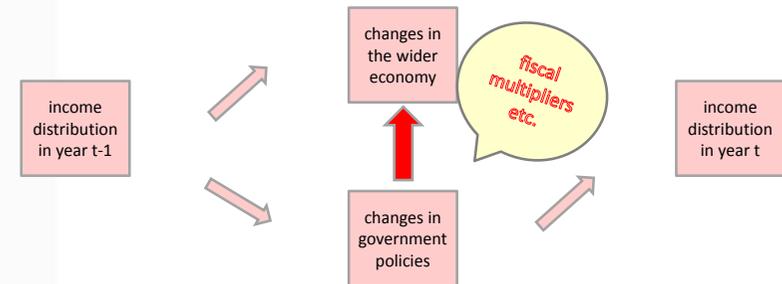


illustration (2)

what we think the chain of causation does not look like



methodology (2)

modelling the effects

- the direct effect of government policies and that of wider developments in the economy are not observed as such (because they occur simultaneously)
- we approximate the former by simulating a **counterfactual scenario** of the effect of changes in government policies on the income distribution as observed before these policies are actually implemented (i.e. when announced and/or legislated)
- equivalent to assuming that policies altered public sector pay, public pensions, taxes and benefits, but left nominal pre-tax market incomes and employment levels as in the year before

methodology (3)

what we estimate

- **C** = the full distributional impact of the recession between two consecutive years t and t-1
- **A** = the effect of changes in tax and benefit policies between years t and t-1 as assessed on the income distribution in year t-1

methodology (4)

warnings and/or caveats

- our counterfactual scenario (**A**) does not coincide with first-order effects of government policies as commonly understood (i.e. as assessed on the income distribution observed after these policies are actually implemented)
- changes in non-monetary incomes (such as those resulting from cuts in the funding of public services) 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)

more warnings and/or caveats

- $B = C - A$ should not be interpreted as equal to the independent effect of changes in market incomes over and above the effect of government policies
- (this effect is unobservable)
- **B** incorporates:
 - the difference between the effects of changes in government policies on the income distribution in t vs. $t-1$,
 - the effects of factors unrelated to government policies

illustration (3)

what we estimate

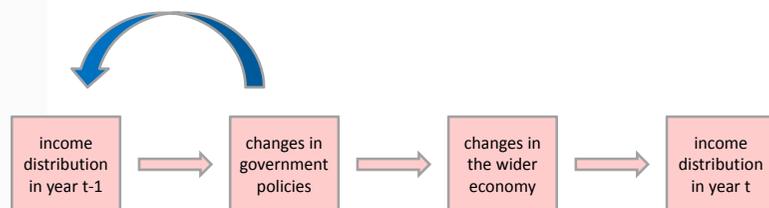


illustration (3)

what we estimate

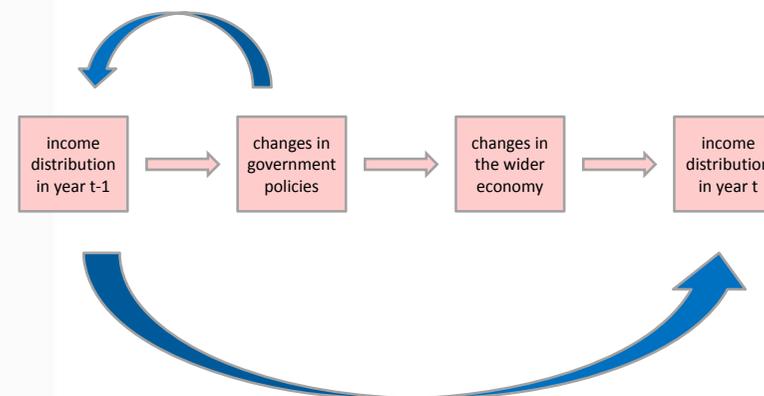
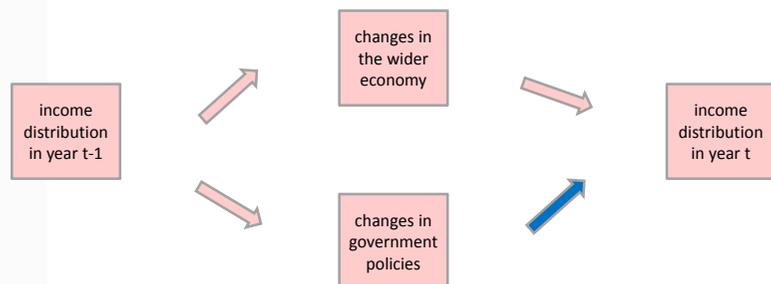


illustration (4) what we do not estimate



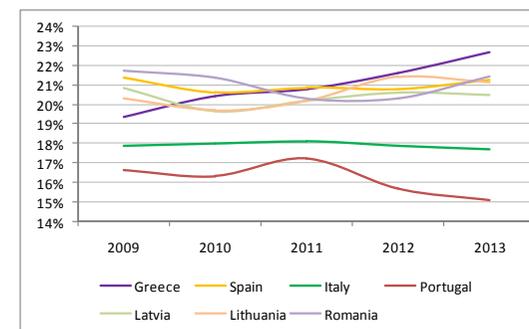
methodology (6) data and model

- 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) poverty indicators

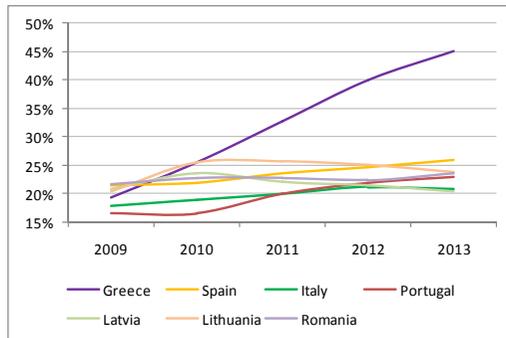
- **relative poverty** rests on the assumption that individuals compare their material circumstances with those of 'the average person' in the society in which they live
- however, at times of rapid change in living standards (but as well as boom), individuals also compare their material circumstances with their own in a previous period
- '**poverty rate anchored at a fixed moment in time**' arguably captures better how poverty is perceived by those concerned

relative poverty rate EUROMOD estimates (2009-13)



Notes: Poverty threshold at 60% of median equivalised income.
Source: EUROMOD version G1.0.

anchored poverty rate EUROMOD estimates (2009-13)

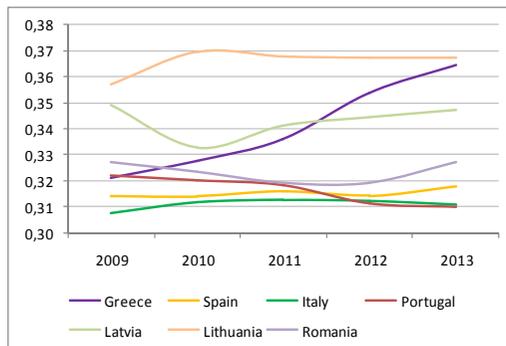


Notes: Poverty threshold at 60% of 2008 median equivalised income (in real terms)
Source: EUROMOD version G1.0.

results (2) inequality indicators

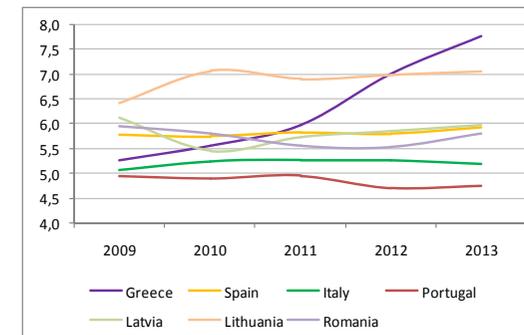
- **Gini index**
 - less sensitive to changes at the ends than around the middle of the distribution
- **S80/S20**
 - income share ratio of richest 20% divided that of poorest 20%
 - more sensitive to changes at the ends than around the middle of the distribution
- changes by **income decile**
 - with and without re-ranking

GINI index EUROMOD estimates (2009-13)



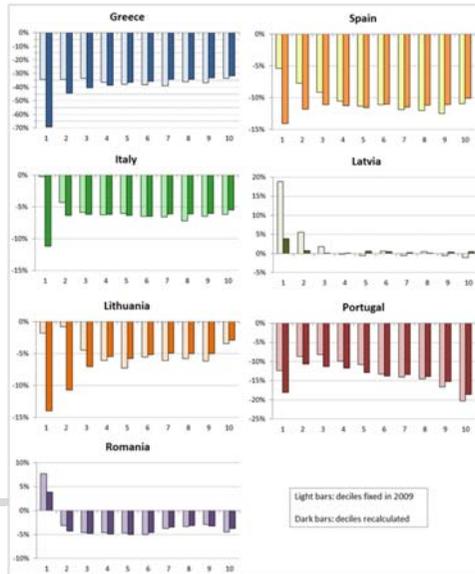
Source: EUROMOD version G1.0.

S80/S20 index EUROMOD estimates (2009-13)



Source: EUROMOD version G1.0.

changes by income decile EUROMOD estimates (2009-13)

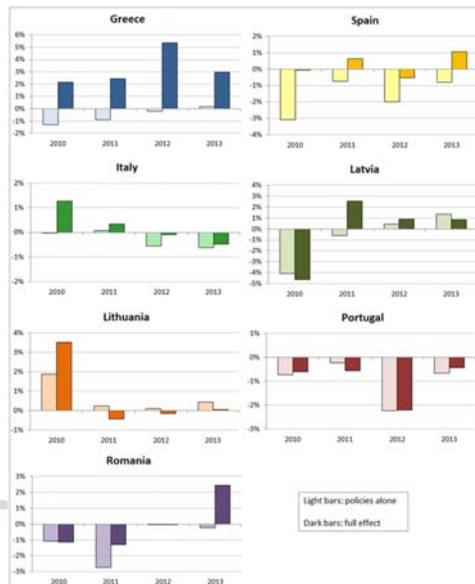


Source: EUROMOD version G1.0.

results (3) effect of (austerity) policies vs. full effect (of crisis)

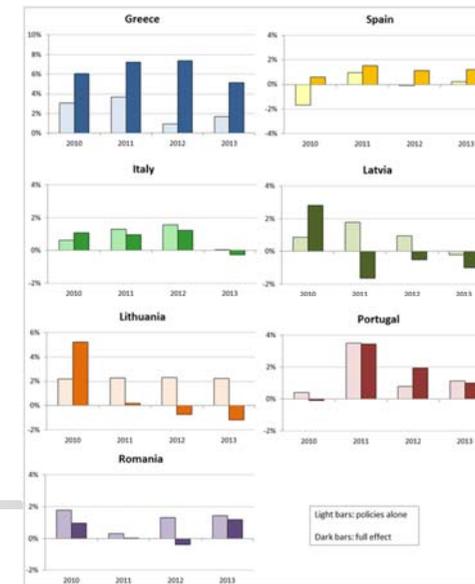
- disentangling the first-order effects of tax-benefit policies ...
- ... subject to the caveats mentioned earlier
- effects on:
 - inequality (Gini)
 - (anchored) poverty

effect of policies vs. full effect inequality (Gini)



Source: EUROMOD version G1.0.

effect of policies vs. full effect (anchored) poverty



Source: EUROMOD version G1.0.

other results (not shown here)

- poverty by sex and age
- effect by policy area
- transition matrices by decile
- Sen indicator of social welfare
- inventory of policy changes (7 countries, 4 years)

conclusions (1) Greece vs. the rest

- 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
- our findings with respect to relative poverty and inequality less straightforward, with improvements alternating with deteriorations and little overall change (again, except in Greece)

conclusions (2) the elderly

- the elderly seem to have improved their relative position in terms of income in **Greece**, **Spain** and **Portugal** (and to a lesser extent also in **Italy** and **Romania**)
- ... because older persons on low incomes, though not fully protected, suffered lower income losses (e.g. cuts in pensions) than other groups (e.g. the unemployed)
- however: funding cuts and other changes in health care (not considered here) may have raised the costs of services and others barriers to access for those depending on them

conclusions (3) re-ranking

- the Great Recession 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 (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 wages)
- as a result, the full effects of tax-benefit policies cannot be reduced to the first-order effects estimated here
- isolating the effects on poverty and inequality of tax and benefit policies from the total impact of the crisis is of interest
- ... and may help identify policies that reduce budget deficits while minimising adverse distributional effects

conclusions (5) fiscal consolidation 'progressive'?

- 'micro-simulation studies indicate that these fiscal adjustments relied on progressive measures'
- (IMF 2014 p. 51)
- while the first-order impact (on t-1) 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 most of the countries examined here **poverty** increased, and the policies implemented accounted for a major part of that increase

conclusions (6) static vs. dynamic effects of austerity

- the static effects of fiscal consolidation policies may be at odds with their dynamic effects
- however, we still know too little to quantify the size and direction of the dynamic (second-order) effects of austerity policies on inequality and poverty (e.g. *via* their effects on jobs and earnings)
- more research into that interaction would enable us to identify policies that promote both growth and equality
- ... even when the room for fiscal policy remains limited

illustration (5) trade offs and the (elusive) search for equitable austerity

		policies progressive?	
		YES	NO
policies depressional?	YES		X
	NO	V	

illustration (5)
trade offs and the (elusive) search for equitable austerity

		policies progressive?	
		YES	NO
policies depressional?	YES	reforming pensions? raising property taxes? fighting tax evasion? ✓	X
	NO	✓	

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illustration (5)
trade offs and the (elusive) search for equitable austerity

		policies progressive?	
		YES	NO
policies depressional?	YES		X
	NO	✓	

raising taxes on low-income workers

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illustration (5)
trade offs and the (elusive) search for equitable austerity

		policies progressive?	
		YES	NO
policies depressional?	YES	(?)	X
	NO	✓	(?)

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illustration (5)
trade offs and the (elusive) search for equitable austerity

		policies progressive?	
		YES	NO
policies depressional?	YES	(?)	X
	NO	✓	(?)

raising the top rate of income tax e.g. to 95%

Slide 40

illustration (5) trade offs and the (elusive) search for equitable austerity

		policies progressive?	
		YES	NO
policies depressional?	YES	(?)	
	NO	✓	(?)

raising VAT rates e.g. to 45%