

CHANGES IN AGE-SPECIFIC INCOME DURING THE LAST DECADE

Bernhard Binder-Hammer, Sonja Spitzer, Alexia Prskawetz

Demographic Aspects of Human Wellbeing, WIC Conference 2019, November 12th







Research questions

Literature

E.g. Chen et al. (2018) show that poverty rates of younger Europeans increased since 2008, while they declined for elderly persons.

Our goal:

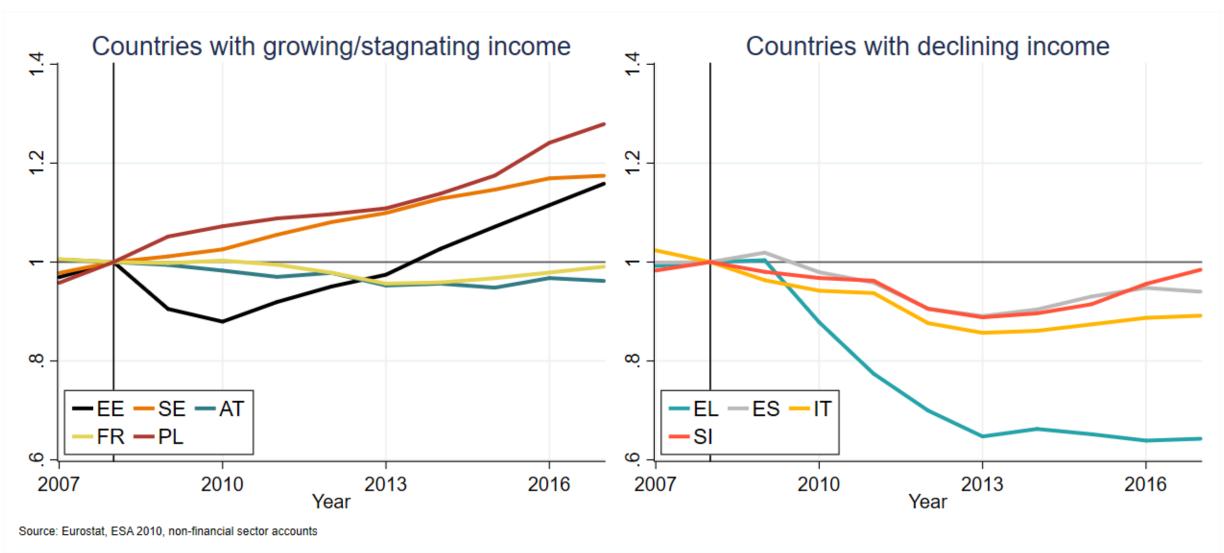
Develop and calculate a set of indicators that describe the allocation of income across age-groups and its changes over time

Research questions:

- a) How did age-specific incomes change between 2007 and 2016?
- b) How did changes in income affect young adults compared to older working age adults and retirees?
- c) Can these changes be attributed to changes in employment, in working hours, in wages or social benefits?

Disposable income of household sector

Standardized real disposable income of household sector (2008 = 1), per capita, 2007 - 2017



Age-specific individual income

Individual net income

Data source: EU-SILC micro-data

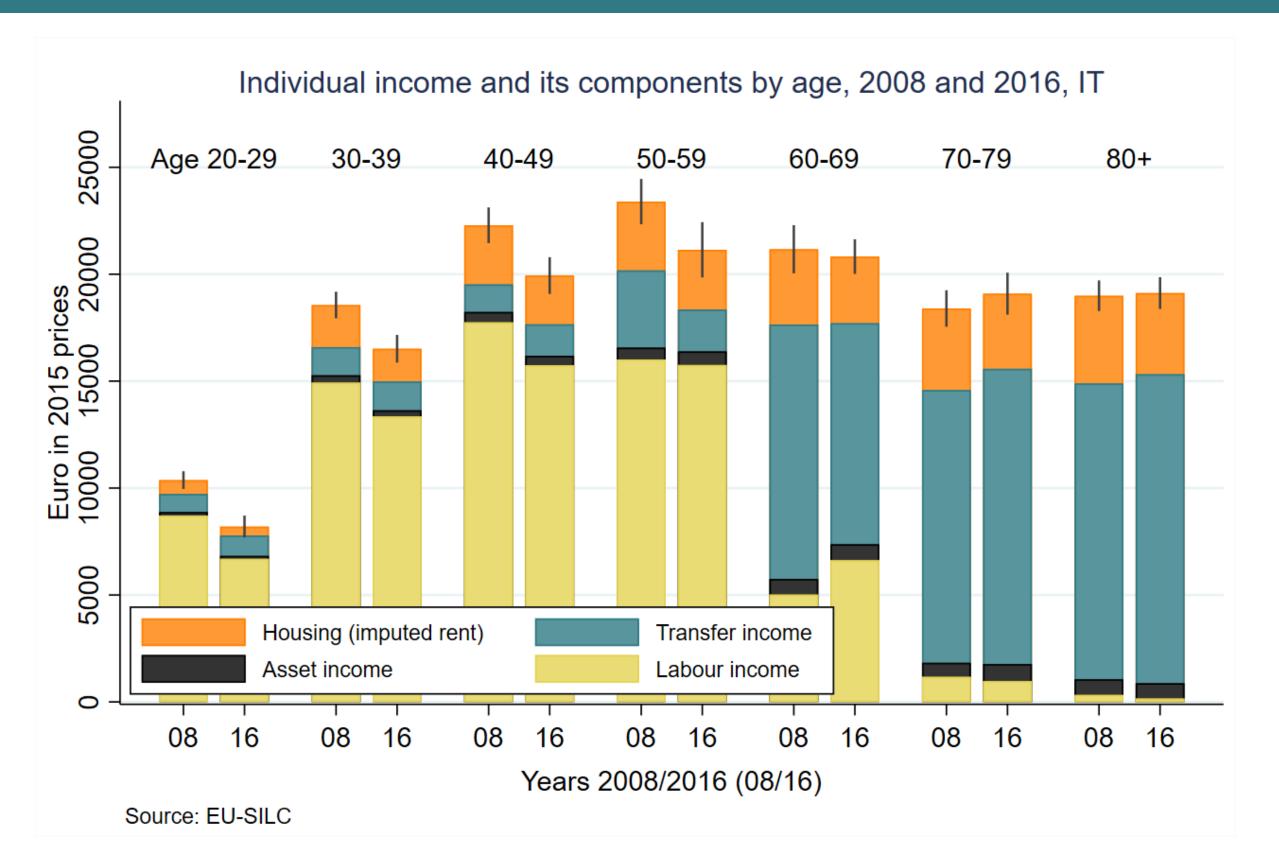
Individual income in EU-SILC:

- Income from employment and self-employment
- Pensions, unemployment benefits

Income at household level is allocated to individuals:

- Asset income => assigned to adults
- Imputed rent => persons responsible for the dwelling
- Family benefits => parent who is responsible for childcare (inverse to share of labour income)

Individual income: overview



Indicators

Challenge: describing the distribution of income with few indicators

We look for indicators that describe

- the allocation of income among age groups
- changes over time
- differences across countries

- → Reduction to three age groups: 20-39, 40-59, 60+
- → Focus on age-specific median income and its change

Relative median income by age, 2016

Relative median income by age:

Age-specific median income (e.g. M_{20-39}) in relation to median income (M):

$$\overline{M}_{20-39} = \frac{M_{20-39}}{M}$$

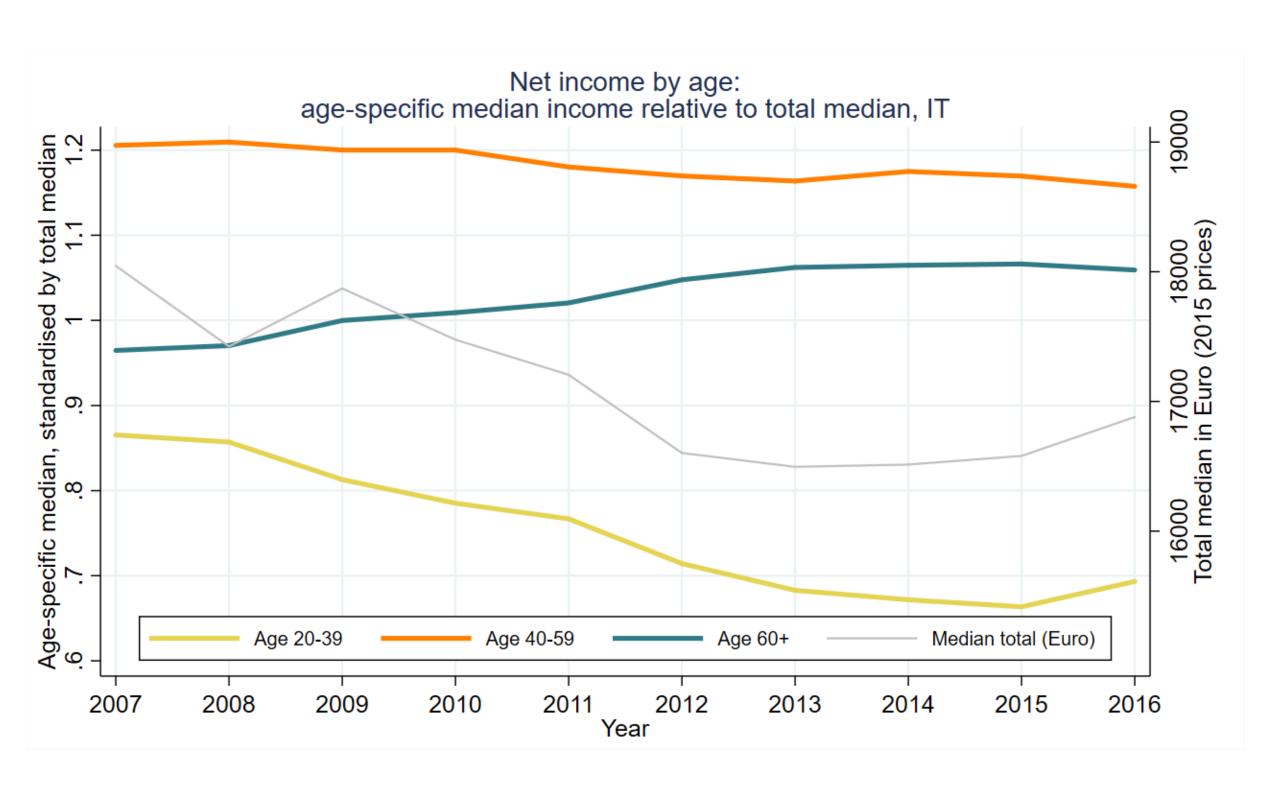
Median income, and age-specific relative median income, (%), 2016						
Country	M	\overline{M}_{20-39}	\overline{M}_{40-59}	\overline{M}_{60+}		
AT	22,775	84	115	99		
EE	7,244	126	127	72		
EL	8,083	64	116	110		
ES	13,572	73	115	106		
FR	23,070	84	111	103		
IT	16,880	69	116	106		
PL	5,471	95	110	97		
SE	24,829	93	126	84		
SI	11,343	92	119	91		

Age-specific income: explanations

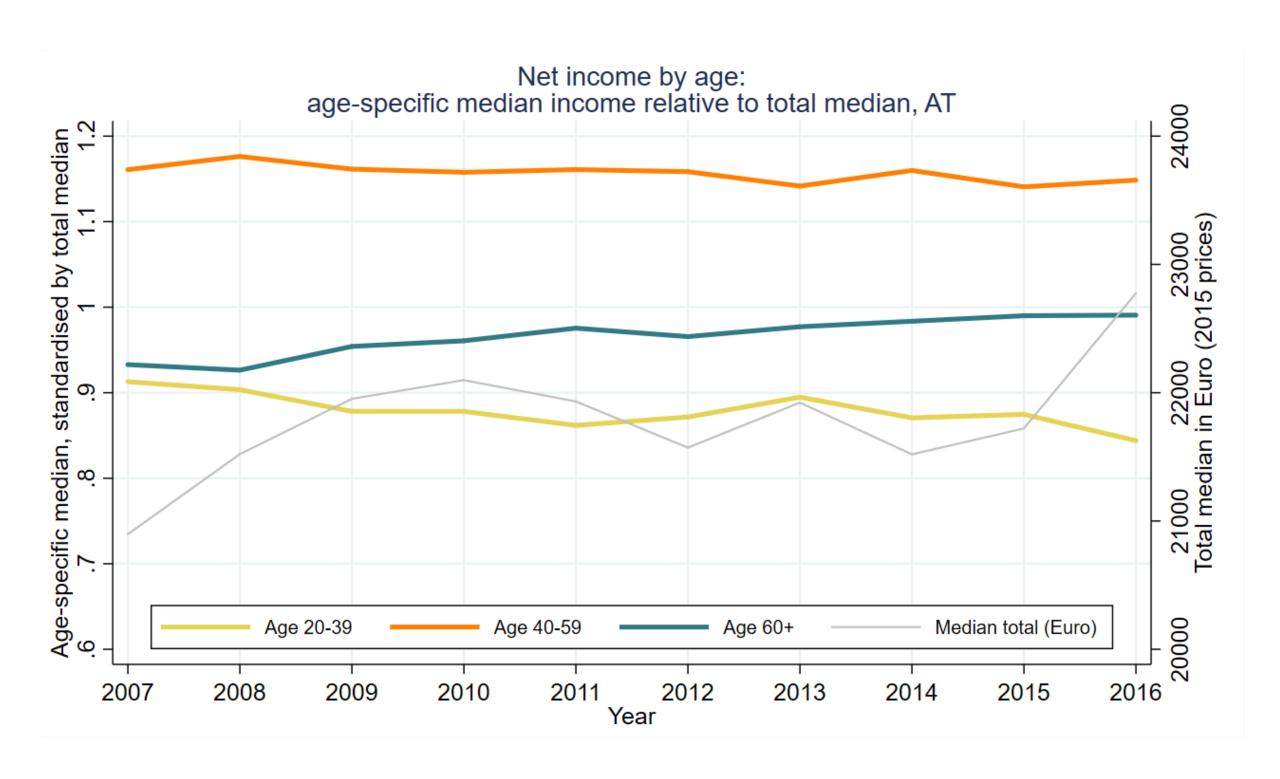
Potential explanations for cross-country differences:

- Youth unemployment (EL, ES, IT)
- Labour force participation/part time work of women (SE)
- Size and type of taxes
- Generosity of pension systems

Relative median income: change 2007 – 2016, Italy



Relative median income: change 2007 – 2016, Austria



Absolute change in median income, 2008 - 2016

Changes in median income 2008 – 2016, in %					
Country	M	M_{20-39}	M_{40-59}	M_{60+}	
AT	6	-1	4	12	
EE	9	22	23	-4	
EL	-29	-44	-46	-17	
ES	-6	-27	-8	7	
FR	4	-3	3	10	
IT	-3	-19	-9	6	
PL	1	5	2	-3	
SE	12	6	21	11	
SI	2	-3	6	6	

Summary and outlook

Outlook:

- Analysis of household equivalence income: parents share their income with their children
- Decomposition of changes in income

Summary:

- Remarkable differences in income development across countries
- Reallocation of income towards older age groups in most countries
 - Strong decline in relative income of the working age population in Greece, Italy and Spain
 - Stagnating income of younger working age population in Austria and France, increase for population 60+
 - Stronger increase for older age groups in Sweden