



Size and distributional pattern of pension-related tax expenditures in European countries

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Background and aim

- Tax expenditures are departures from a benchmark tax system (usually *preferential* tax treatments) granted to specific individuals or categories of households which aim at achieving social and economic goals
 - Presented as tax cuts rather than increases in spending: “soft policy device” (Kalyva, 2016; Stiglitz 2002)
 - instruments vulnerable to lobbying more than equivalent spending programs
 - fiscal and equity impacts not always clear
 - Subject to a lack of transparency (Tyson, 2014)
 - effectiveness and efficiency need to be carefully evaluated
- First attempt to quantify the fiscal and equity effects of pension-related tax expenditures across all European countries
 - Microsimulation approach



The benchmark system

- The taxation of pensions can take place in three possible points in time
 - i) when part of the income is saved and contributions to the pension system are paid
 - ii) when investment income and capital gains accrue
 - iii) when pension benefits are received



The benchmark system

- The choice of the benchmark system is crucial and related to the debated principles of optimal taxation of pensions (Cremer and Pestieau, 2016)
- EET (like TEE) is equivalent to a consumption or expenditure tax
 - Deductibility of contributions and taxation of pension benefits to avoid double taxation
- EET preferred over TEE
 - If individuals are myopic and tend to under-invest for retirement
 - Pension savings more attractive than under TEE as there is always the risk that future governments will act to tax pension benefits
 - With progressive tax EET encourages earlier and greater savings because grants tax relief before retirement when marginal tax rate is higher (Armstrong et al. 2015)



Pension systems across Europe

- OECD (2015) taxonomy:
 - I pillar: public benefits that do not depend on the amount of contributions. Its aim is to avoid poverty in the old age and its impact is highly redistributive
 - **II pillar**: occupational, in most of the cases mandatory, either public or private, pursues the maintenance of working age living standards during retirement
 - **III pillar**: voluntary and tries to address individual preferences for retirement savings versus alternative forms of savings.



Pension-related tax expenditures

- Most countries follow an E(E)T approach but with several tax expenditures in place
 - Pension contributions (fully or partially) not exempted
 - Negative Tax Expenditure, partly compensated by lower tax on private pensions
 - Pensions (fully or partially) not taxed
 - To support elderly incomes by smoothing income over the life-cycle and prevent elderly poverty



Microsimulation approach

- Analysis based on a benchmark tax-benefit system scenario implemented with a microsimulation approach (Figari, Paulus and Sutherland, 2015)
 - Analysis based on the comparison between the current tax-benefit system and a benchmark scenario – E(E)T – where existing pension-related TEs are removed
 - revenue foregone approach (Revenue cost due to TEs)
 - II and III pension pillars
 - Fiscal and equity impact based on micro-data representative of the national population
 - Interaction between different tax instruments and benefit entitlements

- EUROMOD (Sutherland and Figari, 2013)
 - 2013 policy system
 - 2010 EU-SILC (+ FRS for the UK) data updated to 2013



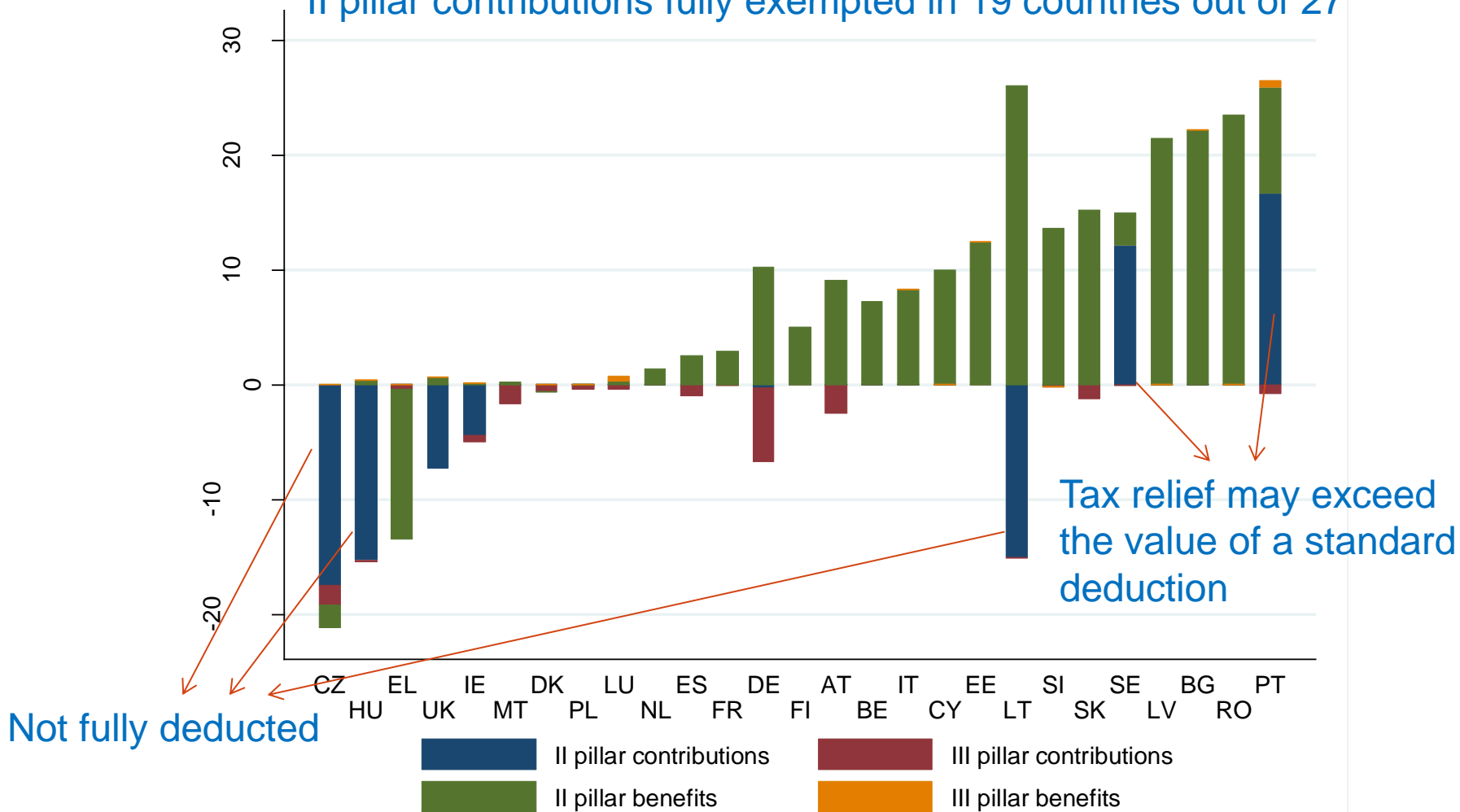
Microsimulation approach

■ Static approach

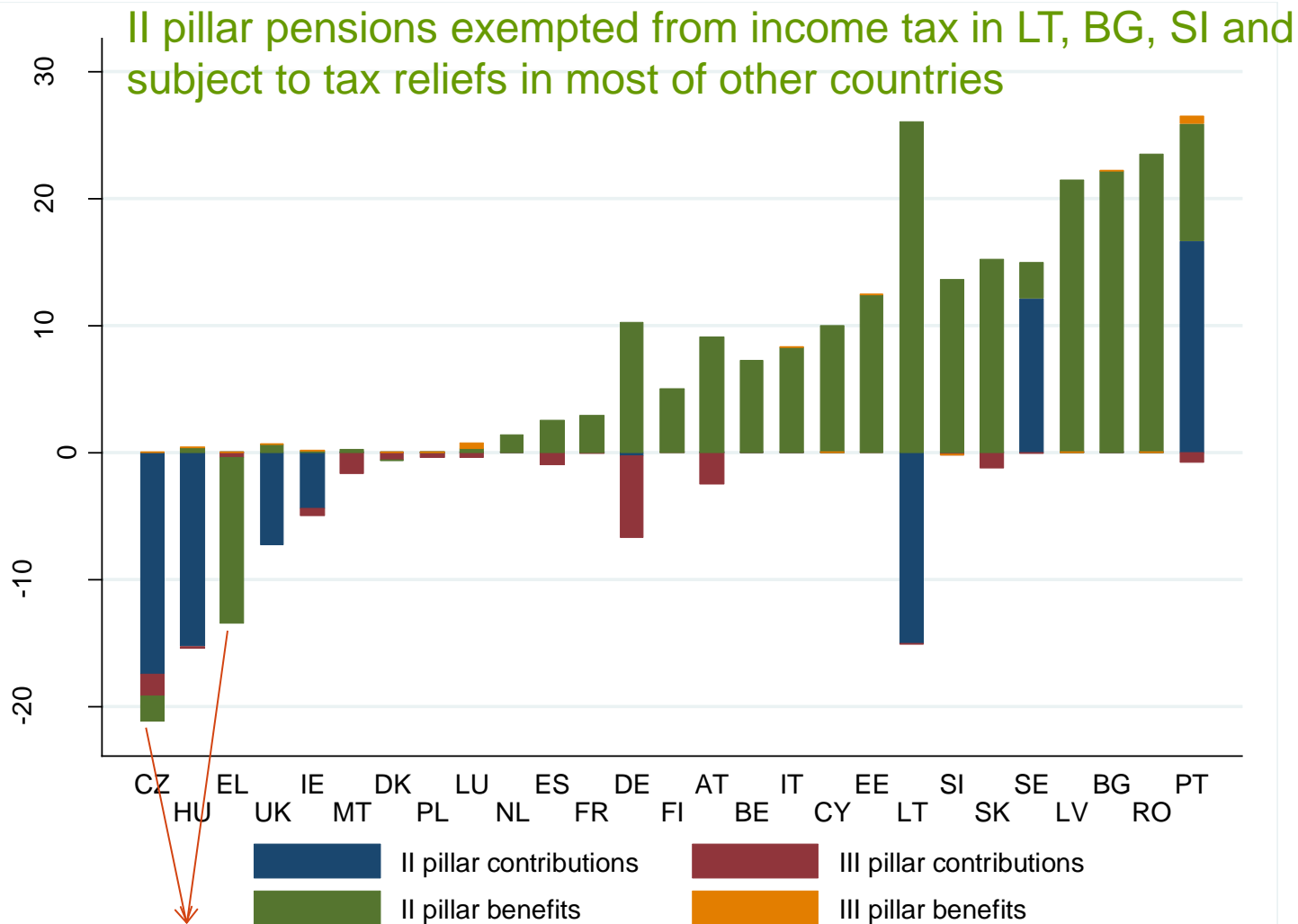
- Appropriate to highlight the effect of tax expenditures on the working population and the elderly at a given point in time
- Does not take into account potential behavioural reactions
 - but the greatest part of the tax expenditures adopted in European countries are actually targeted to elderly people that cannot react by changing their labour supply
- It allows to construct an age profile of tax expenditures useful to define the present value in a life cycle perspective
 - but this builds on strong assumptions about the evolution of the contribution history, of the taxation on contributions and pensions systems.

Pension-related TEs – Revenue cost

II pillar contributions fully exempted in 19 countries out of 27

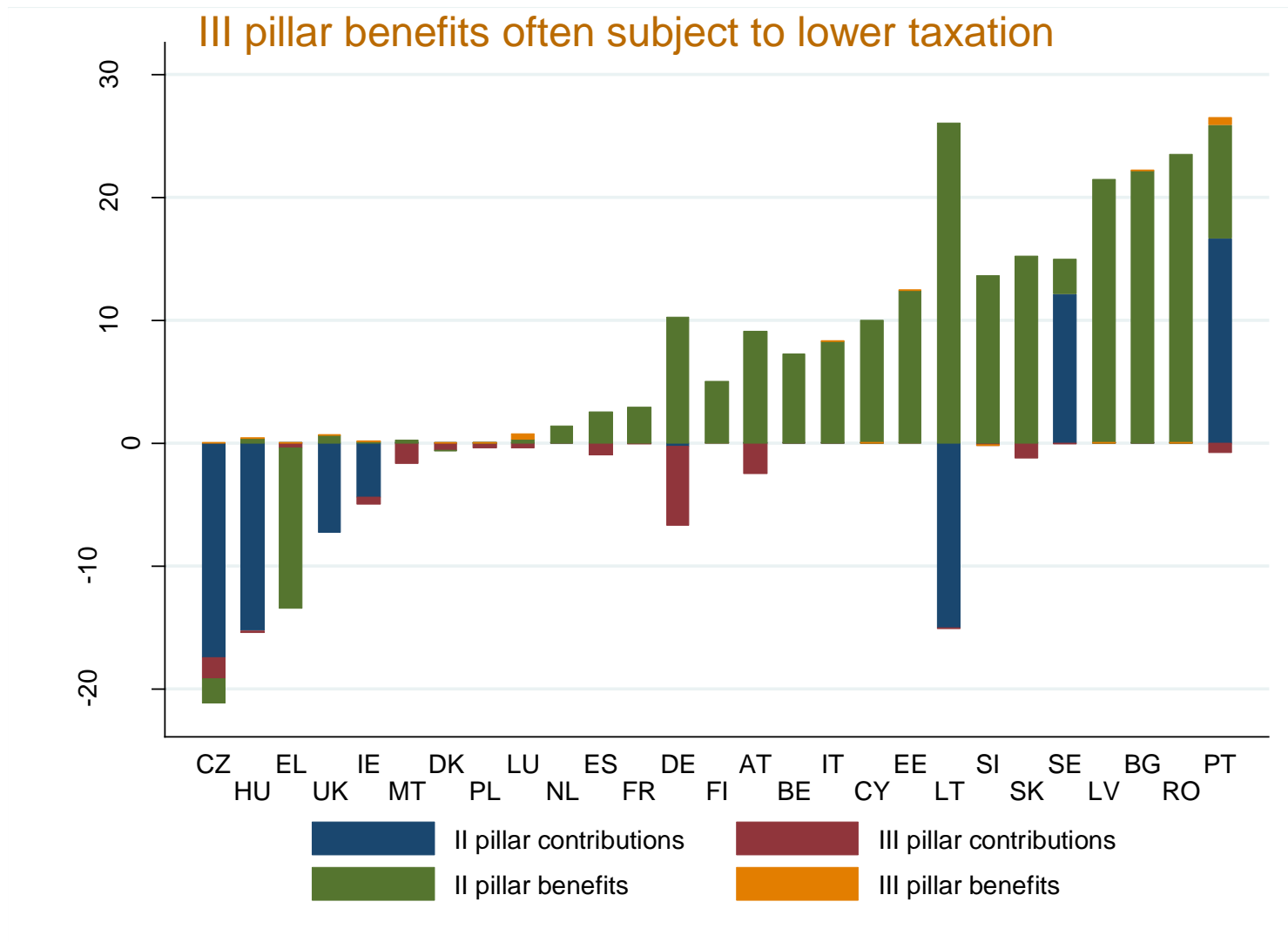


Pension-related TEs – Revenue cost



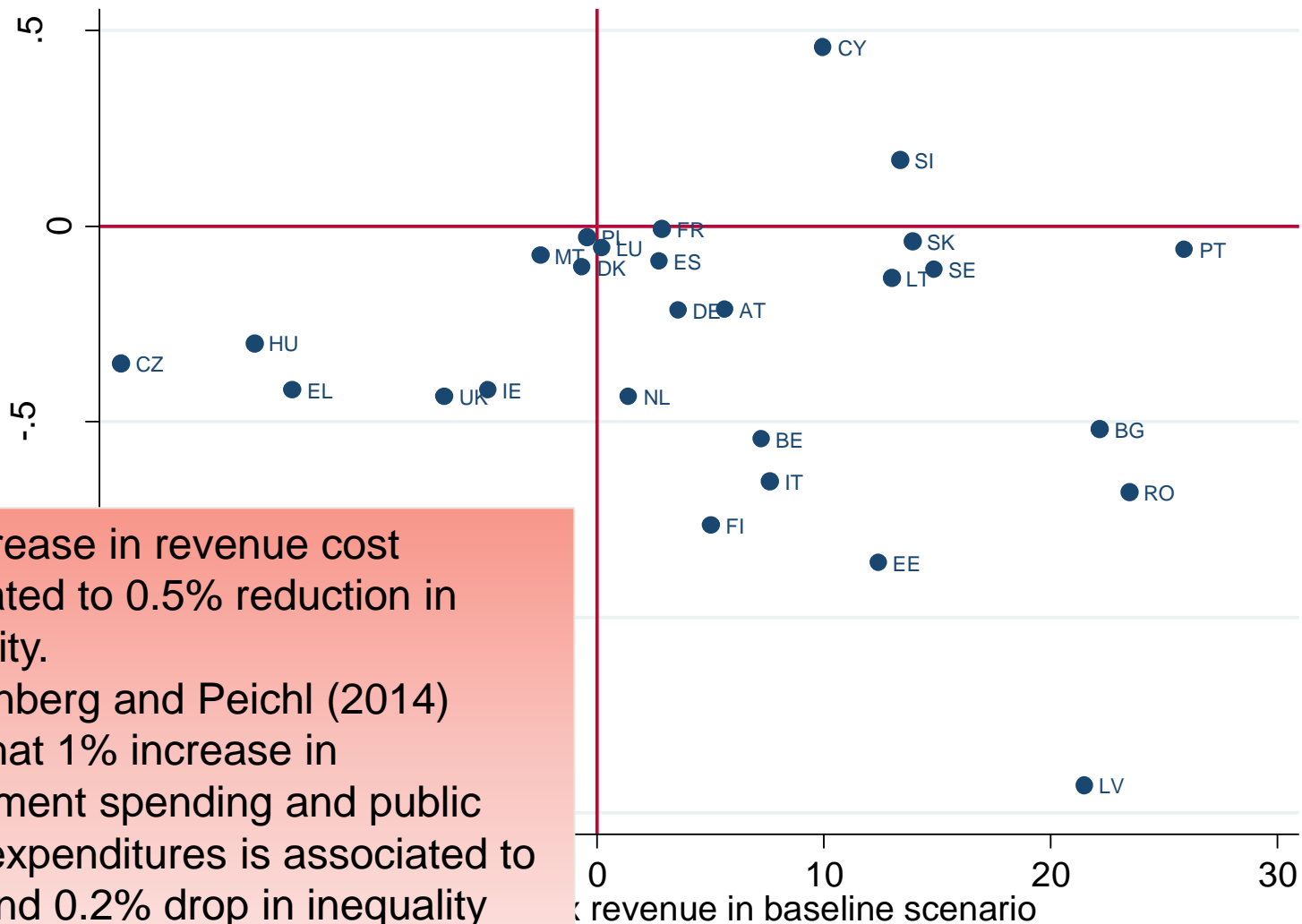
The main exceptions to this pattern are represented by Greece and Czech Republic

Pension-related TEs – Revenue cost



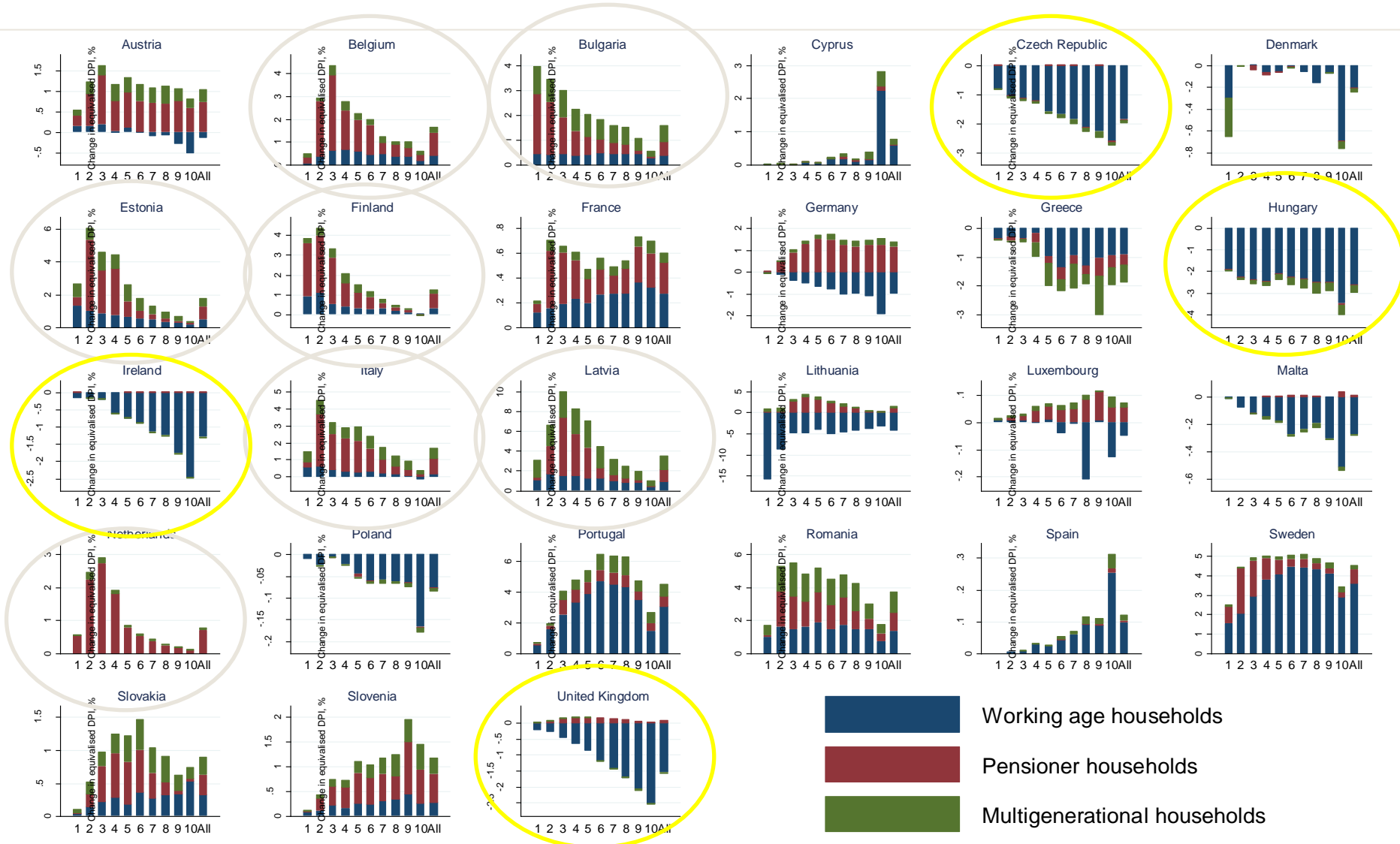
III pillar contributions often not fully deducted

Pension-related TEs: fiscal cost and effect on inequality

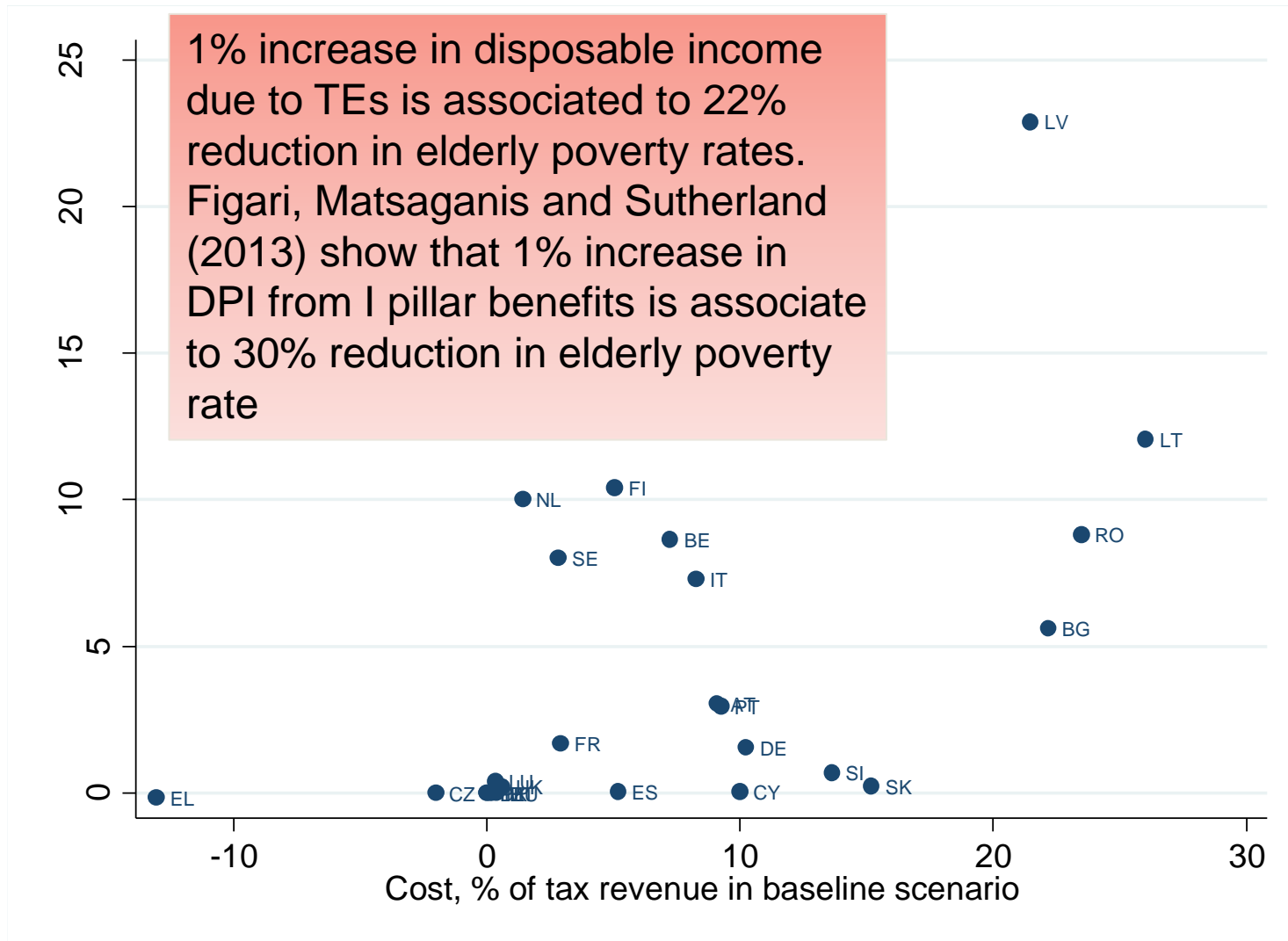


1% increase in revenue cost associated to 0.5% reduction in inequality.
Doerrenberg and Peichl (2014) show that 1% increase in government spending and public social expenditures is associated to 0.3% and 0.2% drop in inequality

Pension-related TEs: distributional pattern by hh type and income



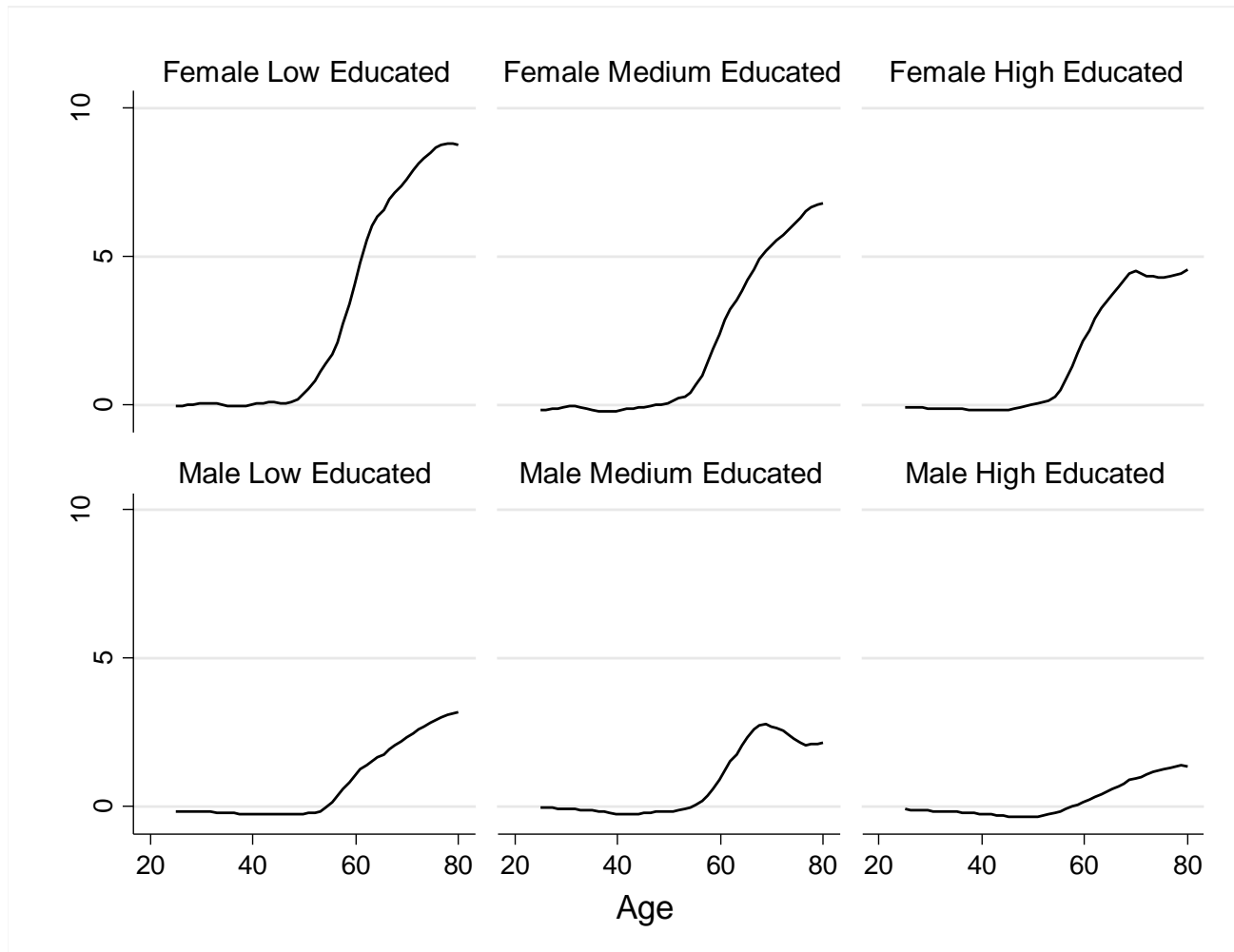
Effectiveness of pension-related TEs in addressing elderly poverty rates



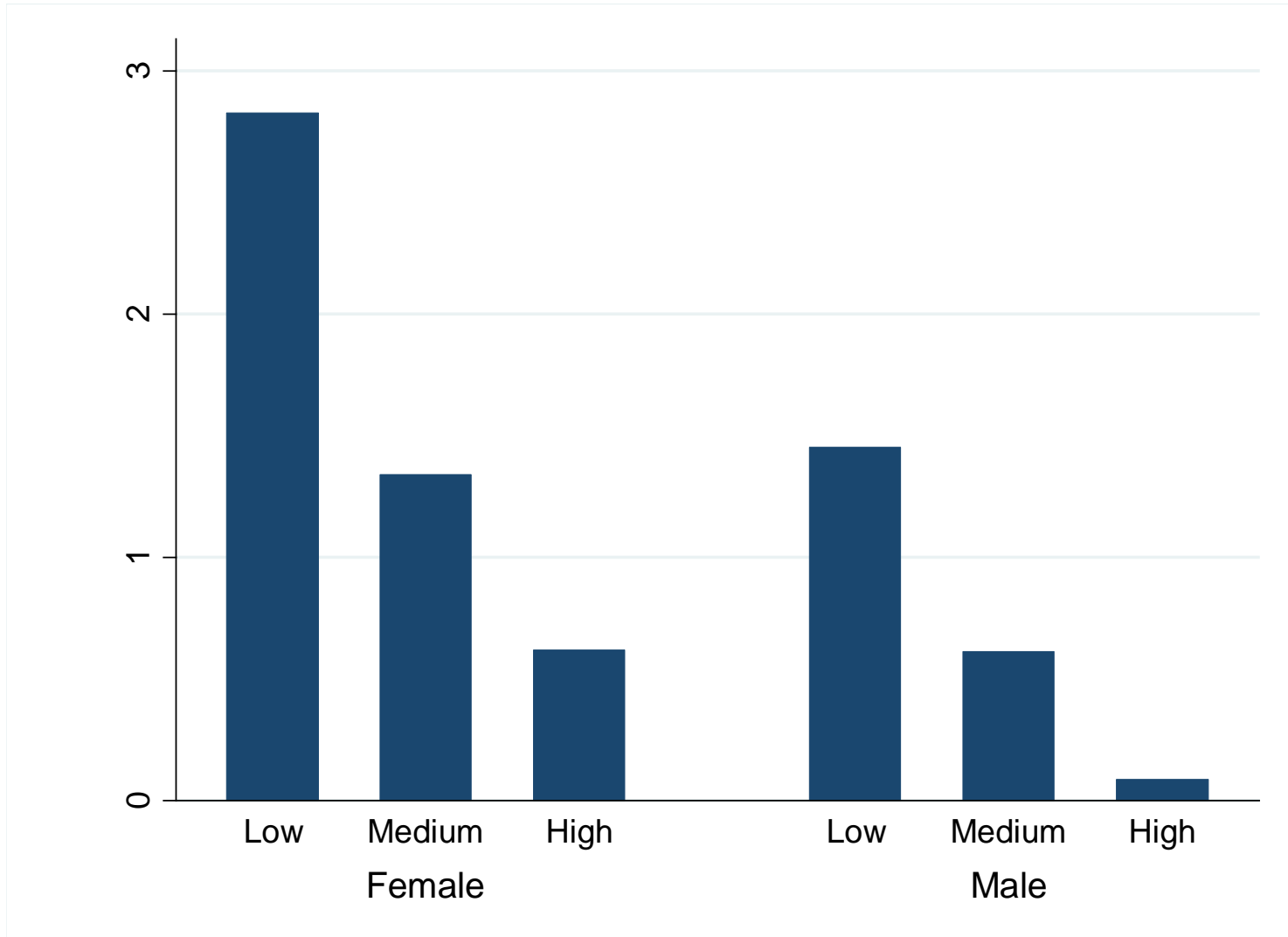
A lifetime perspective ?

- Pension-related TEs have intra-generational implications on a lifetime basis
- How can we extend the static approach and the cross-sectional inter-generational analysis to consider a lifetime perspective?
 - With an feasible approach considering the cross-country perspective
- A first attempt related to Italy
 - Based on a generational accounting methodology (Ter Rele, 2007)
 - For an average individual aged 25 years old we can calculate the present value of the TEs over his lifetime assuming his earnings or pensions at time $t+1 \dots T$ are proxied by those of observed age $+1 \dots T$
 - by gender and education
 - assuming $r=2\%$ and $g=0.5\%$

Pension-related Tes by age, gender, education



Pension-related TEs present value by gender and education





Conclusions

- Impact of pension-related TEs on tax revenues and on income inequalities can be sizeable.
 - The capacity of the pension systems to guarantee their adequacy and sustainability will also depend on their interaction with the overall tax-benefit system
- The budgetary and equity impact of the pension-related TEs is clearly differentiated across countries
 - Evaluation needed in the present context of constrained public finances
- In a cross-sectional perspective, pension-related TEs tend to be progressive at two levels:
 - first among pensioners, by favoring lower income elderly (mainly through a favorable tax treatment of pension incomes)
 - second among working-age individuals (through partial or no deduction of pension contributions) draining resources in particular from those at the top of the income distribution
- In a lifetime perspective, pension-related TEs in Italy show a positive impact on lifetime income
 - in particular for low\medium educated women



Diffusion of III pillar and PenTEs

