

Old age social protection through taxes?

A comparison of the distribution effects of taxes on pensions and income from work in the EU

Ella-Marie Assal, Sakura Panagamuwa Gamage, Gerlinde Verbist Presentation at IMA 8th World Conference, 2/12/2021

Aim of the research

Interaction between pension system and tax system

Old-age income is influenced by both, yet systems often studied separately

Does the tax system reinforce or counteract effects of pension system?

- Is the tax system used as a social policy tool, by treating pension benefits in a favourable way?
- Do pensioners face a similar tax burden as workers?
- To what extent are pensioners taxed into poverty?
- Cross-country similarities or differences, related to welfare state types?



Theoretical framework

- "Tax and benefit policies should be viewed as components of an overarching welfare strategy" (Feher & Jousten, 2018)
 - ⇒ Type of welfare state influences decisions in both systems
 - ⇒ Tax system should not counteract the effects of the pension system

Welfare state principle	Solidarity	Insurance
Pension system goal	Adequate living standards for everyone	Consumption smoothing
Result	Poverty alleviation	Reproducing living standards in old age
Corresponding principle in taxation	Vertical equity	Horizontal equity



Country classification

Further classify countries using Esping-Andersen's (1990) typology

- Solidarity-based countries
 - Beveridgean countries
 - Nordic (DK, SE, FI, NL) and Anglo-Saxon (UK, IE)
- Insurance-based countries
 - Bismarckian countries
 - Continental (AT, BE, FR, DE, LU), Southern (CY, EL, ES, IT, MT, PT), Baltic (EE, LV, LT), Central Eastern European (BG, CZ, HU, HR, PL, RO, SI, SK)

Complex pension systems with multiple policies

- Policies aimed at both objectives, but connections with welfare state principle can still be made
- OECD (2019) taxonomy of pension systems
 - First tier: Social protection policies (non-contributory)
 - Second tier: (Public) earnings-related pensions
 - Third tier: Private pensions (individual or employer)



Taxation of pension benefits

- Different tiers connected to different objectives, thus possible different tax treatment
 - Expectations:
 - Smaller tax burden on first-tier policies
 - Tax treatment of second and third tier policies similar to tax treatment of employment income
- Tax expenditures (TEs): preferential tax treatment of certain types of income
- Pension benefit-related TEs exist in nearly all EU28 countries (Barrios et al. 2020)
- Overview of pension systems & tax treatment



Methodology: EUROMOD

Advantages of EM:

- Level of detail
- Ability to distinguish between the many components of tax (and benefit) systems (e.g. tax expenditures)
- Pension benefits: identification of tier

Pensions/income from work often not only source of income

- Isolate part of taxes (PIT) and contributions (SIC) due to pensions/income from work
- Proportional method
- Two groups: pensioners (> 65 years, 12mo pension income) and employees (18-65y, 12mo employment income)
- 2019 policies



Results: Horizontal equity

Average total tax burden

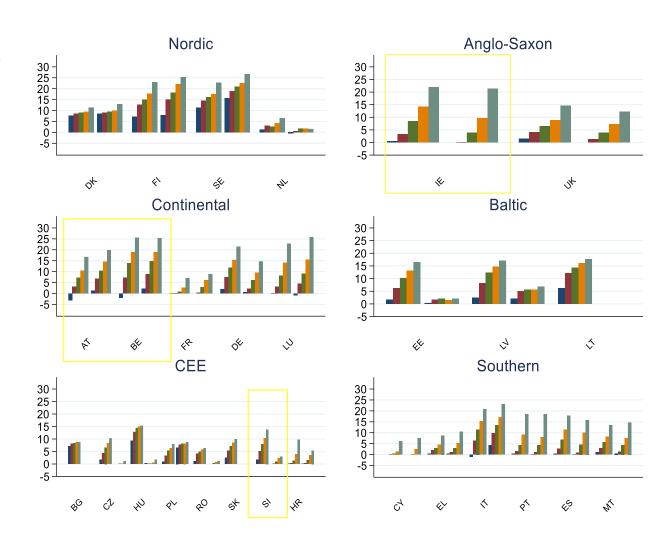
- Tax burden = component taxes as % of pre-tax income component
- Total tax burden (PIT + SIC) smaller for old-age indiv. than workers
 - Lower personal income taxes
 - Exceptions: FR, IT, PL, SE, LU
 - Lower social contributions
 - In most countries not levied on pensions
 - Levied at lower rates in continental countries + CY, EL, NL,
 HR
 - Lower income levels of pensioners

			TOTAL (PIT + SIC)	
	Group	Country	W	OA
NL,	Nordic	Denmark	20.3	9.3
		Finland	28.5	15.1
		Sweden	24.7	19.4
		Netherlands	7.8	5.9
	Anglo-Saxon	Ireland	17.2	1.7
		UK	18.3	3.6
	Continental	Austria	25	15
		Belgium	31.7	12.5
		France	23.4	10.1
		Germany	30.9	14.2
		Luxembourg	23.2	16.1
	Baltic	Estonia	15.1	1
		Latvia	24.6	3.8
		Lithuania	37.6	0
	CEE	Bulgaria	20.5	0
		Czech Rep.	19.1	0.1
		Hungary	32	0.4
		Poland	19.6	7.7
		Romania	40.7	0.3
		Slovakia	21.4	0
		Slovenia	31.9	0.7
		Croatia	25.1	1.9
	Southern	Cyprus	12.1	3.3
		Greece	21.3	9.9
		Italy	21.8	14.7
		Portugal	19.6	5.3
		Spain	21	5.8
		Malta	16.5	2.7



Results: Horizontal equity – Quintile analysis

- Average PIT rates for employees (left) and pensioners (right) across quintiles of equivalised pre-tax income
- Horizontal inequity is partially due to composition (position of pensioners in income distribution), partially due to TEs
 - Ireland versus Slovenia
- Horizontal inequity depends on how TEs for employees and pensioners compare in size
 - Belgium, Austria
- Contrary to expectations: horizontal equity in Nordic
 & Anglo-Saxon countries





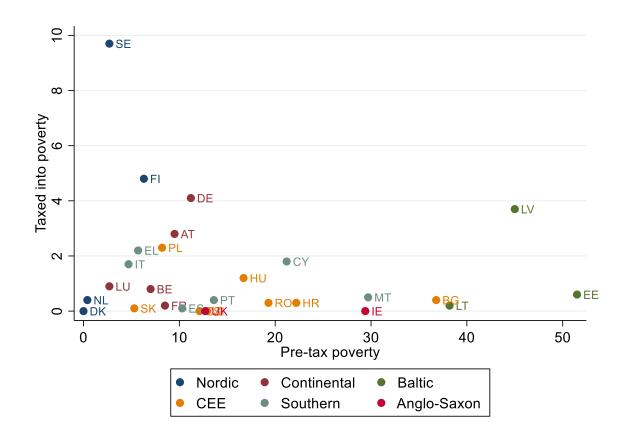
Results: Vertical equity – Taxed into poverty

- Taxed into poverty
 - = share of pensioners that is not poor based on pre-tax income, but poor after deduction of PIT and SIC on pension income
- Variation in pre-tax poverty rates (x-axis)
- Low levels of pensioners that are taxed into poverty

<5% in all countries except Sweden

 Striking difference between DK, NL, UK, IE and SE/FI

Figure 1: Scatter plot of pre-tax poverty rate and percentage taxed into poverty, pensioners only, 28 European countries, 2019





Conclusion

Tax system quite clearly used as a social policy tool

In a beneficial way for pensioners?

- Average tax burden & percentage taxed into poverty suggest yes
- We take into account position of pensioners in income distribution (but not fully)
- => Results are partially driven by tax structure, partially by TEs

Caveats

- Results depend on tax expenditures in other policy fields
- Interaction pension and tax system are complex and go in two ways

