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Redistribution in a joint income-wealth perspective: A cross-country comparison

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Outline

1. Introduction
2. Data & methods
3. Joint income-wealth living standards
4. Broader assessment of the redistributive effects of tax-benefit instruments
5. Decomposition by age
6. Conclusion

1. Introduction

Introduction

- Renewed interest in inequality
- Evidence indicates increasing inequality in both income and wealth (OECD, 2015; Piketty, 2014)
- Level of inequality strongly depends on redistributive capacity of tax-benefit systems
- Literature assesses capacity against income, but living standards depend on both income and wealth (Kuypers & Marx, 2016; Brandolini et al., 2010)
 - Financial stability & economic power (Azpitarte, 2012; Cowell & Van Kerm, 2015)
 - Increasing wealth/income ratios (Piketty, 2014)

Introduction

- Wealth taxation often proposed as way to reduce inequality and raise government revenues (Piketty, 2014; Bach et al., 2014)
- Increase in theoretical literature on (optimal) wealth taxation
- But large void in empirical research
 - Due to absence of data and analytical tools

Purpose of our research

- Evaluate redistributive efforts against joint measure of income and wealth
- Add analysis of wealth taxes
- Using HFCS data and micro-simulation model EUROMOD
- Cross-country analysis

2. Data & methods

Eurosystem Household Finance and Consumption Survey (HFCS)

- 2 waves (± 2010 / ± 2014)
- 15/20 Euro Area member states
- Information on wealth, income, consumption, pensions, employment and demographics
- Net wealth = (real + financial assets) – (mortgage + non-mortgage debt)
- Oversampling of wealthy

New analytical tool: HFCS in EUROMOD

- HFCS only covers gross incomes
- Converted into disposable incomes using the EUROMOD tax-benefit simulation model (Kuypers, Figari & Verbist, 2016)
- Joint observation of net wealth and disposable income
- Extension of scope of EUROMOD
 - Taxation of capital income, wealth and wealth transfers
 - Fiscal incentives for asset accumulation
 - Asset means-testing in benefit eligibility
- Simulation of budgetary and redistributive effects of current and hypothetical wealth related policies

Cross-country comparison

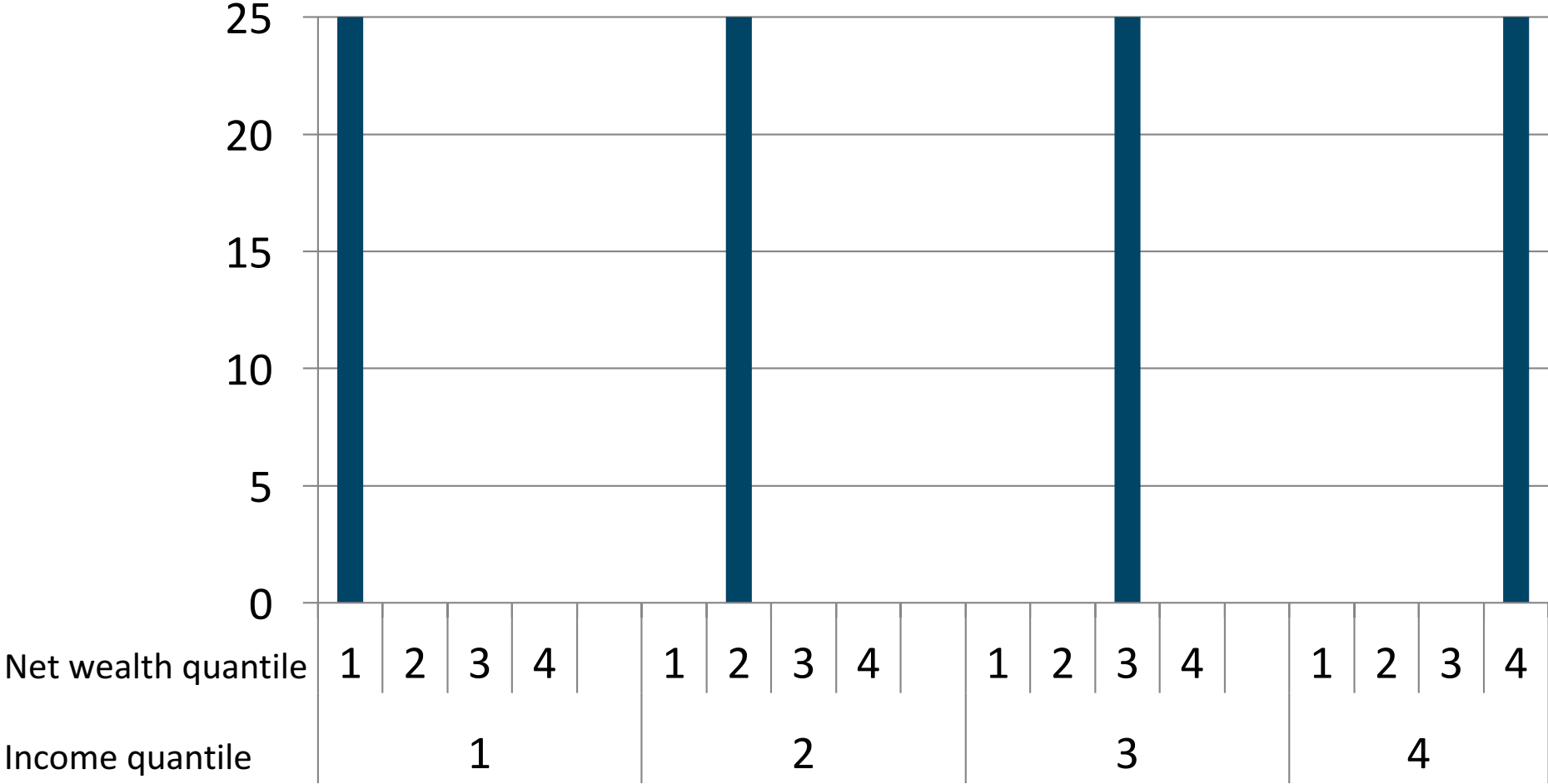
- 6 countries from 1st HFCS wave
- Different income & wealth distributions and correlation
- Broad range of tax-benefit systems & wealth taxation
- Largest sample sizes

Country	Reference period		Sample size	
	Wealth	Income	Households	Individuals
Belgium	Time of interview	2009	2,327	5,506
Finland	31/12/2009	2009	10,989	27,009
France	Time of interview	2009	15,006	35,729
Germany	Time of interview	2009	3,565	8,134
Italy	31/12/2010	2010	7,951	19,836
Spain	Time of interview	2007	6,197	15,850

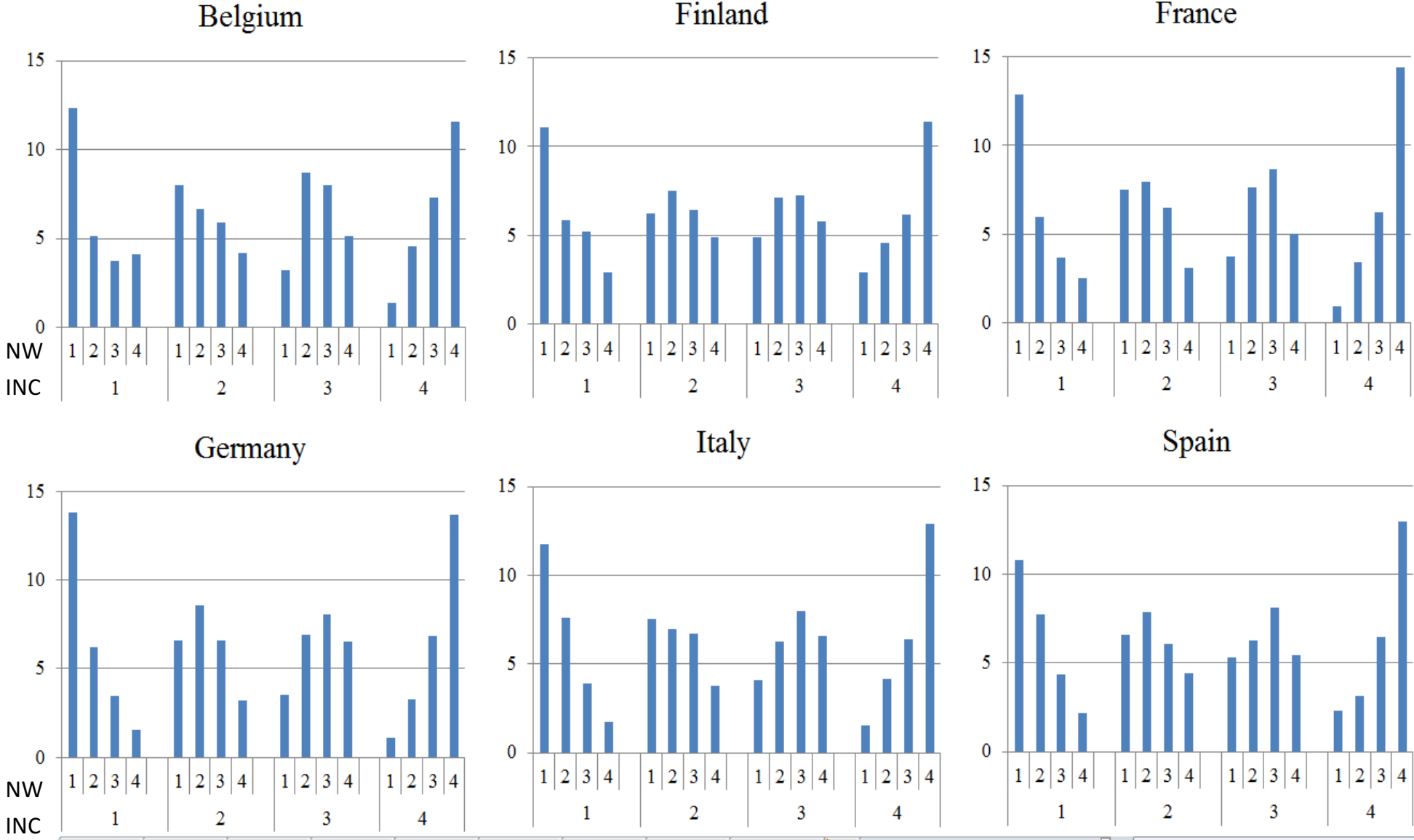
3. Joint income-wealth living standards

Relationship between income and wealth

Perfect rank correlation

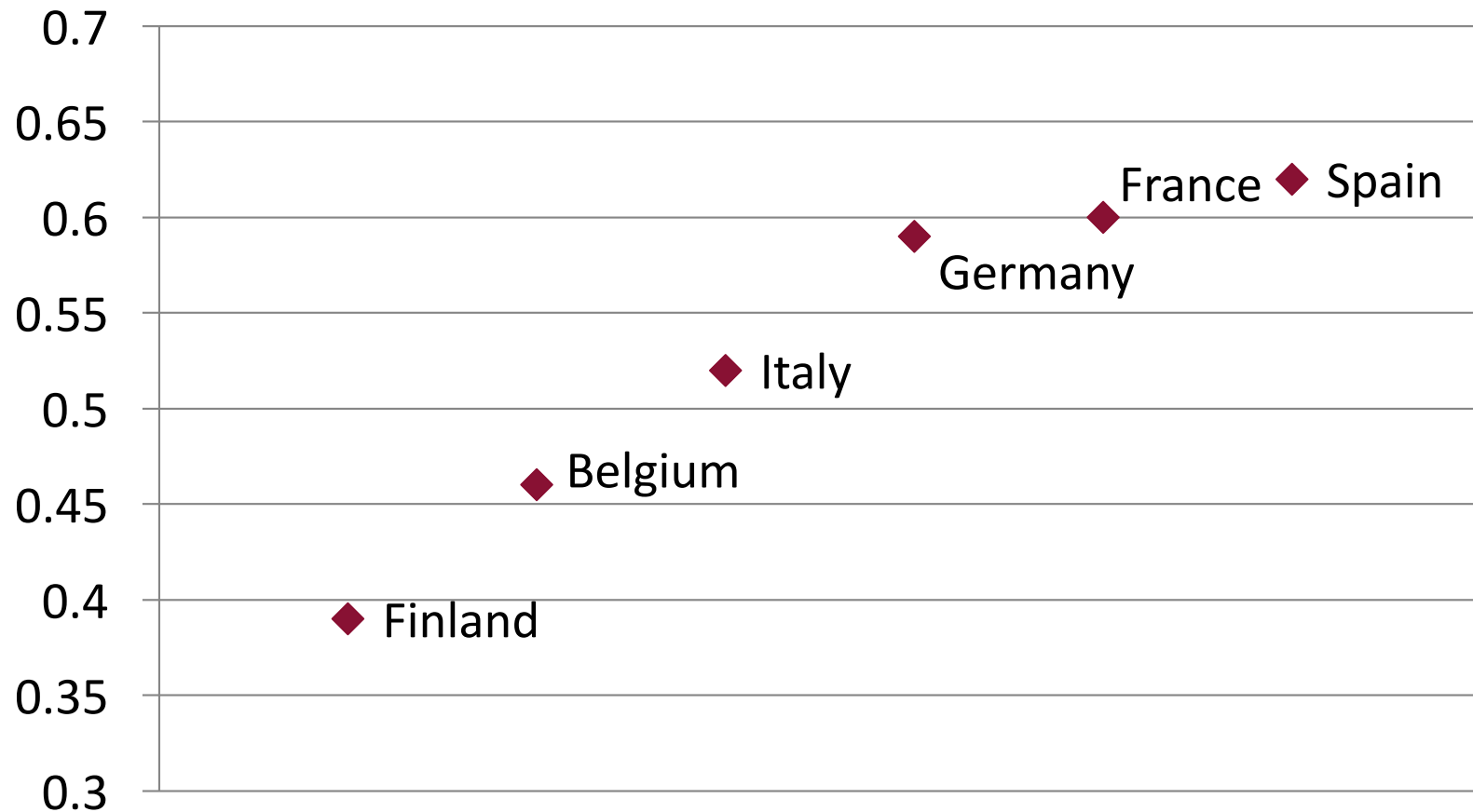


Relationship between income and wealth



Cross-country differences

Rank correlation coefficient disposable income and net wealth



Joint measure of income and wealth

- Sum of income and wealth using annual annuities (e.g. Weisbrod & Hansen, 1968; Brandolini et al., 2010)

$$AY = Y + \left[\frac{\rho}{1 - (1 + \rho)^{-n}} \right] * NW$$

$$n = T \text{ for unmarried,} \\ T_1 + (T - T_1)b \text{ for married}$$

Y : income from labour, pensions and transfers

NW : net wealth (assets – liabilities)

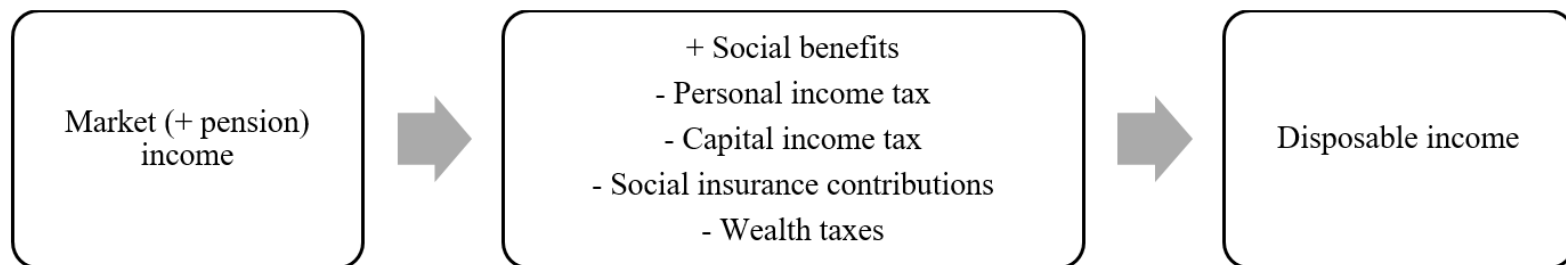
ρ : interest rate

n : length of the annuity (life expectancy)

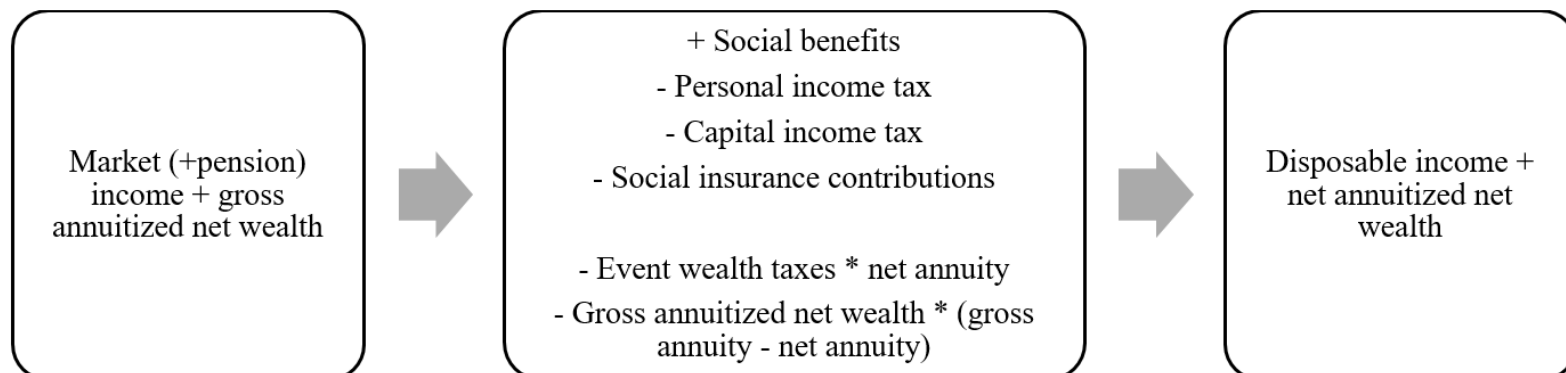
Extension annuitization for redistributive analysis

- Event wealth taxes subtracted from wealth that is annuitized
- Recurrent wealth taxes captured by interest rate annuity
 - Gross interest rate annuity: 5% (long-term pre-tax interest rate found in Piketty (2014))
 - Net interest rate annuity: 5% minus recurrent wealth taxes

Income framework



Joint income-wealth framework



Extension annuitization for redistributive analysis

Example:

- Single-person HH with life expectancy = 40 years
 - MI=€25,000, BEN=€5,000, INCTAX=€7,500
 - NW=€150,000, RECWTAX=€800, INHERITTAX=€5,000
-
- Income framework:
 - MI = €25,000
 - DI = €25,000 + €5,000 - €7,500 - €800 - €5,000 = €16,700
 - Wealth taxation = €5,800
-
- Joint income-wealth framework:
 - $MI + GAW = €25,000 + \frac{0.05}{1-(1+0.05)^{-40}} * €150,000 = €33,742$
 - $DI + NAW = (€25,000 + €5,000 - €7,500) + \frac{0.0447}{1-(1+0.0447)^{-40}} * (€150,000 - €5,000) = €30,346$
 - $Wealth\ taxation = (€5,000 * 0.054) + (€150,000 * (\frac{0.05}{1-(1+0.05)^{-40}} - \frac{0.0447}{1-(1+0.0447)^{-40}})) = €870$

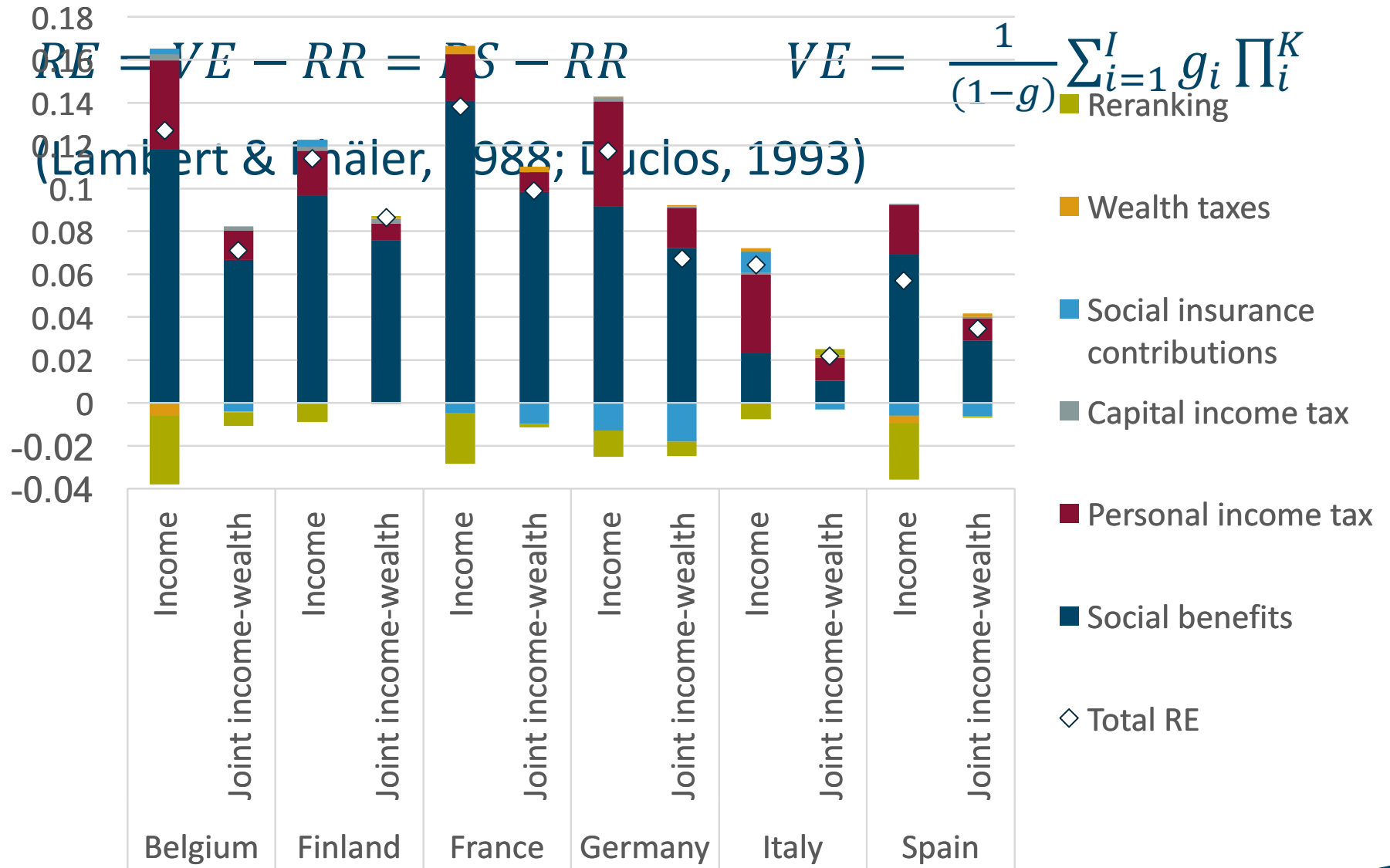
4. Broader assessment of the redistributive effects of tax-benefit systems

Redistributive effect of tax-benefit system

Income framework			
	Gini MPI	Gini DI	RE as % of Gini MPI
Belgium	0.469 (0.012)	0.342 (0.011)	27.08
Finland	0.362 (0.003)	0.249 (0.002)	31.22
France	0.421 (0.003)	0.287 (0.002)	31.83
Germany	0.417 (0.005)	0.301 (0.004)	27.82
Italy	0.374 (0.003)	0.309 (0.003)	17.38
Spain	0.407 (0.006)	0.350 (0.006)	14.00
Joint income-wealth framework			
	Gini MPI + GAW	Gini DI + NAW	RE as % of Gini MPI+GAW
Belgium	0.458 (0.008)	0.393 (0.007)	14.19
Finland	0.363 (0.002)	0.285 (0.002)	21.49
France	0.445 (0.003)	0.355 (0.003)	20.22
Germany	0.453 (0.007)	0.392 (0.008)	13.47
Italy	0.418 (0.005)	0.405 (0.005)	3.11
Spain	0.412 (0.005)	0.384 (0.005)	6.80

Notes: MPI=market & pension income, GI=gross income, DI=disposable income, GAW=gross annuitized wealth, NAW=net annuitized wealth, standard errors are shown between parentheses

Decomposition redistributive effect



5. Decomposition by age

Redistributive effect – decomposition by age

		Income framework			Joint income-wealth framework		
		GE(0) MPI	GE(0) DI	RE as % of GE(0) MPI	GE(0) MPI + GANW	GE(0) DI + NANW	RE as % of GE(0) MPI + GANW
Belgium	Total	0.4222	0.2058	51.26	0.5077	0.2879	43.29
	Elderly	0.0436	0.0330	24.31	0.0544	0.0526	3.31
	Non-elderly	0.3773	0.1727	54.23	0.4396	0.2080	52.68
France	Total	0.5004	0.1369	72.64	0.5065	0.2133	57.89
	Elderly	0.0396	0.0192	44.70	0.0457	0.0345	20.48
	Non-elderly	0.4595	0.1171	74.52	0.4480	0.1668	62.77

6. Conclusion



Conclusion

- Considerable reranking between income and wealth distribution, but cross-country differences
- Welfare states are less redistributive against joint income-net wealth
 - Personal income taxes, SIC less redistributive
 - Capital income & wealth taxes too small to have redistributive impact
 - Social benefits remain strongly pro-poor

New research possibilities

- Tax-benefit system almost unilaterally focused on reducing income inequality, wealth considerations largely absent
- New analytical HFCS-EUROMOD tool enables research opportunities on policy reforms related to wealth
- Wealth taxation
 - Increase redistributive character
 - Shifting taxes from labour to wealth
- Social policy
 - Move beyond income maintenance
 - Support asset accumulation among the poor

Thank you!

