



Welfare compensation for unemployment in the Great Recession

Francesco Figari

University of Insubria and ISER – University of Essex

with **Marina Fernandez, Holly Sutherland** and **Alberto Tumino**

ISER – University of Essex

2011 IARIW-OECD Conference on Economic Insecurity:

Measurement, Causes and Policy Implications

November 22-23, 2011



Great Recession and economic insecurity

- Our aim is to assess the extent to which tax-benefit systems provide an automatic income stabilisation for those who became unemployed at the onset of the Great Recession
 - Welfare compensation
- Crisis affects labour markets even after GDP recovers and household income
 - Those becoming unemployed during the crisis face a high risk of staying long in unemployment with a direct impact on the well-being of individuals and their families
 - Long-lasting impacts on household incomes (Jenkins et al. 2011)
 - Usual indicators might have serious difficulties in capturing the effects of the crisis (Nolan 2009) and evolution in the overall income distribution can hide the changes in income of particular groups (Aaberge et al. 2000, Jenkins et al. 2011)
- Clear link between unemployment shock, income stabilisation, and economic insecurity of those affected by unemployment



Approach

- “Stress test” the tax-benefit system (Atkinson 2009) to consider how welfare systems protect people from an extreme shock, offering relative protection and preventing to falling below an absolute income threshold
 - Evidence of the effects of either a macro-economic shock or a contemporary shock for which longitudinal data are not available yet
 - Focus on a specific aspect of a macroeconomic shock, highlighting the direct compensation provided by the tax-benefit system rather than that arising from other adaptive changes in individual behaviour and other household incomes
 - Based on data representative of the national population, it uses as a benchmark the real income distribution observed at a given time
 - Approach can be used to predict the effects of the crisis on the overall income distribution (Matsaganis and Leventi, 2011) taking properly into account the composition of new unemployed

Coverage and data

- Six EU countries (BE, EE, ES, IT, NL, UK)
 - Different macroeconomic shocks during the Great Recession
 - Different unemployment protection schemes and overall tax-benefit system

- Data
 - National SILC (BE, EE, IT), EU-SILC (ES), FRS (UK)
 - 2006 incomes updated to 2009 (UK 2008/9)

- Labour Force Survey
 - EU-LFS 2009

- Policy year: 2009

Counterfactual scenarios

- Take into account predicted changes in market income due to unemployment
 - Matching individuals who experienced a transition from employment to unemployment between 2008 and 2009 from LFS data based on observed individual and household characteristics (Coarsened Exact Matching, Iacus et al., 2011)

- Two counterfactual scenarios by using microsimulation model (EUROMOD)
 - Short term: new unemployed receive unemployment benefits if they are entitled to them
 - Longer term: eligibility for unemployment benefits exhausted

- Calculate new tax liabilities and benefit entitlements; and hence new household disposable income

Unemployment risk

	Belgium	Estonia	Spain	Italy	Netherlands	UK
Male	-0.000	0.082*	-0.084***	-0.077***	0.005	0.281***
Age						
35-44	-0.300***	-0.094*	-0.242***	-0.229***	-0.214***	-0.268***
45-54	-0.434***	0.039	-0.377***	-0.359***	-0.204***	-0.328***
55+	-0.608***	-0.374***	-0.621***	-0.532***	-0.254***	-0.433***
Education						
Upper secondary	-0.190***	-0.189***	-0.222***	-0.114***	-0.175***	-0.092***
Tertiary	-0.403***	-0.372***	-0.448***	-0.106***	-0.203***	-0.285***
Native	-0.242***	-0.342***	-0.340***	-0.295***	-0.289***	0.006
Self-employed	-0.478***	-0.329***	-0.715***	-0.348***	-0.638***	-0.181***
Sector of activity						
Agriculture and Fishing	-0.272*	-0.273***	-0.580***	-0.474***	0.07	-0.22
Mining, Manifact. and Utilities	-0.068	-0.229***	-0.531***	-0.221***	0.137*	
Wholesale and retail	-0.049	-0.422***	-0.656***	-0.277***	0.334***	
Hotels and restaurants	0.1	-0.355***	-0.544***	-0.060**	0.215**	
Transport and communication	-0.164***	-0.510***	-0.613***	-0.296***	0.079	
Financial intermediation	-0.307***	-0.566***	-0.755***	-0.568***	0.003	
Real estate and business	-0.114	-0.568***	-0.450***	-0.345***	0.111	
Public administ. and defence	-0.303***	-0.506***	-0.723***	-0.512***	-0.107	
Education	-0.288***	-0.972***	-0.866***	-0.634***	-0.519***	
Health and social work	-0.374***	-1.143***	-0.904***	-0.673***	-0.371***	
Other public services	-0.166**	-0.631***	-0.776***	-0.269***	0.108	
Industry						0.151***
Constant	-1.036***	-0.432***	0.119**	-1.002***	-1.553***	-1.763***
No. Observations	44,701	9,554	42,050	229,875	45,601	42,392
Pseudo R ²	0.076	0.075	0.121	0.066	0.067	0.047

Unemployment welfare systems

	Scheme	Duration	Subject to Tax / SICs
BE	UB Insurance 60% p.e.; family additions, ceilings	unlimited	yes / no
EE	UB Insurance 40-50% p.e.; ceilings	9 months	yes / no
ES	UB Insurance 60-70% p.e.; family additions, ceilings	4 to 24 months	yes / yes
IT	UB Insurance 40-60% p.e.; ceilings	8 to 12 months	yes / no
NL	UB Insurance 70-75% p.e.; ceilings	3 to 38 months	yes / yes
UK	UB Insurance Flat-rate (€ 61 to € 76 pw)	6 months	yes / no

Unemployment welfare systems

		Scheme	Duration	Subject to Tax / SICs
BE	UB Insurance	60% p.e.; family additions, ceilings	unlimited	yes / no
EE	UB Insurance	40-50% p.e.; ceilings	9 months	yes / no
	UB Assistance	Flat rate (formally means tested)	9 months	no / no
ES	UB Insurance	60-70% p.e.; family additions, ceilings	4 to 24 months	yes / yes
	UB Assistance	Means tested at individual level	6 to 18 months	yes / no
IT	UB Insurance	40-60% p.e.; ceilings	8 to 12 months	yes / no
NL	UB Insurance	70-75% p.e.; ceilings	3 to 38 months	yes / yes
	UB Assistance	Means tested at family level	3 to 38 months	yes / yes
UK	UB Insurance	Flat-rate (€ 61 to € 76 pw)	6 months	yes / no
	UB Assistance	Means tested at family level	Unlimited	no / no

Unemployment welfare systems

	Scheme	Duration	Subject to Tax / SICs
BE	UB Insurance 60% p.e.; family additions, ceilings	unlimited	yes / no
	Soc Assistance Means tested at family level		no / no
EE	UB Insurance 40-50% p.e.; ceilings	9 months	yes / no
	UB Assistance Flat rate (formally means tested)	9 months	no / no
	Soc Assistance Means tested at family level		no / no
ES	UB Insurance 60-70% p.e.; family additions, ceilings	4 to 24 months	yes / yes
	UB Assistance Means tested at individual level	6 to 18 months	yes / no
	Soc Assistance Means tested at family level		no/no
IT	UB Insurance 40-60% p.e.; ceilings	8 to 12 months	yes / no
NL	UB Insurance 70-75% p.e.; ceilings	3 to 38 months	yes / yes
	UB Assistance Means tested at family level	3 to 38 months	yes / yes
	Soc Assistance Means tested at family level		yes / yes
UK	UB Insurance Flat-rate (€ 61 to € 76 pw)	6 months	yes / no
	UB Assistance Means tested at family level	Unlimited	no / no
	Soc Assistance Means tested at family level		no/no

Income stabilisation indicators

■ Relative Resilience

- Net Replacement Rate: ratio between household disposable income after and before the shock

$$\frac{Y_{\text{post}}}{Y_{\text{pre}}}$$

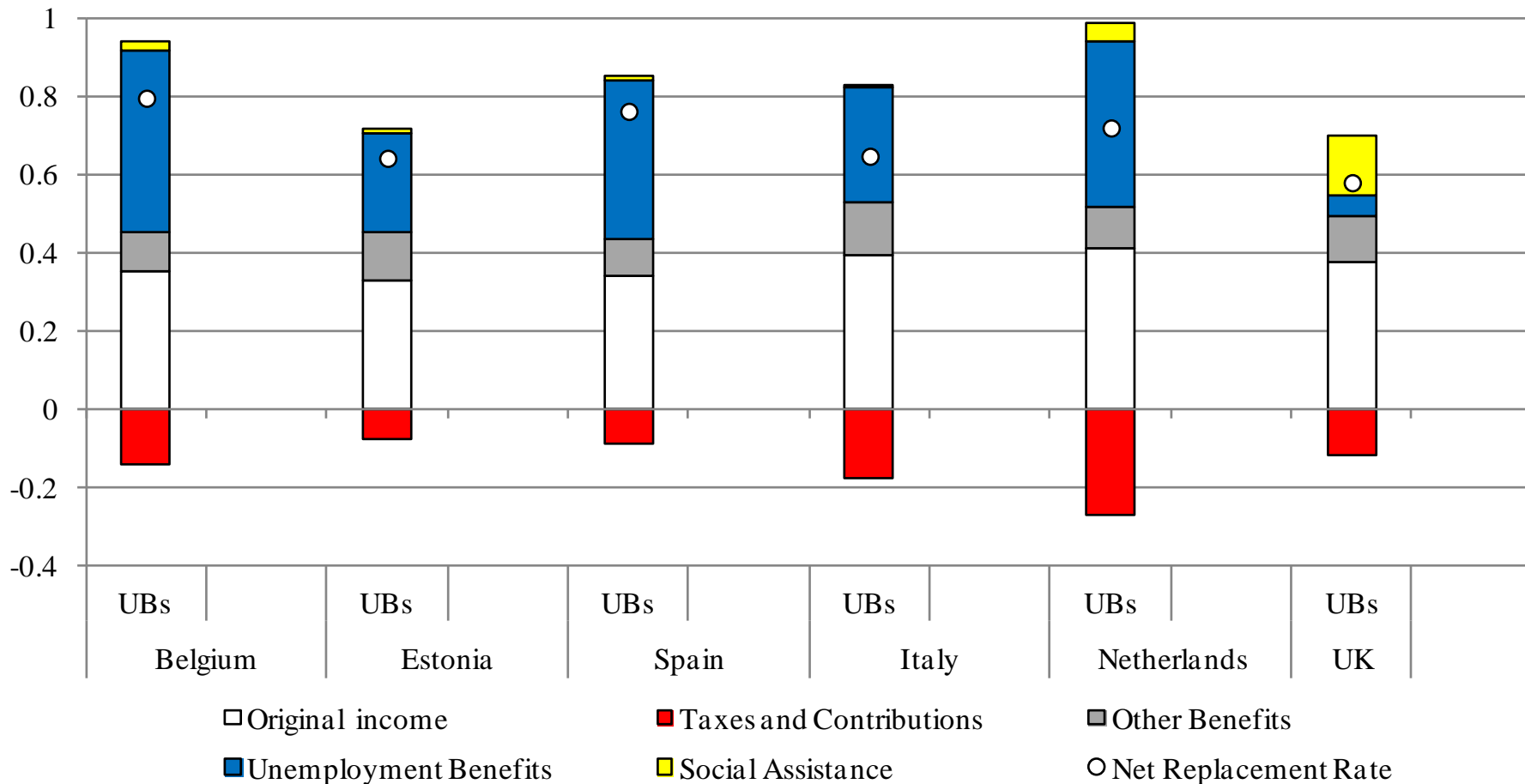
- Compensation rate: proportion of net earnings lost due to unemployment compensated by public transfers net of taxes

$$\frac{(B_{\text{post}} - B_{\text{pre}}) - (T_{(\bar{E}_{\text{post}})} - T_{(\bar{E}_{\text{pre}})})}{(E_{\text{pre}} - T_{(E_{\text{pre}})}) - (E_{\text{post}} - T_{(E_{\text{post}})})}$$

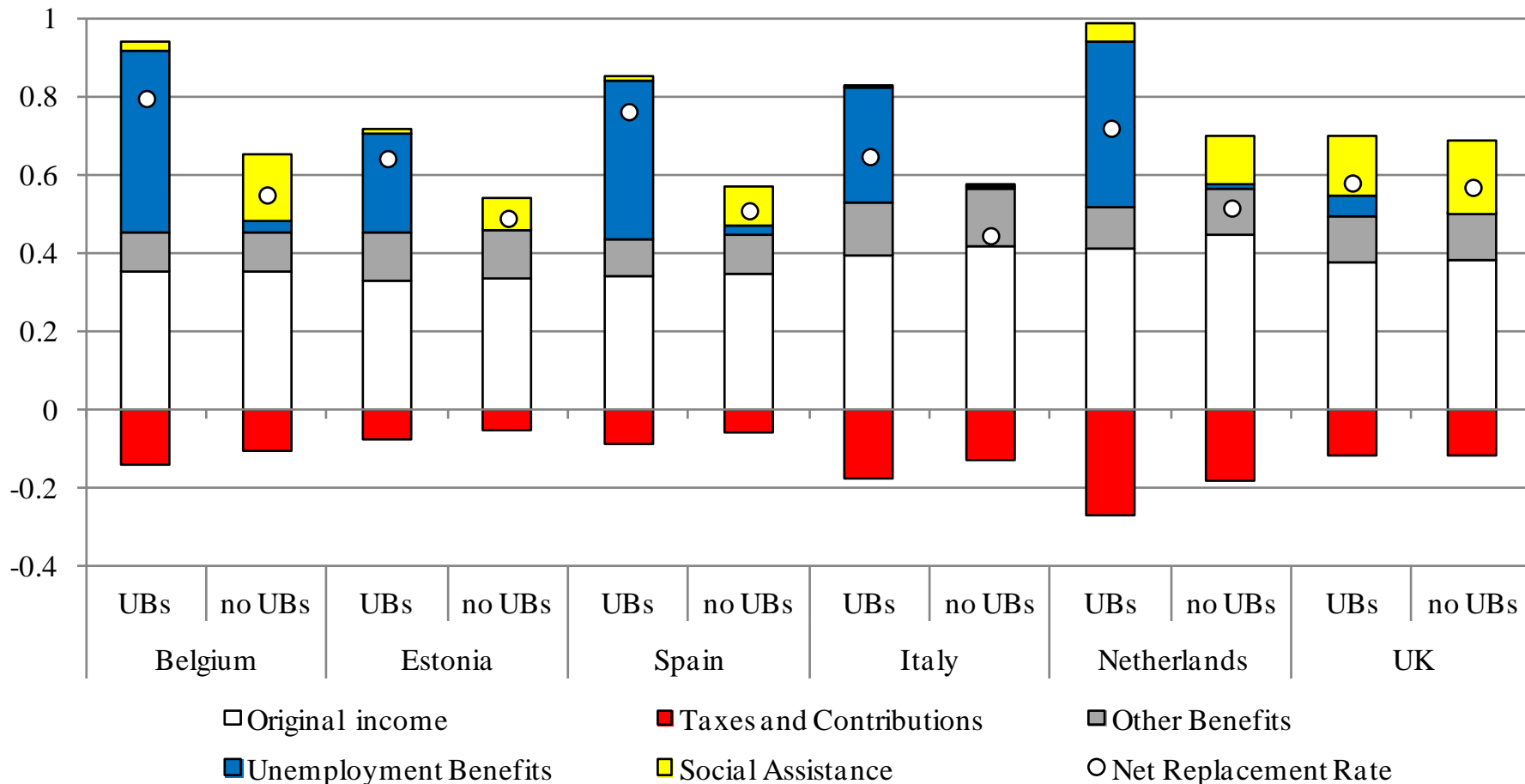
■ Absolute Resilience

- Risk of falling below a low absolute income threshold defined as 60% of mediana (Equivalent to change in poverty status with fixed threshold)

Average Net Replacement Rate

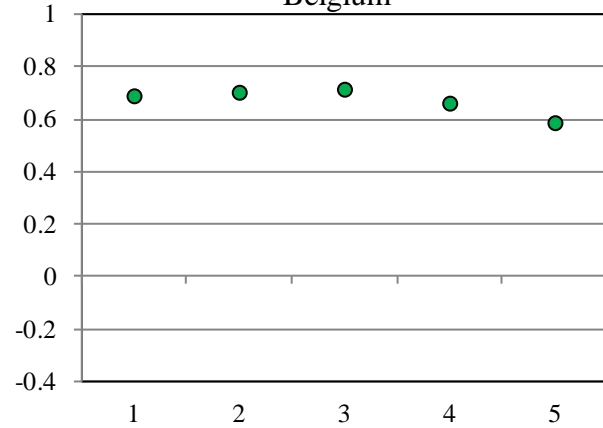


Average Net Replacement Rate

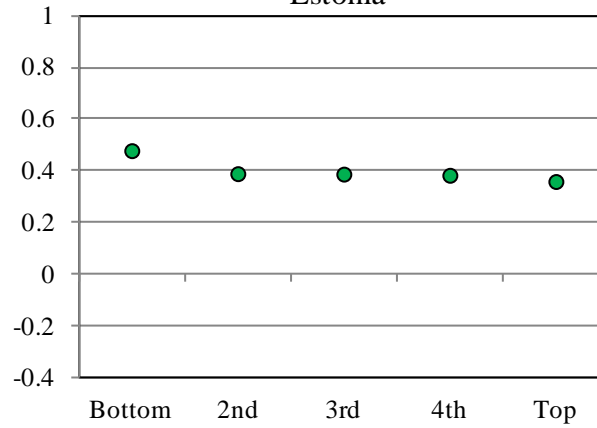


Average Compensation Rate, with UBs

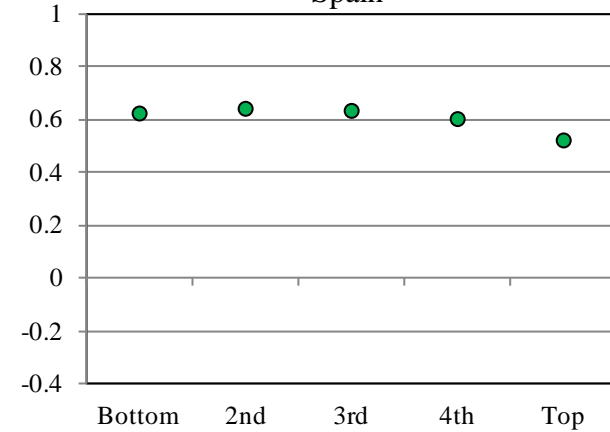
Belgium



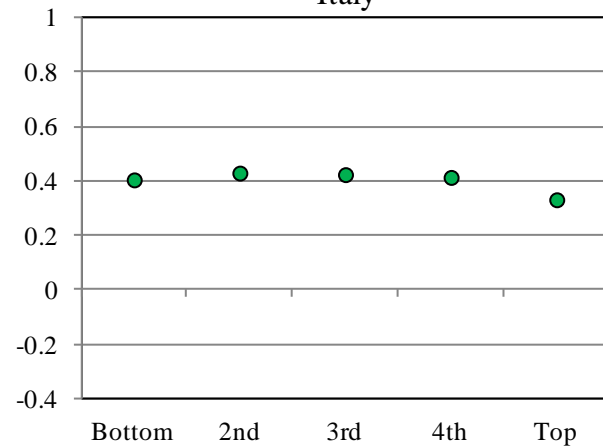
Estonia



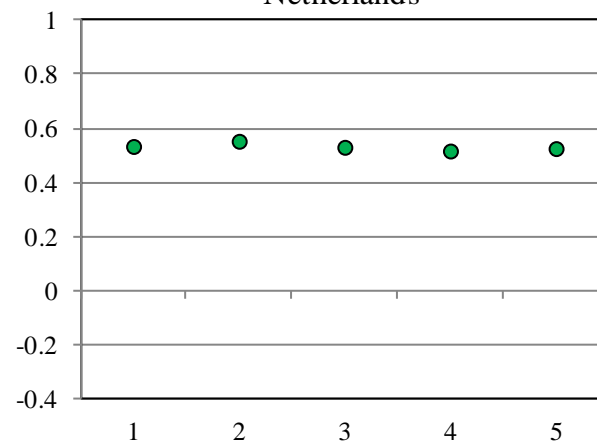
Spain



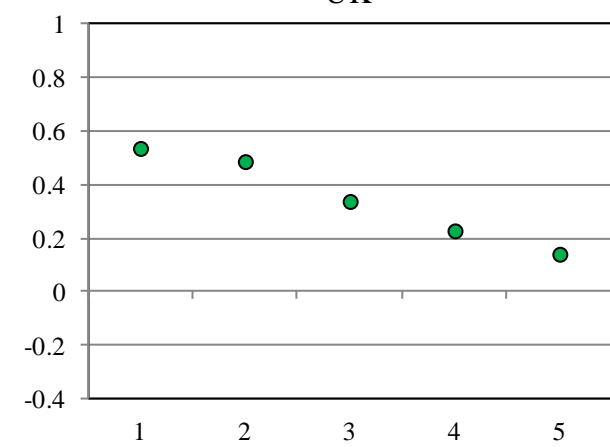
Italy



Netherlands



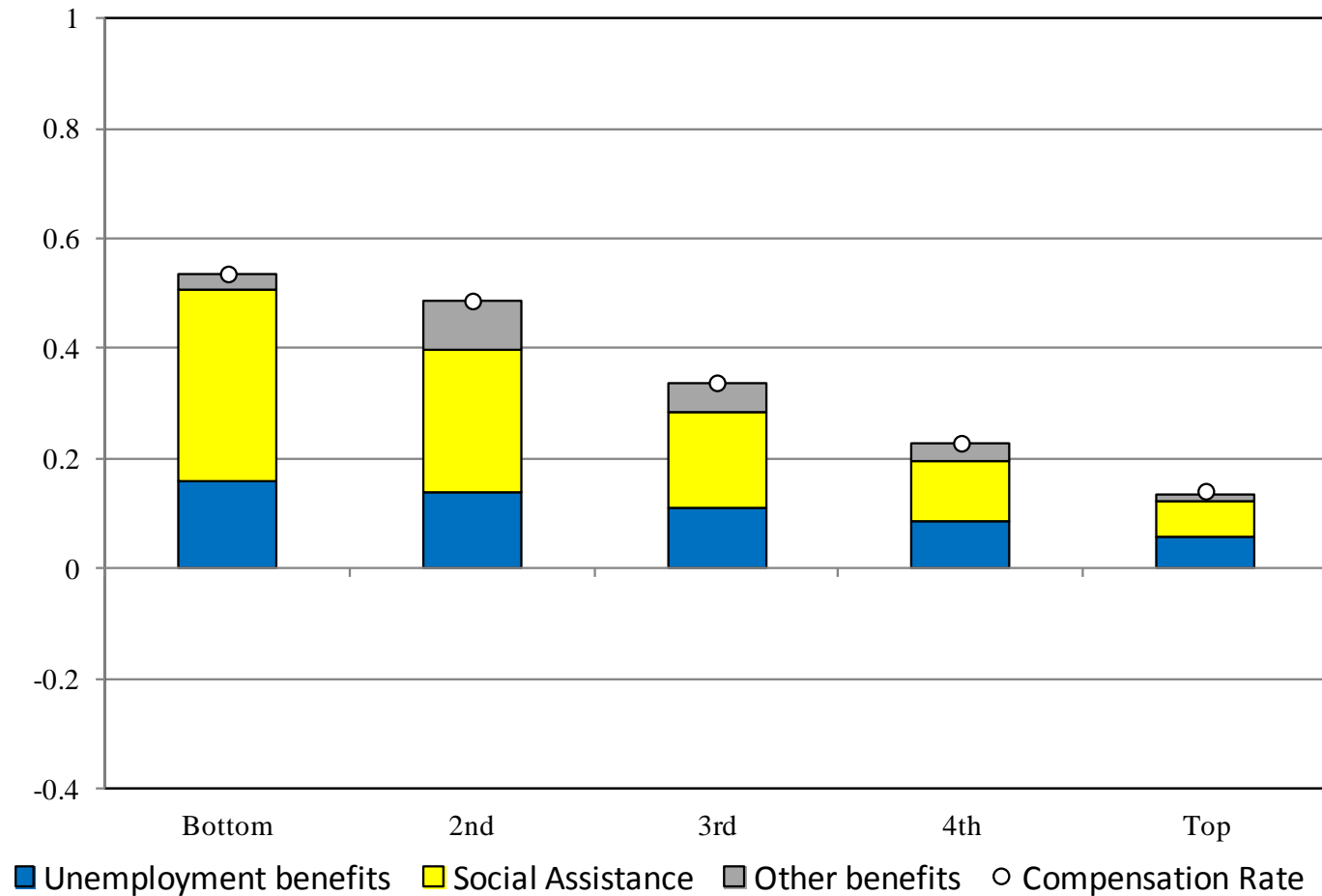
UK



● Compensation Rate

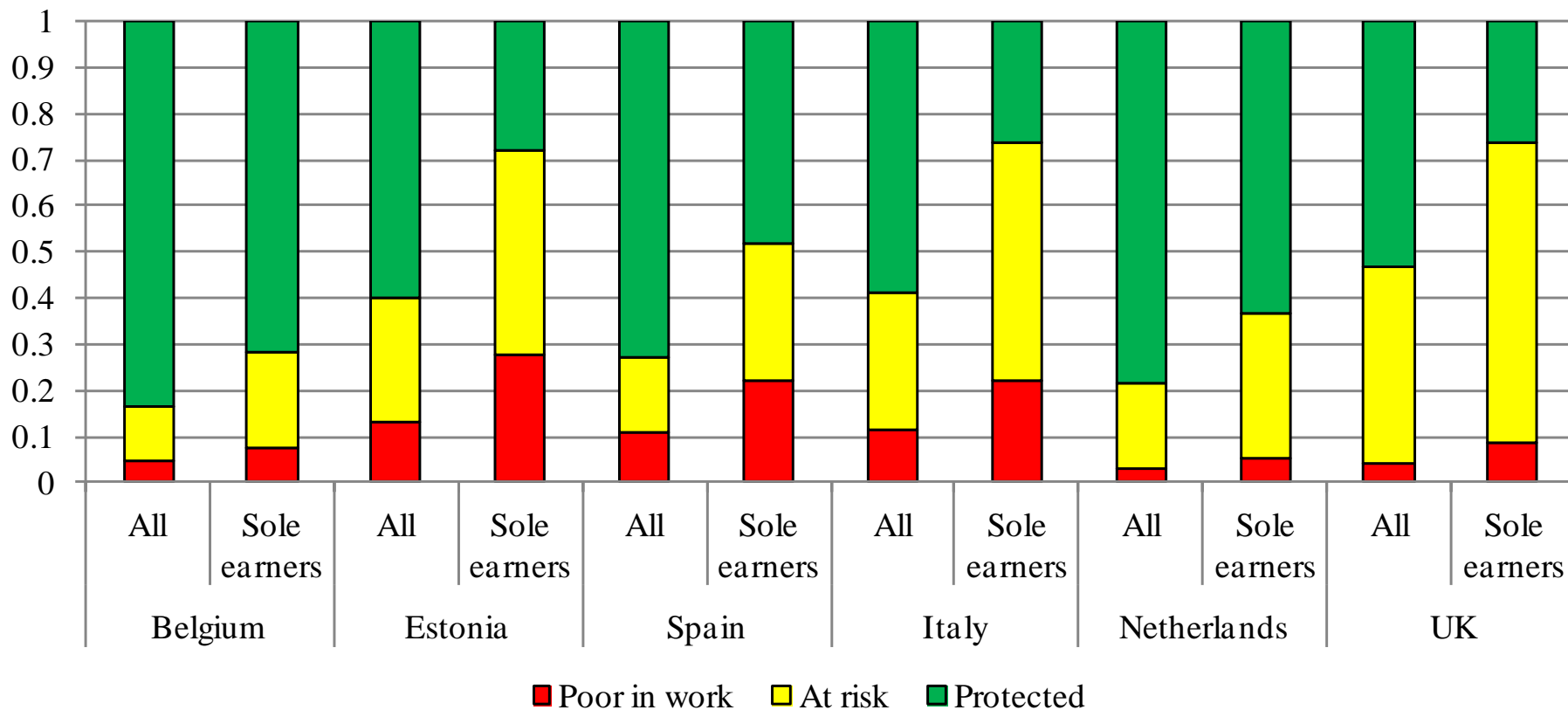
Average Compensation Rate, with UBs

UK



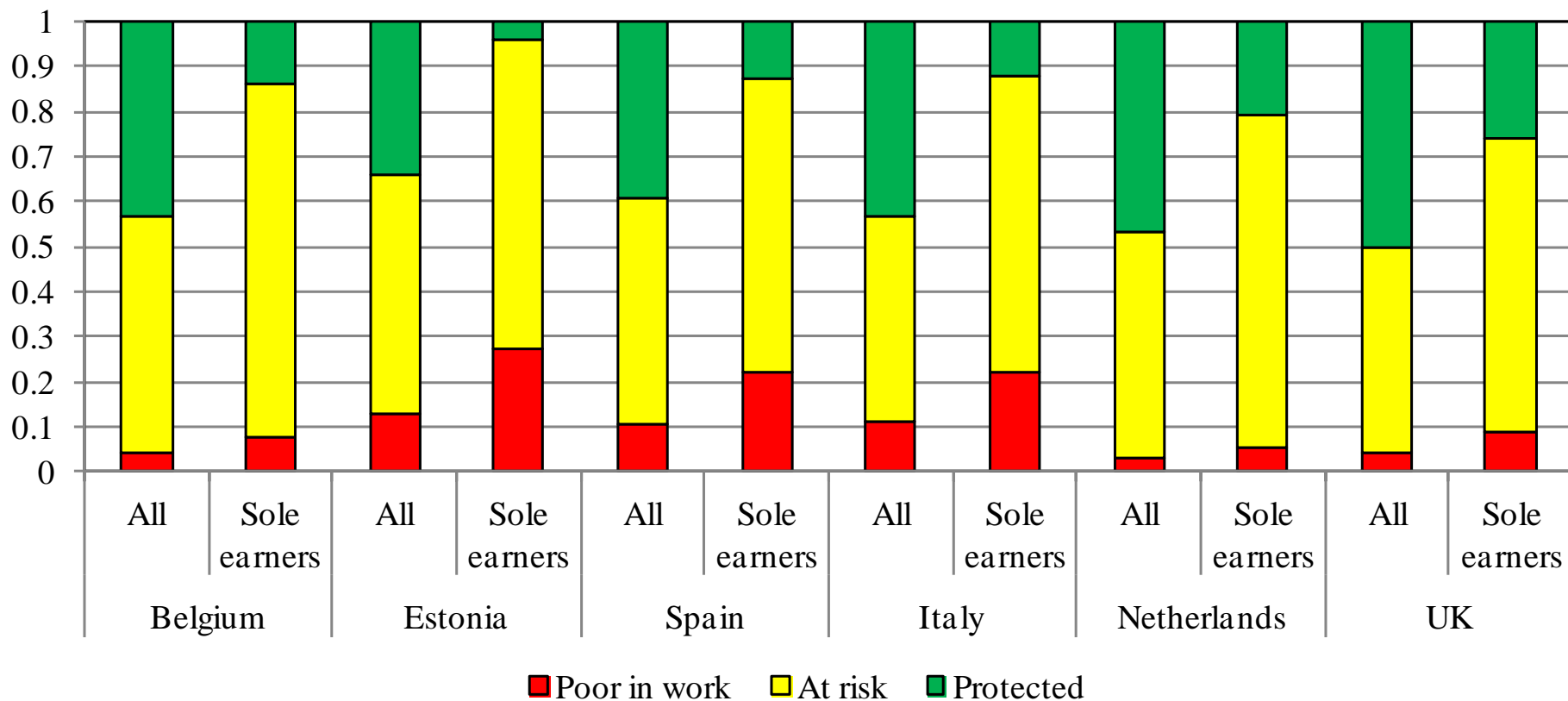
Absolute resilience, with UBs

Are the new unemployed protected from falling below the poverty line?



Absolute resilience, without UBs

Are the new unemployed protected from falling below the poverty line?



Conclusions

- Differences across countries in the impact of economic downturn on unemployment risk and in the protection offered by the welfare systems
- Other household income plays a key role in absolute and relative protection: family as shock absorber.
- Welfare state has a complementary role, more remarkable in BE and ES (with UBs) and the UK (for the poorest; without UBs).
 - Relevant interactions of different tax-benefit instruments: without UB, in all countries except Italy, social assistance (if it is taken up) offers some protection both absolutely and relatively; also other income-responsive benefits (UK)
- Net public support flat across the distribution vs focused at the bottom (UK)
 - In principle guaranteeing a reasonable level of protection for all potentially unemployed people is desirable but too low levels.
- Long-lasting effects of the crisis will put minimum income schemes in several EU countries to a severe test: to meet the challenge, social safety nets must become stronger and tighter