



Improving poverty reduction in Europe: what works best where?

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MOTIVATION AND WHAT WE DO

Limited evidence on the cost efficiency of different tax-benefit policies to reduce poverty, within and across countries:

- Within a country a mix of policy instruments interacting in complex ways - **understanding differences between instruments important for policy design**
- **Understanding differences across countries important for policy learning**

We study the effectiveness of different types of policy instrument in reducing the risk of poverty (or limiting its increase) by measuring the effect of increasing or reducing the size of the instrument:

- Change in instrument size:** increase/decrease by 5%, 20%, 50%, 70%, 90%
- Policy instruments:** child benefits, minimum income components of social assistance, lower tax thresholds, min wage, the whole tax-benefit system.
- Measuring 'cost-effectiveness':** the ratio of the percentage point change in poverty (headcount or gap) to the net cost to the public budget (or employers in the case of the minimum wage), expressed as a proportion of GDP
- Countries:** Belgium, Bulgaria, Estonia, Greece, Hungary, Italy, UK

METHODOLOGY AND DATA

Use EUROMOD:

- simulate scaling policies up and down (not revenue-neutral)
- net effects after whole tax-benefit system
- 2013 tax-benefit policies

Data: EU-SILC 2010 (FRS 2009/10 for UK); updated to 2013

Policy instruments:

- Universal and means-tested child benefits:**
 - why:** increasing the benefit size -> poverty reduction among hh with children
 - what:** excluding maternity/parental benefits, child-related components of out-of-work or in-work benefits; no changes in eligibility
- Social assistance adult amounts/subsistence thresholds:**
 - why:** increasing benefit size -> (severe) poverty reduction
 - what:** changes in eligibility, excluding complements, supplements and passported benefits; non-existent in EL, regional/municipal schemes not simulated in IT
- Income tax threshold:**
 - why:** increasing zero tax threshold -> increase in net income, move out of poverty or reduction in poverty gap
 - what:** excluding BG and HU - flat tax; no threshold in EL in 2013 - re-introducing 2012 zero tax band; modifying IT tax credits
- Minimum wage (only increases):**
 - why:** increasing minimum wage -> increase income of paid work, reduction in poverty
 - what:** non-existent in IT
- Indexing the whole tax-benefit system as a benchmark**

RESULTS

Poverty*-cost ratio:

$$\frac{\Delta \text{Poverty indicator}}{\left(\frac{\Delta \text{Public budget}}{\text{GDP}} * 100 \right)}$$

* change in percentage point; using a fixed poverty threshold

In red: across policies and within a country, the most cost-effective policy

In yellow: across countries and within a policy, the country with the most cost-effective policy

Results:

Child benefits more cost-effective than social assistance in many cases. Child benefits and social assistance most cost-effective in reducing poverty headcount and gap.

Child benefits - poverty headcount graph:

- in most countries the effect on the poverty headcount is **proportional** to the scale of the change in spending
- **straight and symmetrical lines** for increases/decreases (exception UK)
- across countries a key **difference is in the gradient** of the effect

Child benefits - poverty gap graph: linear relationship in countries with small benefits (BG, EE, EL, IT); non-linear where some recipients above poverty threshold (BE, HU, UK)

Social assistance graphs:

- large **differences** across countries and within countries for given benefit increases vs decreases

Poverty-cost ratio by policy instrument using the -/+20% change

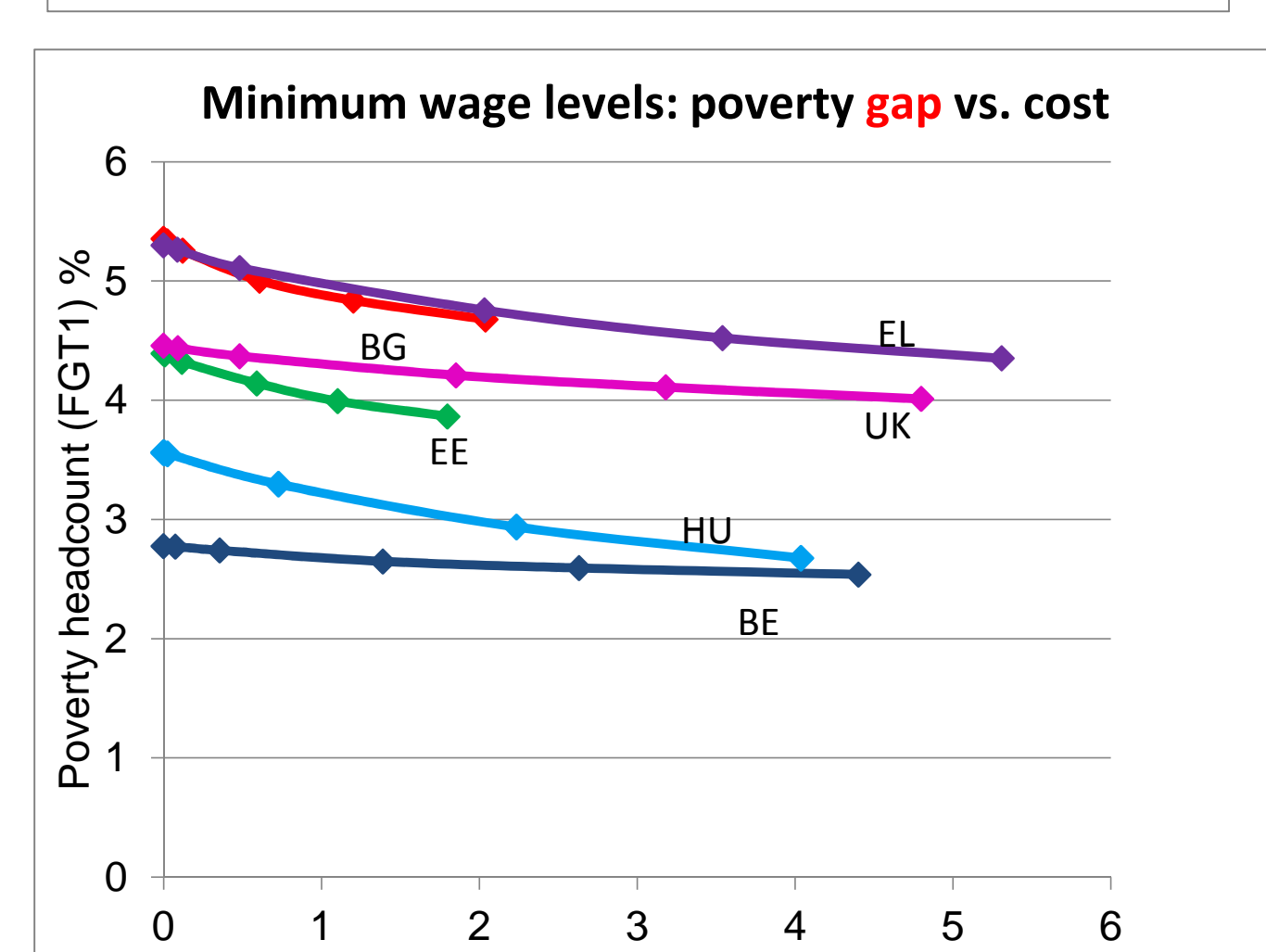
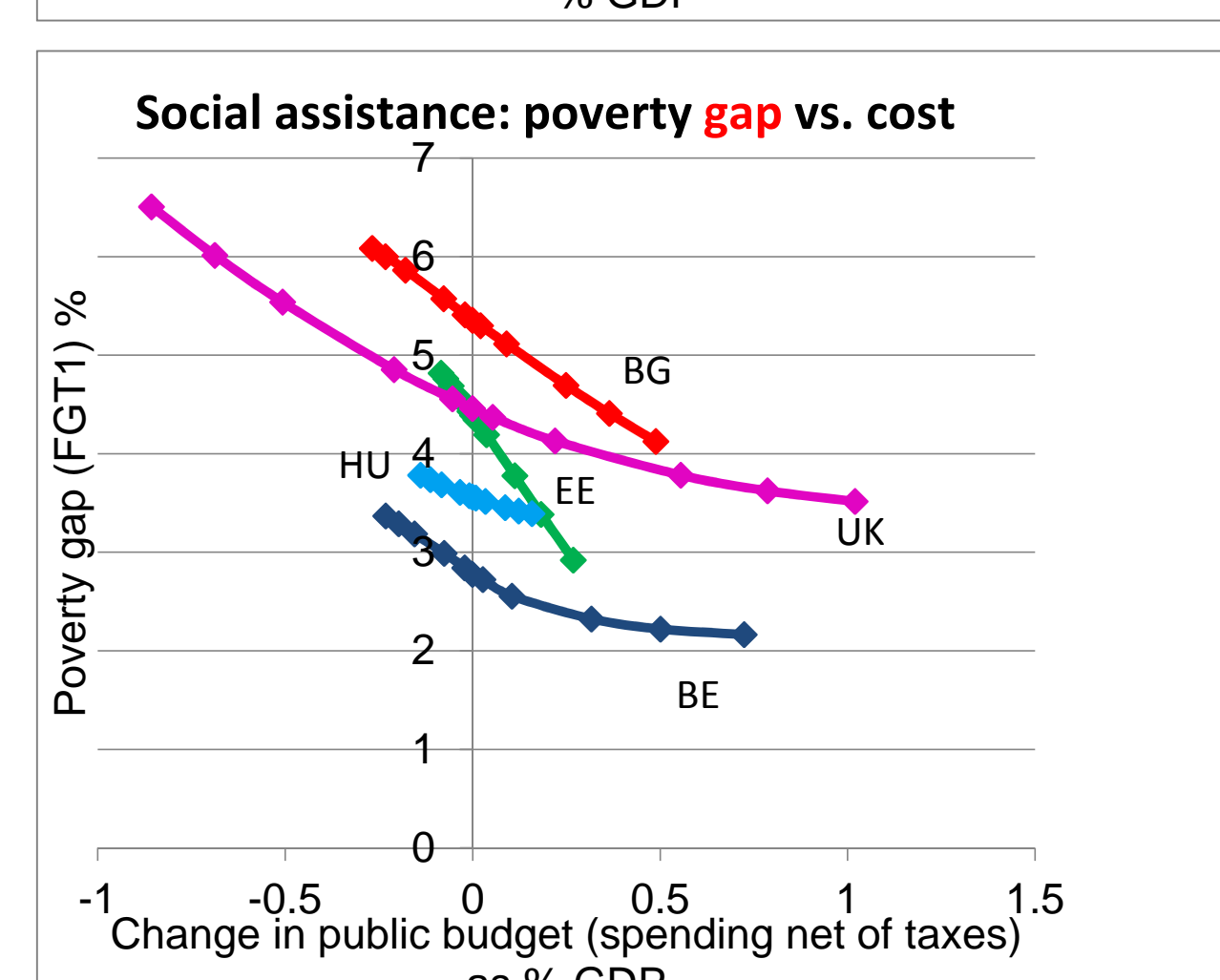
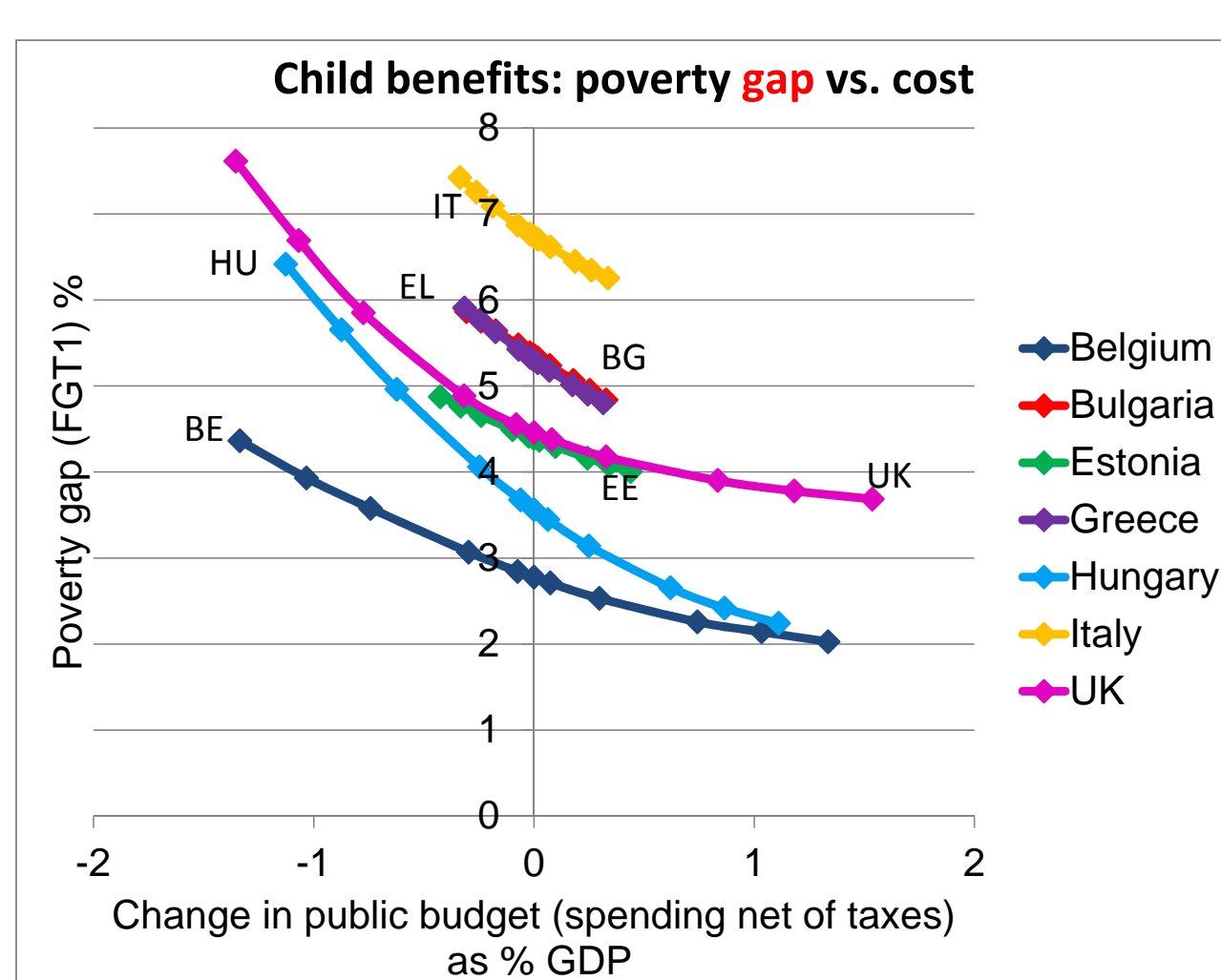
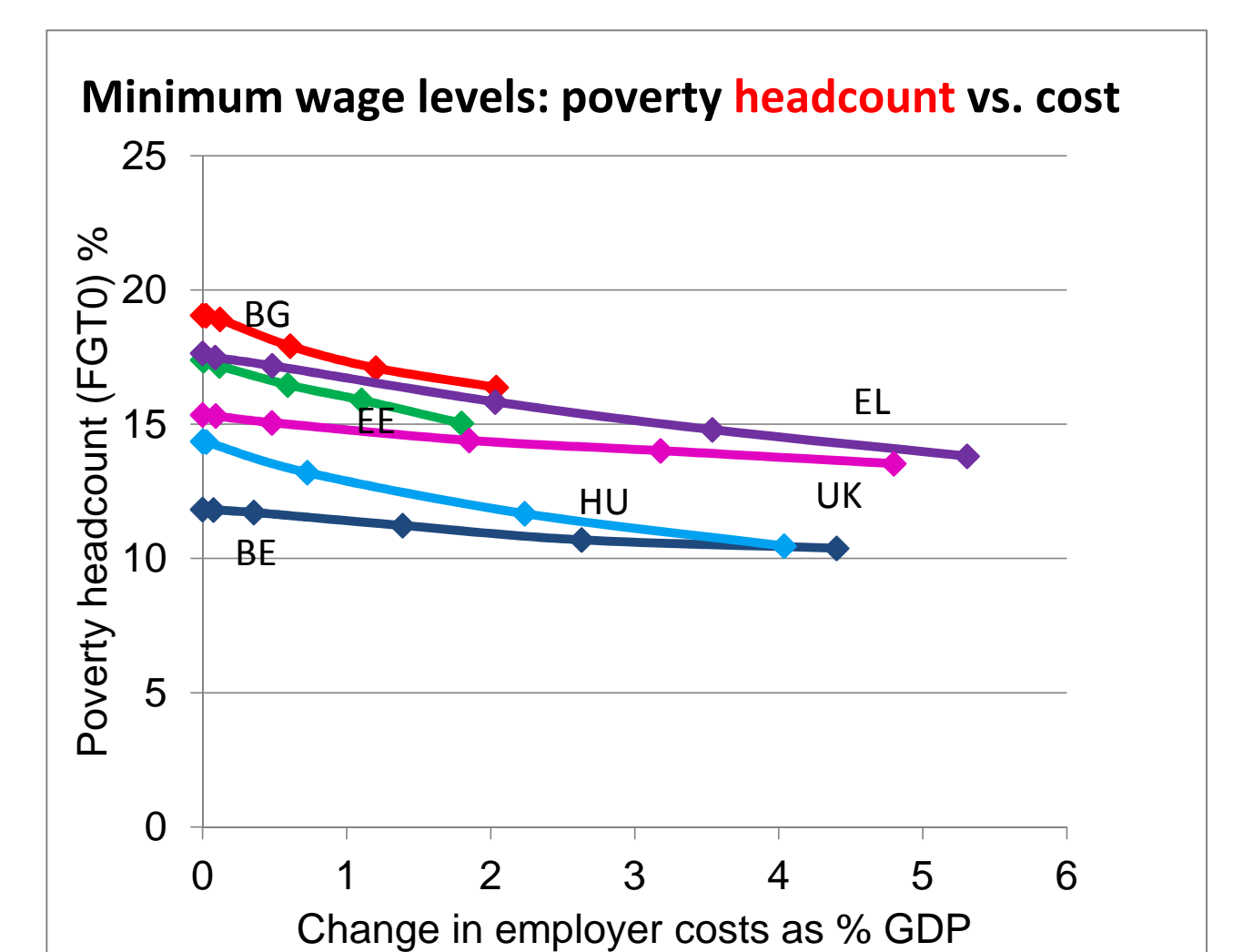
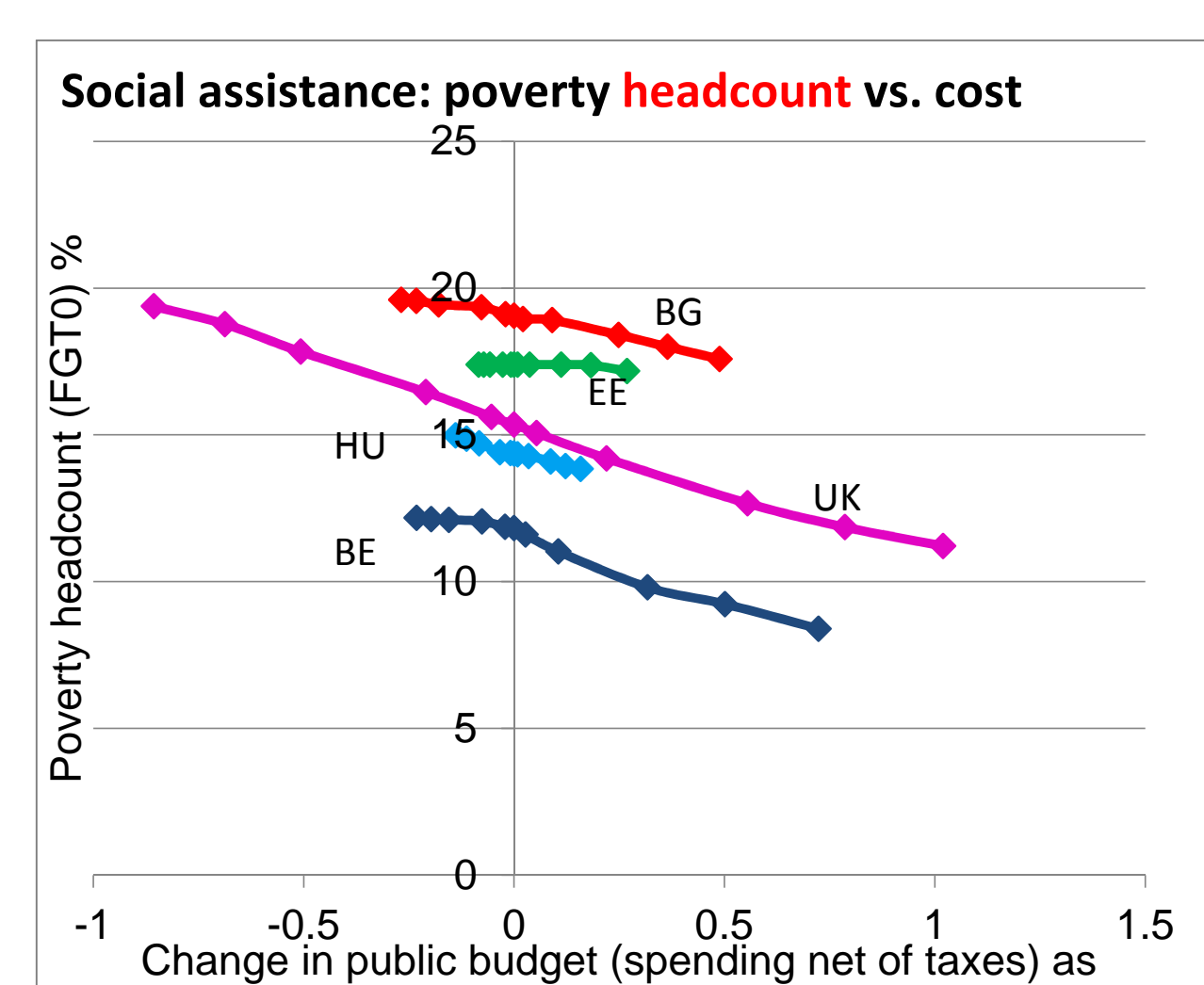
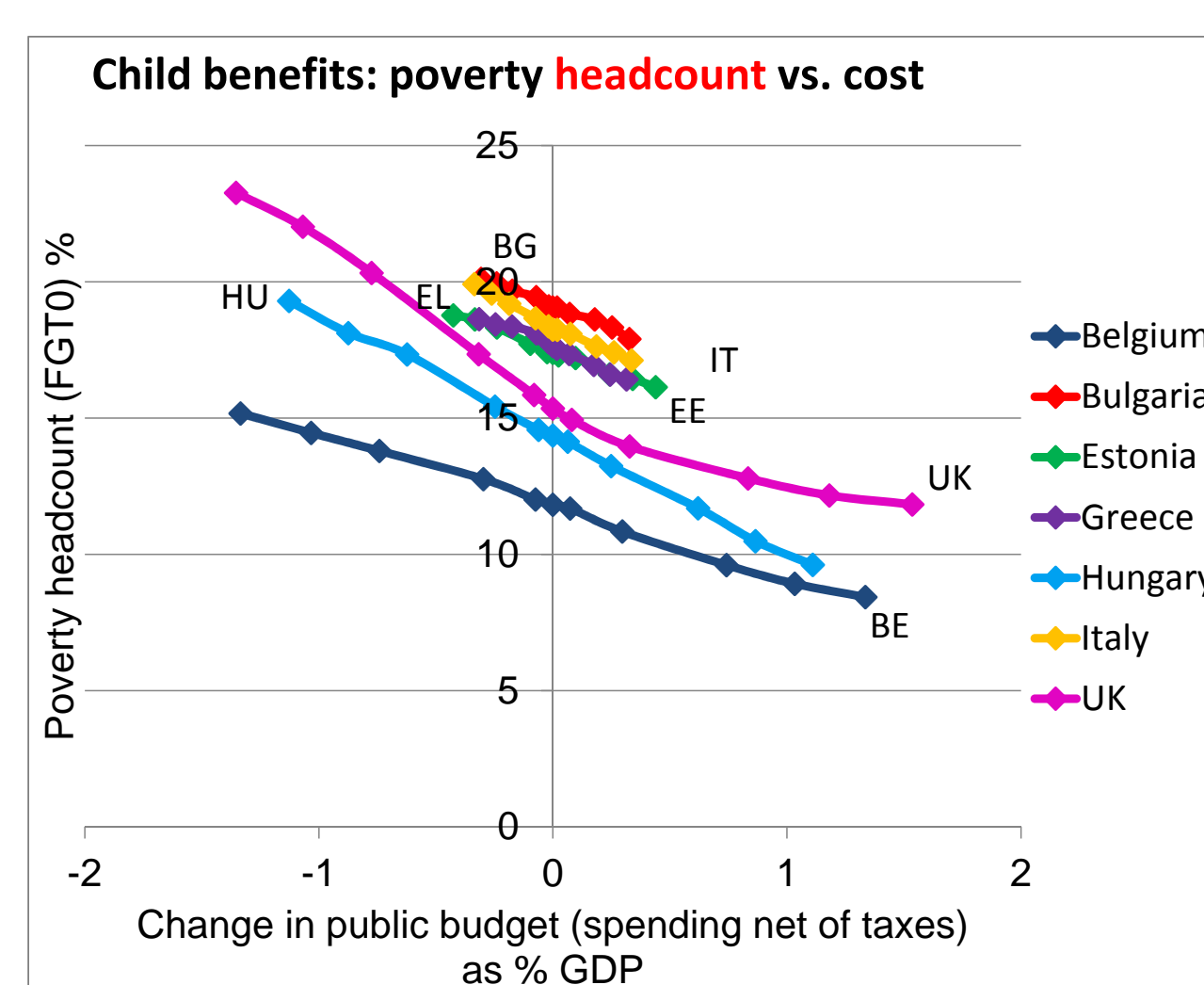
	Child benefit		Social Assistance		Income tax threshold		Tax-benefit system indexation	
	-20%	+20%	-20%	+20%	-20%	+20%	-20%	+20%
Poverty headcount								
Belgium	3.16	3.33	3.02	7.57	1.07	0.49	1.97	1.06
Bulgaria	5.38	3.25	3.78	1.65			1.89	1.32
Estonia	3.41	1.92	0.00	0.00	4.05	0.99	3.17	2.44
Greece	6.63	4.18			0.39	0.42	1.19	1.01
Hungary	4.28	4.52	1.33	2.51			1.85	1.32
Italy	5.49	2.12			1.45	1.21	1.50	0.94
UK	6.28	4.24	5.28	5.24	0.67	0.37	2.97	1.87
Poverty gap								
Belgium	0.98	0.83	2.80	2.11	0.11	0.06	0.51	0.25
Bulgaria	1.71	1.66	2.83	2.66			0.82	0.56
Estonia	1.03	0.98	5.29	5.32	0.51	0.26	1.11	0.59
Greece	1.83	1.70			0.19	0.13	0.39	0.16
Hungary	2.01	1.70	1.36	1.29			0.58	0.33
Italy	1.78	1.62			0.31	0.24	0.42	0.22
UK	1.34	0.87	1.89	1.50	0.12	0.08	0.76	0.39

- in BE and BG recipients below the poverty line - increasing social assistance has large effect on the poverty gap but little on the headcount
- in the UK - less disproportional and asymmetrical effects as recipients also above the poverty threshold
- in EE - small benefit size; amount increases have no effect on headcount but dramatically cost-effective in reducing the poverty gap

Minimum wage graphs: not well-targeted on people in low-income households; however, reduction in dependency on in-work benefits, make work pay, increase in tax revenues

Income tax threshold: small poverty-reduction effects of increasing the threshold with large budgetary costs

Indexing the whole tax-benefit system: vulnerability to increased poverty if tax-benefit system is not indexed (BE and UK)



REFERENCE

Leventi. C., H. Sutherland & I. V. Tasseva (2016): Improving poverty reduction in Europe: what works (best) where?, ImPRovE Working Paper No16/16

