



EUROPEAN CENTRE FOR SOCIAL WELFARE POLICY AND RESEARCH

# Analysing intergenerational fairness

*Disaggregating income effects and simulating revenue-neutral reform policies*

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Presentation prepared for the EUROMOD Annual Meeting 2021 (online)

# Background

- Study for the European Commission (DG EMPL)
- RQ1: Did automatic stabilisers and fiscal consolidation undertaken in certain Member States in the wake of the economic crisis impact upon different age groups asymmetrically and in what way?
- RQ2: What policy recommendations could have been formulated to better support intergenerational fairness during the 2008 financial crisis period? What would have been the impact of such policies, had they been applied?

# Reallocation of benefits

- Focus on disposable income of six generations:
  - 0-17, 18-24, 25-54, 65-74, 75+ years
  - Household perspective
  - Individual perspective
- To whom is a benefit addressed and what is its purpose?
- Reallocation of benefits among household members

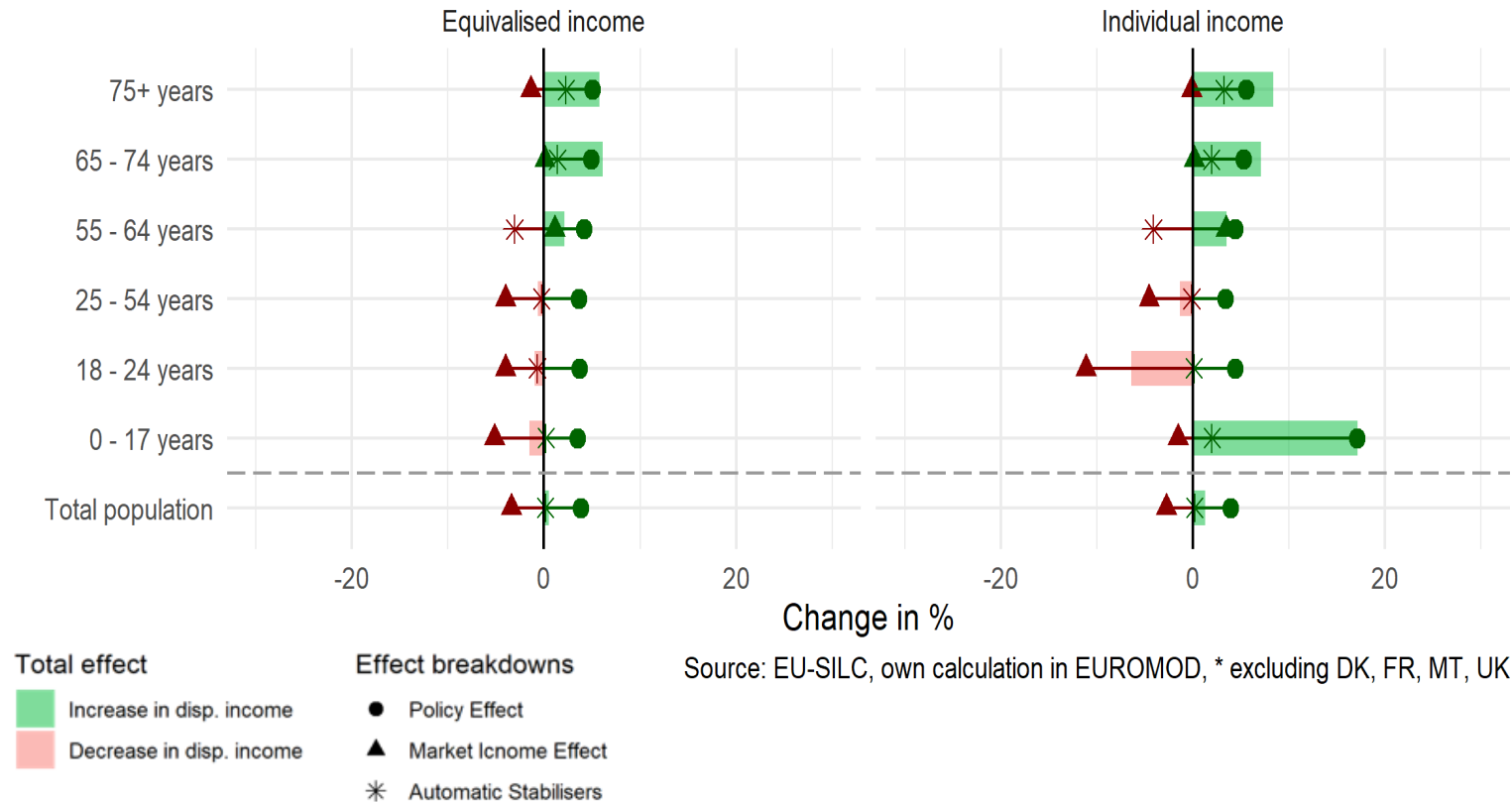
# Decomposition analysis

- Total effect = **Policy effect + market income effect + automatic stabiliser effect** (+ nominal effect) following Paulus and Tasseva (2018)

Market income effect	Automatic stabiliser effect	Policy effect
<ul style="list-style-type: none"> <li>• Changes in               <ul style="list-style-type: none"> <li>• employment income</li> <li>• self-employment income</li> <li>• capital income</li> <li>• private pension income</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Changes in               <ul style="list-style-type: none"> <li>• population eligible for a benefit</li> <li>• granted benefit amounts, e.g. due to higher needs</li> <li>• tax liability due to changes in tax base or eligibility for tax credits and allowances</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Introduction of new taxes or benefits</li> <li>• Abolition of existing taxes or benefits</li> <li>• Changes in eligibility criteria, tax rate or benefit level</li> <li>• Indexation of benefits <math>\neq</math> CPI</li> </ul>

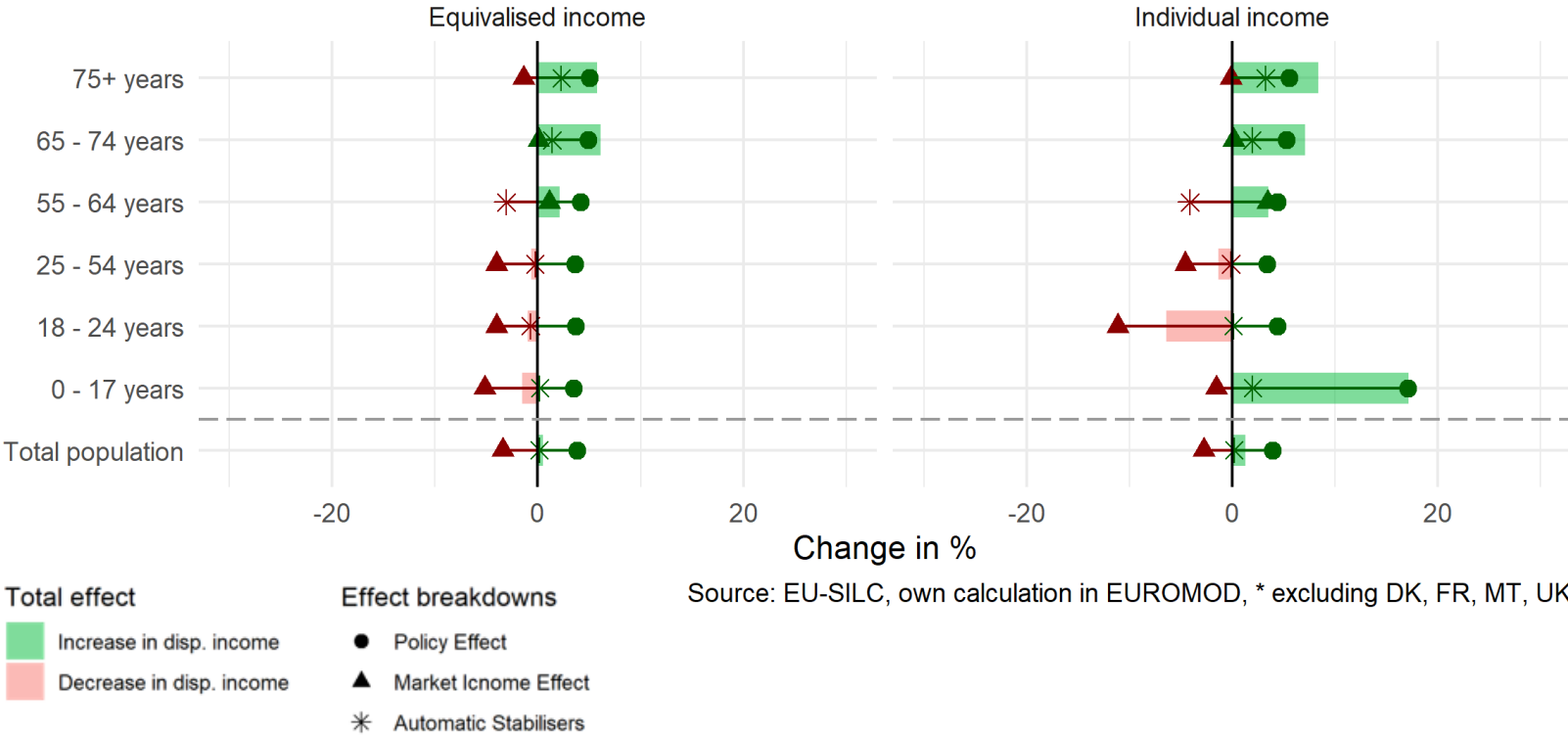
# Results (I)

Average change in real disposable income in the EU\*  
2007 - 2009



# Results (II)

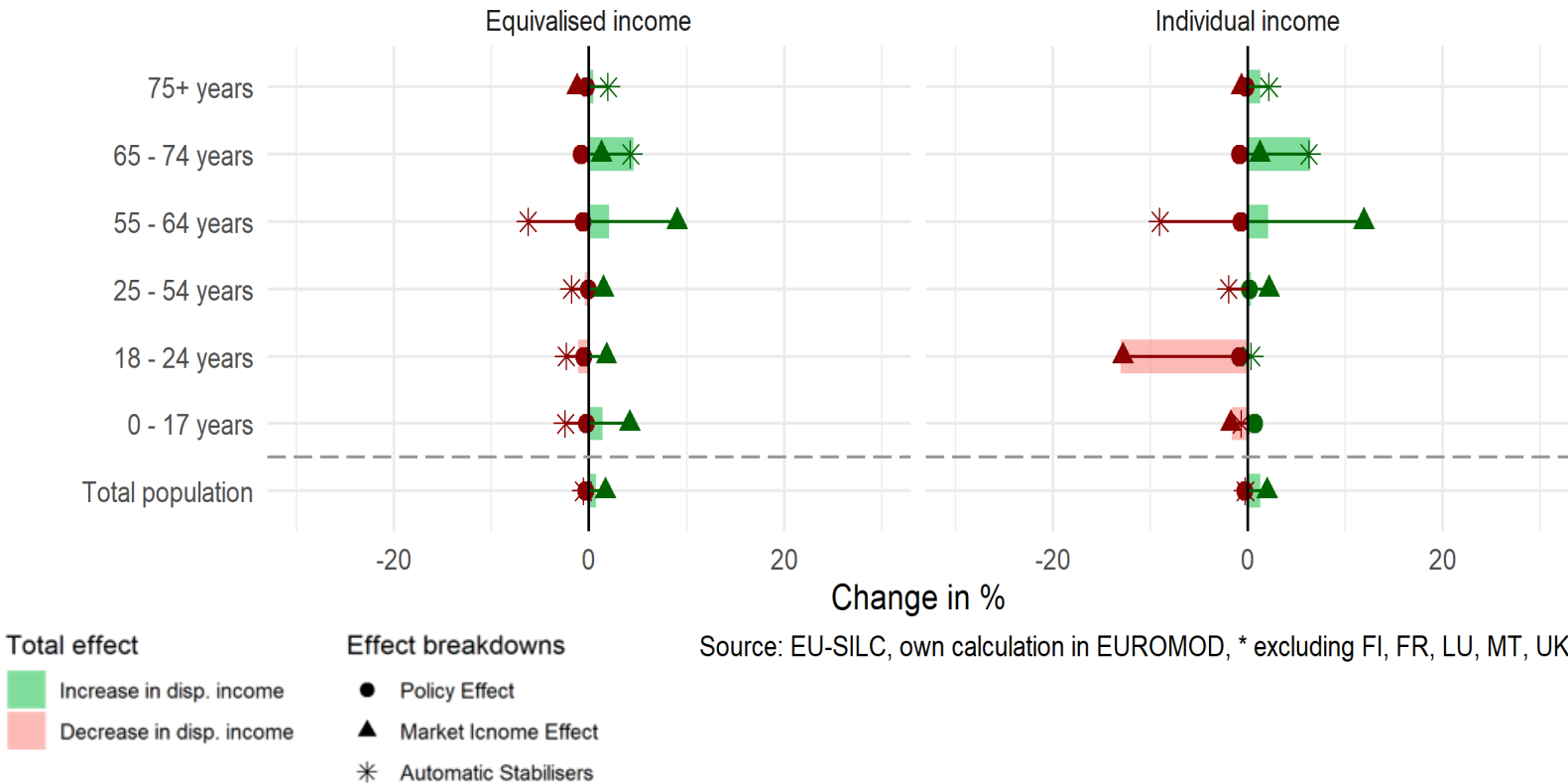
Average change in real disposable income in the EU\*  
2007 - 2009



Source: EU-SILC, own calculation in EUROMOD, \* excluding DK, FR, MT, UK

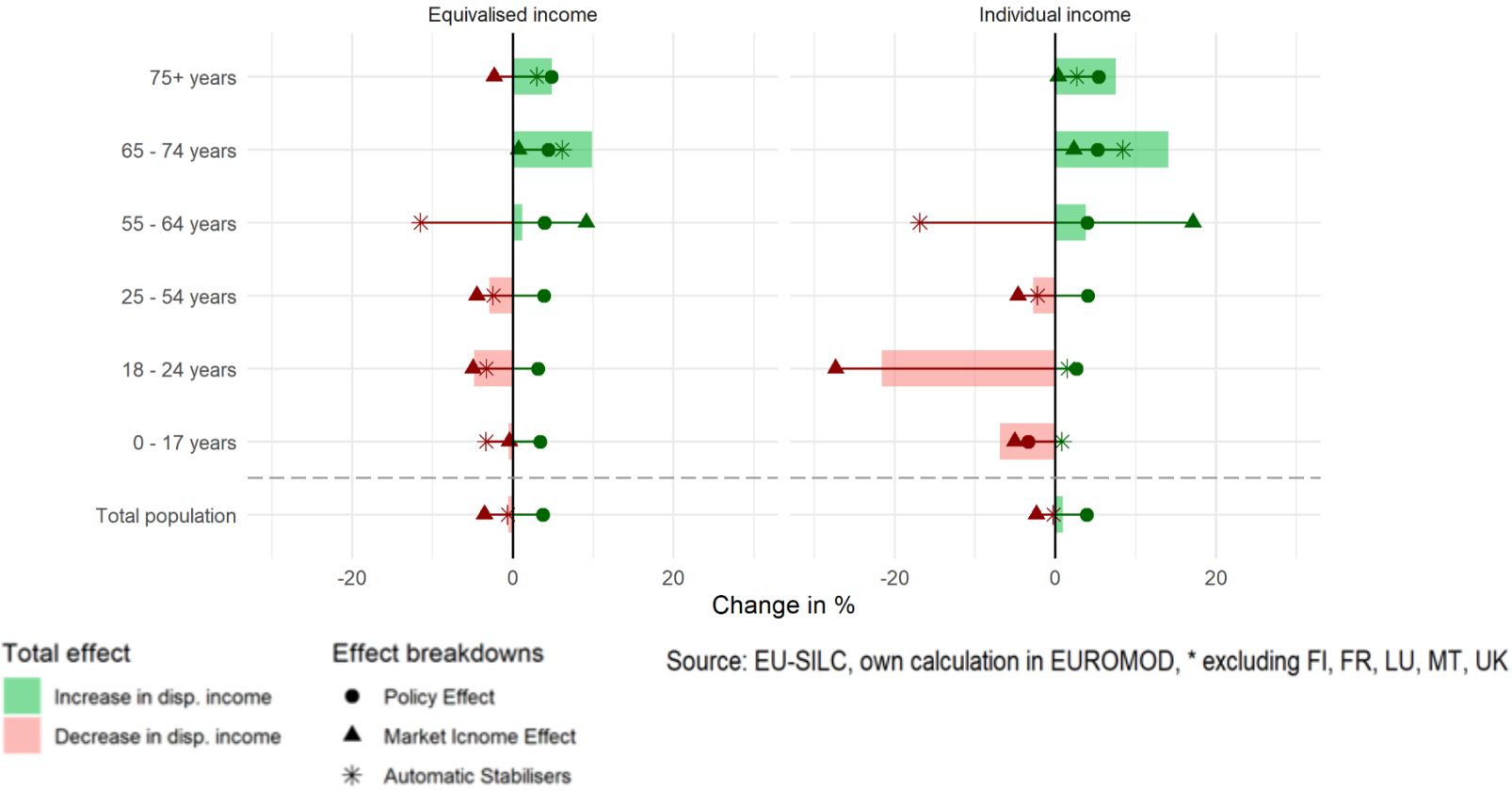
# Results (II)

Average change in real disposable income in the EU\*  
2011 - 2014



# Results (IV)

Average change in real disposable income in the EU\*  
2007 - 2014





# Results (V)

- Young adults (18-24) affected strongest by crisis of 2008
  - Market income decreased most
  - Weak countervailing effect of policies and automatic stabilisers
- Disposable income of older generations (65-74, 75+) increased most
- Intergenerational effects were very similar across most EU Member States

# Policies to support IF

- There is no one “fair” intergenerational distribution of disposable income
- Focus on policies that would have *maintained* or *counteracted* the changes in the intergenerational income distribution observed between 2007 and 2014 (results of the earlier analysis + lit.)
- Policy packages should be „revenue neutral“
- Counterfactual analysis for 2011 for nine EU countries (AT, BG, EL, HU, IE, LV, ES, PL and SE)

# Policies

## Funds **generating**

- Pension reduction 1: -1% annually for all
- Pension reduction 2: -2% annually for pensions above the median
- Additional 10% income tax on the highest income decile

Combined to 12  
revenue neutral  
reform scenarios

## Funds **decreasing**

- Unconditional child benefit
- Unemployment benefit for young adults with no qualifying period
- 50% SIC reduction for lower income earners
- Anti-poverty household benefit (<60% median)

# Revenue-neutral reform scenarios (cont'd)

- Size of redistribution depends on the volume of funds raised by the revenue generating policies (pension cuts, top income tax)
- **Benefits:** generated funds are distributed evenly across the eligible population. Eligibility is fixed, the level of the benefit varies with the number of recipients.
- **SIC reduction:** the level of the reduction is fixed (-50%), the number of recipients varies with the amount of funds raised.

# Results: intergenerational income distribution

Reform scenario	Individual income perspective						Equivalised income perspective					
	0-17	18-24	25-54	55-64	65-75	75+	0-17	18-24	25-54	55-64	65-75	75+
1. pension 1 & child ben	72,8%	1,1%	-0,1%	-1,1%	-2,6%	-2,7%	2,2%	0,5%	0,7%	-0,9%	-2,1%	-2,2%
2. pension 2 & child ben	68,9%	0,9%	-0,1%	-1,0%	-2,2%	-2,0%	1,9%	0,4%	0,6%	-0,9%	-1,9%	-1,7%
3. pension 1 & UB <25	0,0%	17,0%	0,1%	-1,1%	-2,6%	-2,7%	0,5%	3,4%	0,5%	-0,6%	-2,1%	-2,1%
4. pension 2 & UB <25	0,0%	14,5%	0,1%	-1,0%	-2,2%	-2,0%	0,4%	3,0%	0,4%	-0,6%	-1,8%	-1,7%
5. pension 1 & SIC reduction	0,1%	2,0%	0,9%	-0,6%	-2,5%	-2,7%	-2,6%	0,5%	-1,0%	-0,5%	-2,0%	-2,1%
6. pension 2 & SIC reduction	0,1%	1,8%	0,8%	-0,6%	-2,1%	-1,9%	-2,7%	0,4%	-1,0%	-0,6%	-1,8%	-1,6%
7. pension 1 & anti-pov. ben	9,1%	2,5%	0,5%	-0,5%	-2,1%	-2,0%	-2,4%	0,6%	-1,2%	-0,6%	-1,8%	-1,6%
8. pension 2 & anti-pov. ben	8,6%	2,2%	0,4%	-0,6%	-1,8%	-1,3%	-2,5%	0,6%	-1,2%	-0,6%	-1,6%	-1,2%
9. tax & child ben	223,5%	3,0%	-3,4%	-2,7%	-0,6%	-0,1%	4,5%	-0,1%	0,0%	-1,9%	-0,5%	-0,2%
10. tax & UB <25	0,0%	54,3%	-2,8%	-2,7%	-0,6%	-0,1%	-1,3%	10,0%	-0,7%	-1,0%	-0,4%	0,0%
11. tax & SIC reduction	0,1%	2,7%	0,0%	-0,7%	-0,4%	-0,1%	-3,7%	0,2%	-1,6%	-0,4%	-0,2%	0,0%
12. tax & anti-pov. ben	28,7%	8,0%	-1,4%	-0,8%	1,0%	2,1%	-3,0%	1,4%	-2,3%	-0,6%	0,8%	1,7%

# Results: poverty

	At-risk-of-poverty rate (in % and change in pp)							Total
	0–17	18–24	25–54	55–64	65–74	75+		
Baseline scenario (2011)	0,2	0,22	0,15	0,14	0,1	0,13	0,16	
1. Pension 1 & child ben	-2,3	-0,6	-0,9	0	0,7	0,7	-0,70	
2. Pension 2 & child ben	-1,8	-0,3	-0,7	-0,1	0,1	0,2	-0,40	
3. Pension 1 & UB < 25	-0,9	-4,3	-0,8	-0,2	0,7	0,7	-0,80	
4. Pension 2 & UB < 25	-0,7	-3,2	-0,6	-0,3	0,2	0,3	-0,7	
5. Pension 1 & SIC reduction	-0,2	-1	-0,7	-0,3	0,3	0,4	-0,3	
6. Pension 2 & SIC reduction	0	-0,8	-0,6	-0,4	-0,1	-0,3	-0,3	
7. Pension 1 & anti-pov ben	-4,6	-4,9	-3,2	-3	-3,7	-4,3	-3,7	
8. Pension 2 & anti-pov ben	-3,3	-4,2	-2,8	-2,9	-3,8	-4,9	-3,2	
9. Tax & child ben	-6,3	-1,8	-2,1	0	0,7	0,7	-1,9	
10. Tax & UB < 25	-0,8	-7	-0,9	-0,3	0,8	0,8	-1,1	
11. Tax & SIC reduction	0,3	-0,4	-0,1	-0,1	0,7	0,1	0	
12. Tax & anti-pov ben	-11,7	-13,4	-9,1	-8,3	-7,7	-9,9	-9,9	

# Conclusions

- Volume of redistribution depends on revenue generating policies
- An **unemployment benefit** for young adults (<25 years) would have benefited young adults. A **child benefit** and **pension reductions** would have respectively increased (decreased) the disposable incomes of the youngest (oldest) generations
- **SIC reduction** would have changed the int. gen. income distribution and the overall poverty rate very little
- An **anti-poverty household benefit** would have benefited children and young adults slightly more than other generations
- The **top income** tax would have redistributed income from the prime working age generations (25-54, 55-64) to younger and older ones and strongly reduce the AROP rate
- Important to consider differences between individual and equivalized HH income.

# Thank you for your attention!

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