

The role of private and public transfers to sustain the generational economy. An application of National Transfer Accounts (NTA) in an ageing Europe

CEPAR International Conference: Population Ageing: Causes, Consequences and Responses

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- Diversity in ageing across Europe & Economic Challenge
- Introduction to the generational economy
- The role of public and private transfers
- Diversity of the generational economy across Europe
- Increasing intergenerational inequality
- Discussion

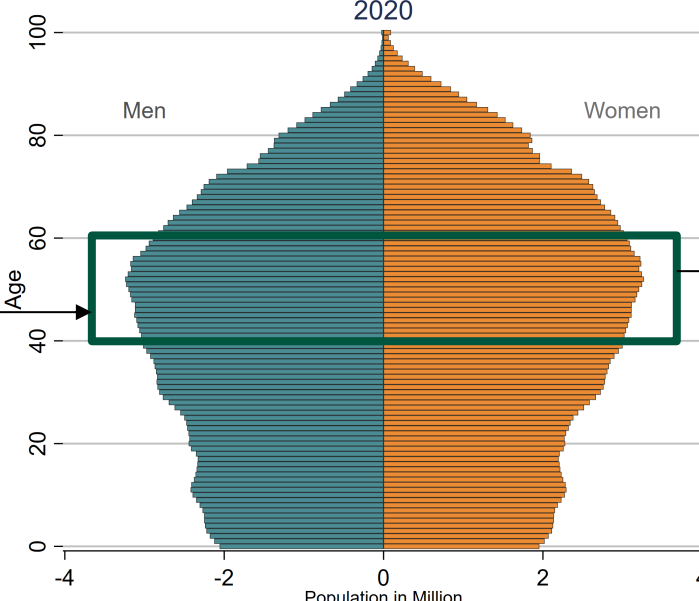
Diversity in ageing across Europe & Economic Challenge



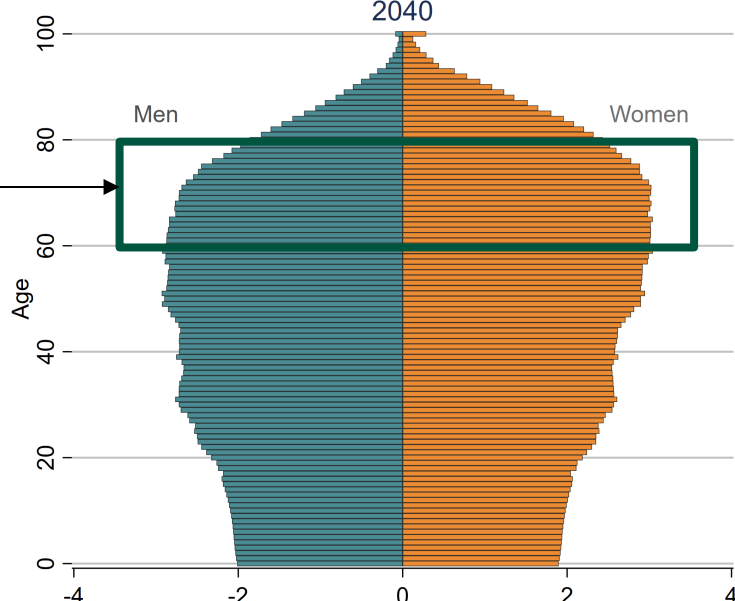
Europe is aging



Source: Eurostat



Source: Eurostat



Source: Eurostat

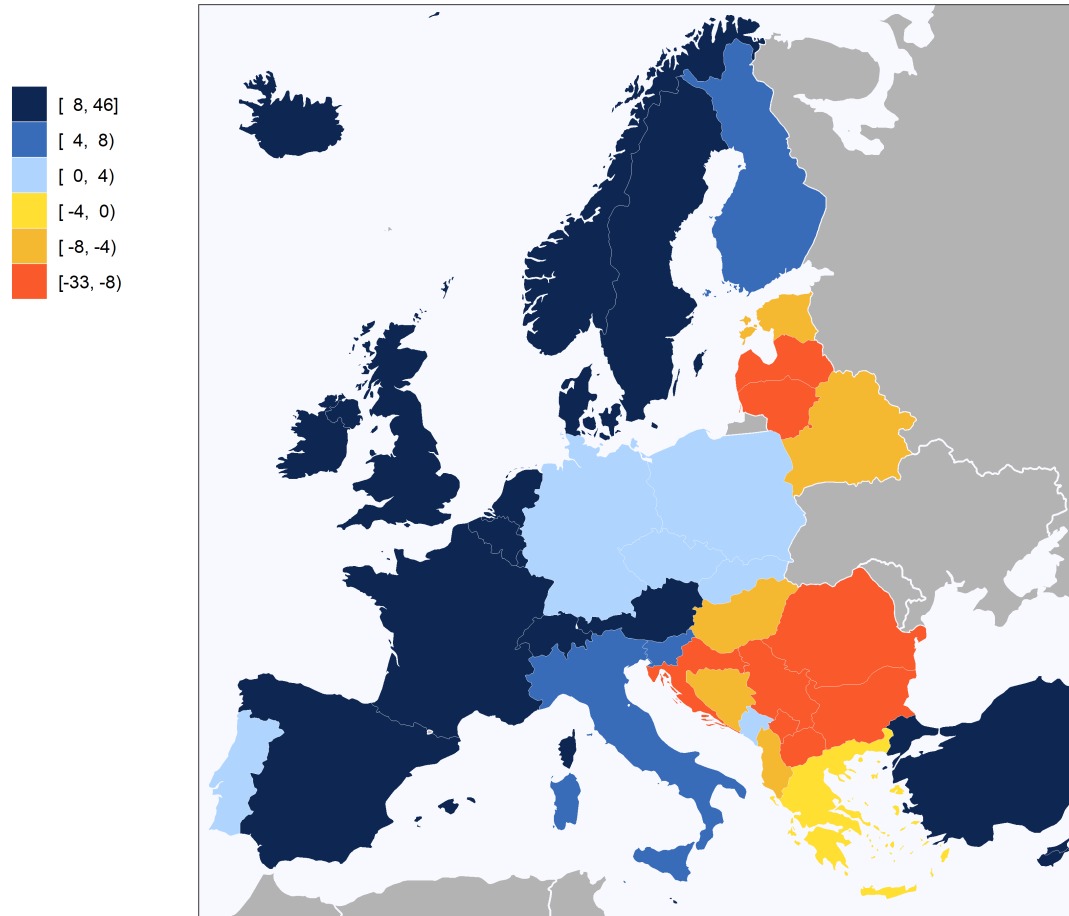
Dependency Ratio (%)

	2000	2020	2040
65+ / (20-64)	26	35	49
80+ / (20-64)	5	10	16

Population Change

Population change (in %) 2000-2021: East-West division

Total population change (%)
2000 to 2021



European Demographic Datasheet 2022

Fertility

- Low (TFR<1,5) in Southern Europe and parts of Eastern & South-Eastern Europe
- Declining fertility in most regions

Mortality

- Geographical gradient: low life expectancy & high male-female life expectancy gap in Eastern and South-Eastern Europe
- Slowing mortality improvement in most regions

Migration

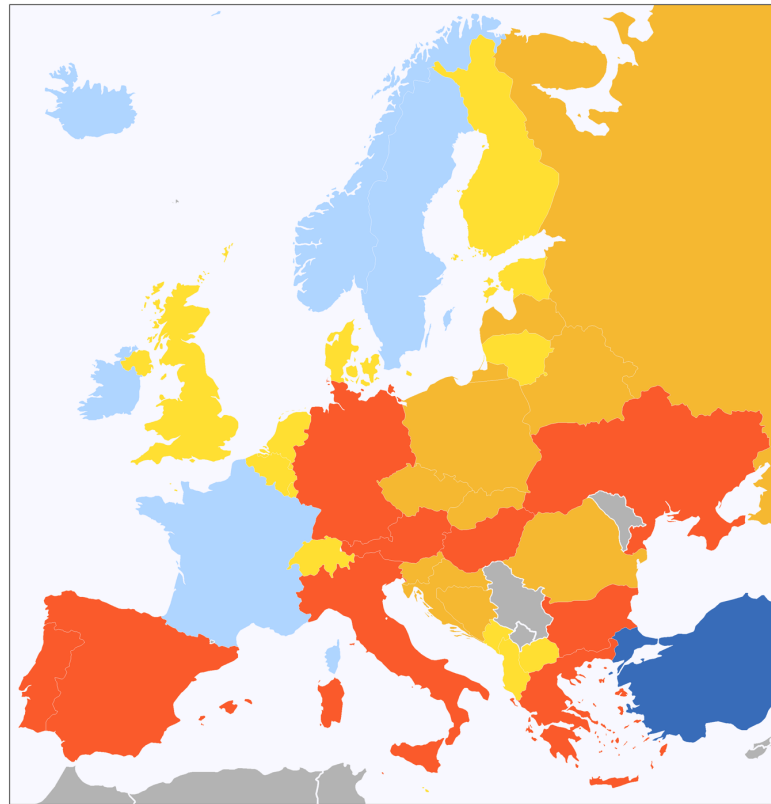
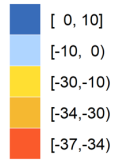
- Significant immigration flows except in South-Eastern and Eastern Europe which suffered outmigration

Differing **Population Change** in Europe:
fast population decline in Southeast Europe

Declining working age population (20-64 years)

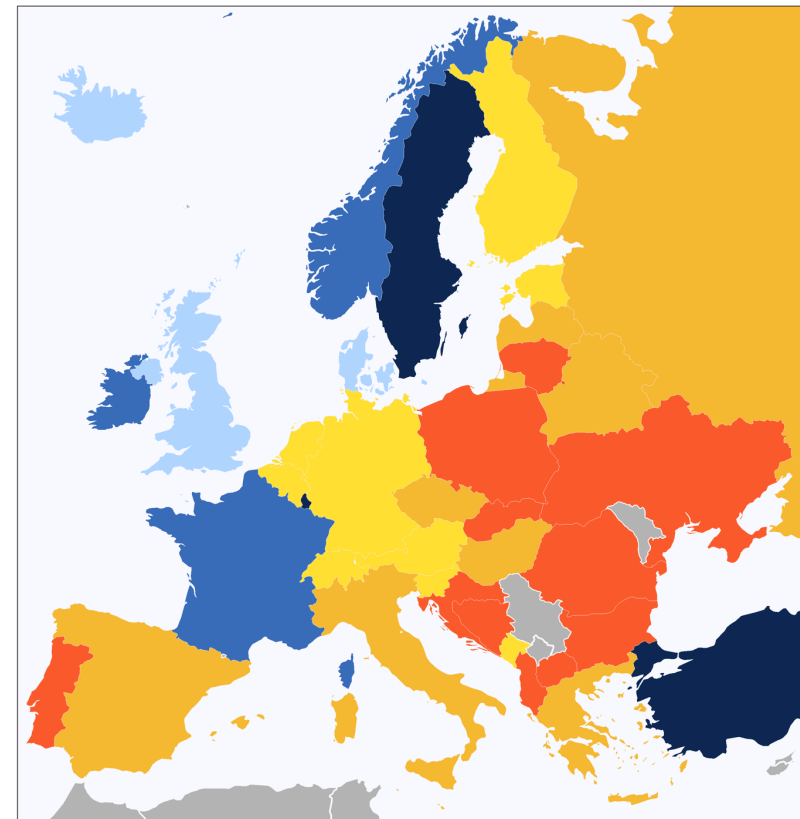
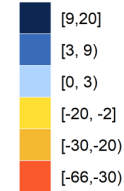
without migration the working age population **declines/stagnates** in all European countries, **2020-2060**

Projected change in working age population - **Zero migration (%)**
2020 to 2060



European Demographic Datasheet 2022

Projected change in working age population (%)
2020 to 2060



European Demographic Datasheet 2022

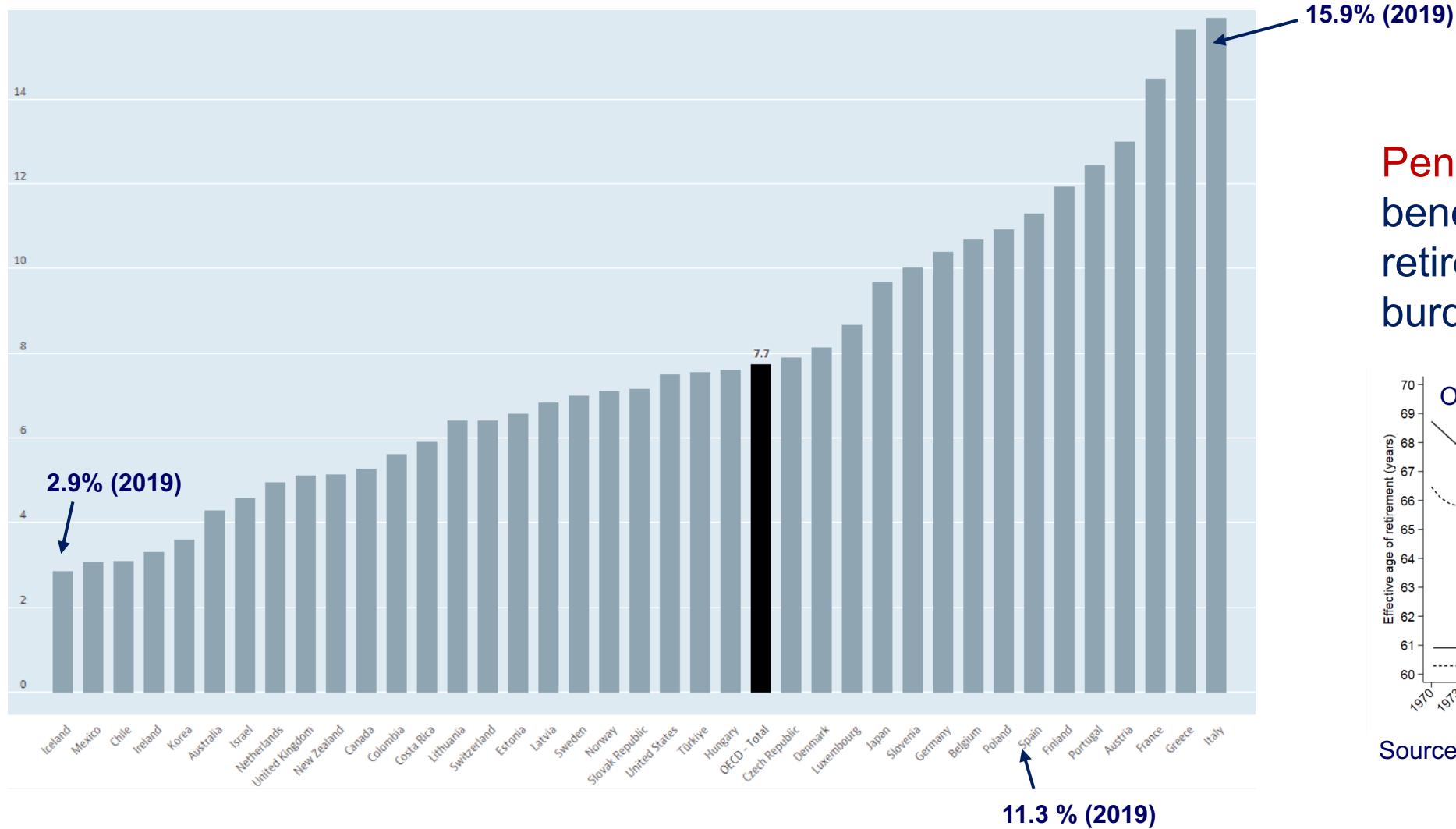
Economic Challenge of demographic change in Europe

- **Decrease in working age population** - how to **sustain economic growth, innovation, pension, health and elderly care?**
- **Emigration of younger, more educated people** poses a major challenge for healthcare, social security and pension systems **in CESEE** (Central, Eastern and South-Eastern Europe) countries (IMF 2019) - **vicious cycle of demographic, social and economic decline!**
- Huge role of public sector in **old-age provision in OECD** & increasing expenditures on **longterm care and health**
- **Income disparities** between young and old Europeans

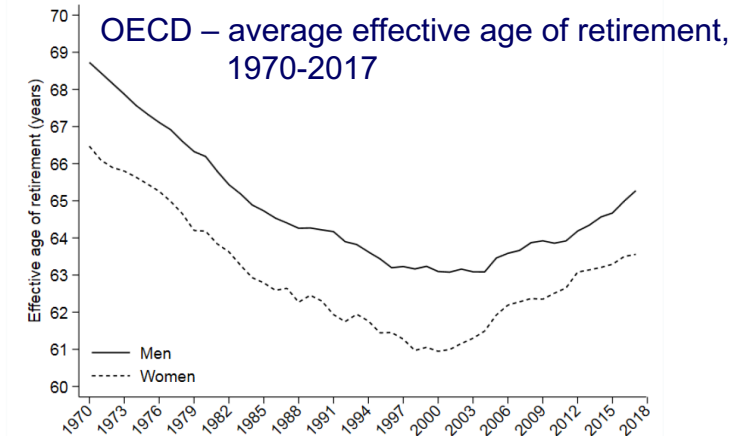
Importance to combine national variation in **life cycle needs** and **production** with national differences in **demographic change** and **institutions** → NTA (NTTA)

Role of public sector in old-age provision in OECD

Public Pension Spending, % of GDP, 2021 or latest available



Pension reforms (reducing benefit ratio, increasing retirement age) relieve the burden on pension systems

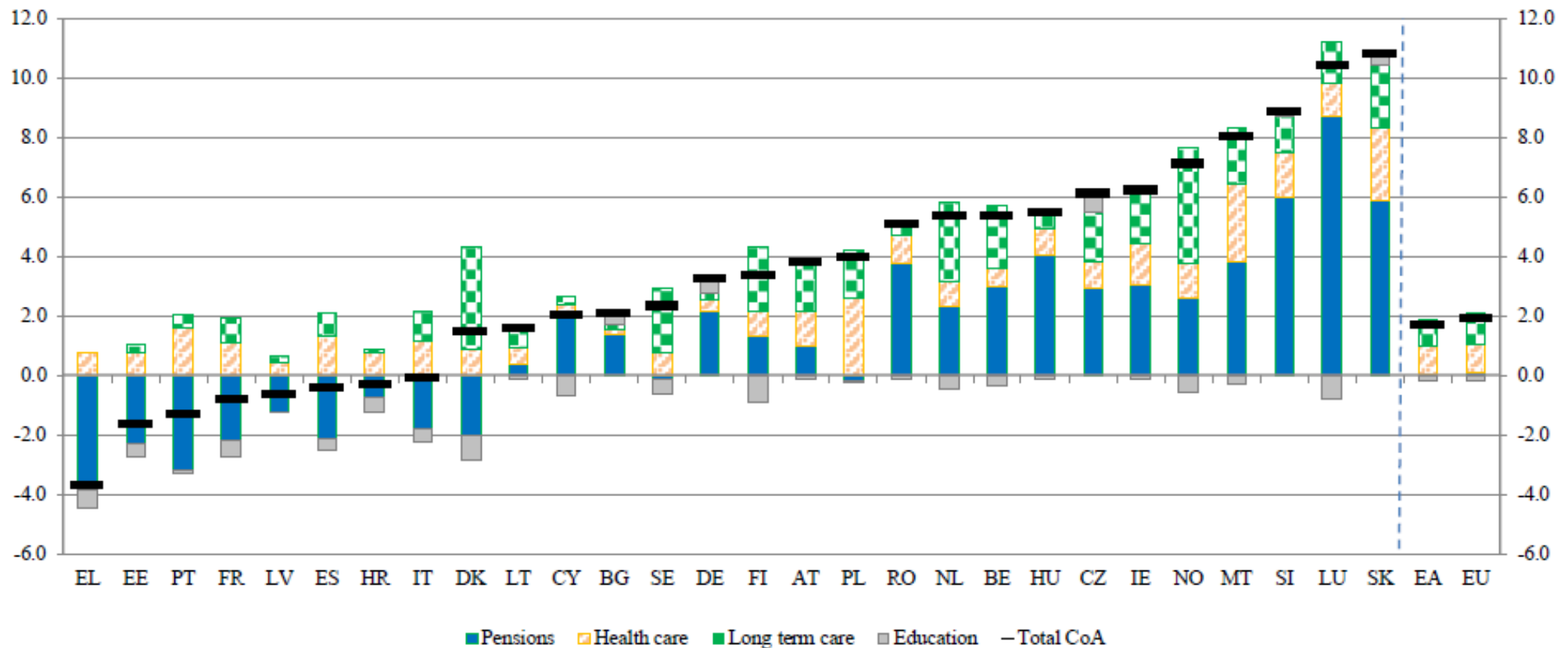


Source: Boeri and van Ours (2021)

Increasing expenditures on long-term care & health

Long-term care & health care spending are important drivers of age related expenditures in the future

Graph 5: Projected change in age-related expenditure (2019-70), by expenditure component, pps. of GDP



Source: Commission services, EPC.

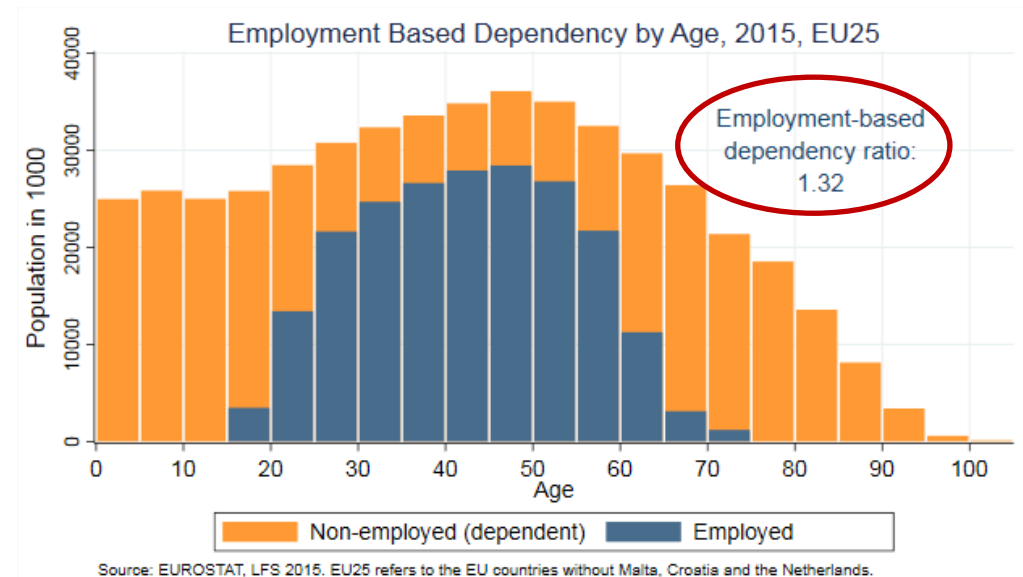
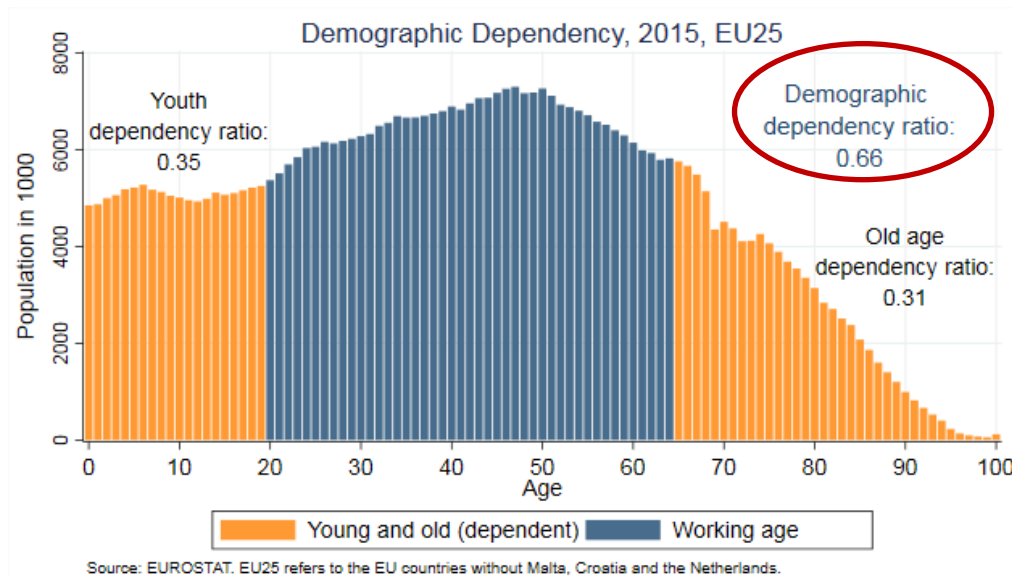
Source: The 2021 Ageing Report

Introduction to the **generational economy**



Measuring dependency

$$\frac{\text{Age} < 15 \text{ or Age} > 65}{\text{Age } 16 - 64} \neq \frac{\text{non-employed}}{\text{employed}}$$



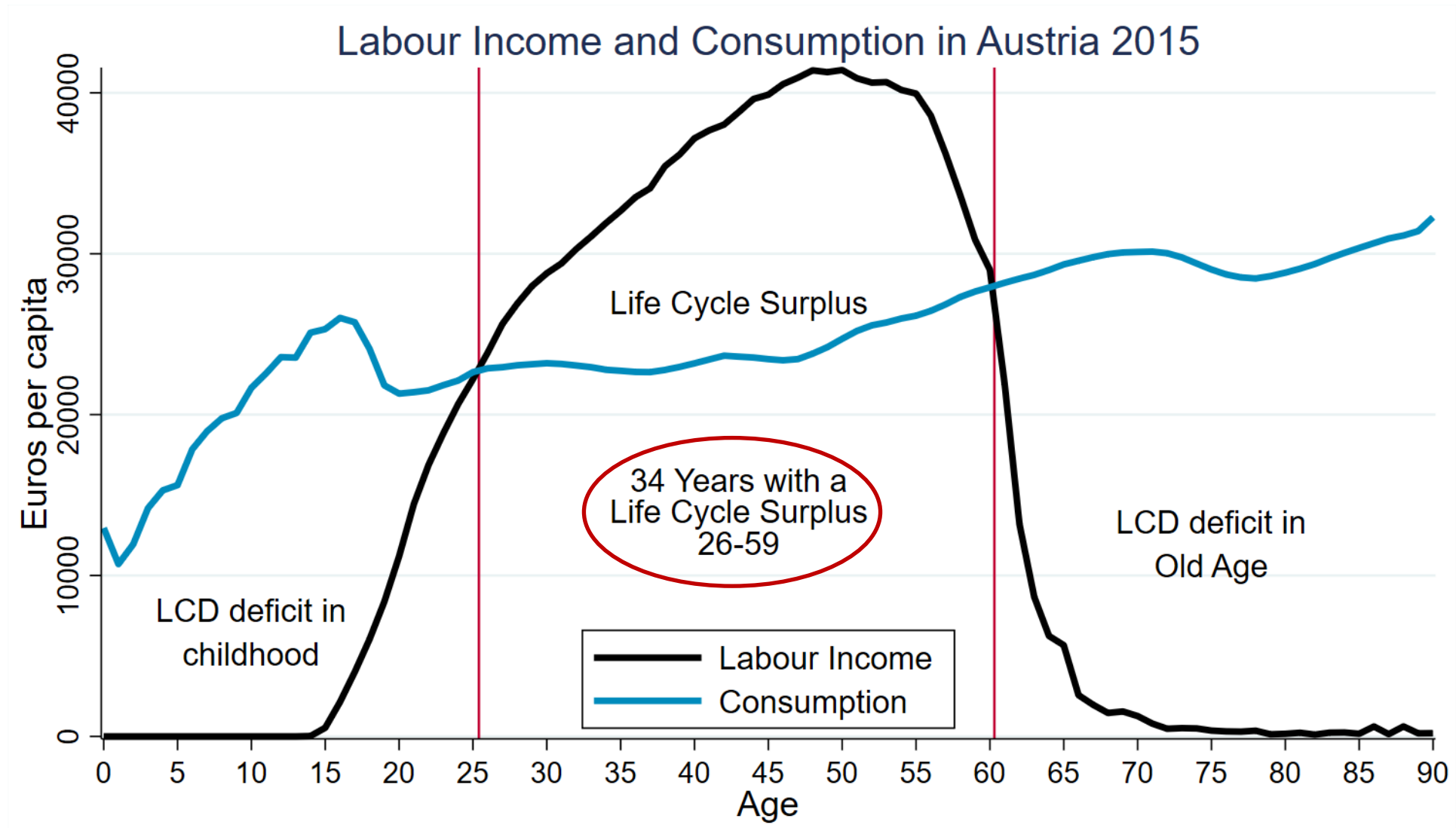
Need to consider also

degree of dependency within dependent population

degree of economic ability of those who support others

age-specific consumption and income based on NTA

Measuring the economic life course: the case of Austria 2015



Generational Economy

- **Relations across generations** are a key aspect of society and the economy
- Long phases of **economic dependence in childhood and old age**
- Requires **redistribution of resources** across life course and across age groups

Mechanisms of intergenerational redistribution:

- **Private transfers** (e.g. parents finance consumption of their children,.....)
- **Public transfers** (health, pensions, education, ...)
- **Asset based reallocation**

Generational Economy

The **Generational Economy** denotes

- The relation between **demographic characteristics** (age, family status, gender) and **economic characteristics**.
- The **mechanisms** and **institutions** of intergenerational **redistribution**

Measuring the Generational Economy → **National Transfer Accounts (NTA)**

NTA integrate age & gender into National Accounts and measure for each age group

- **Generation** of income
- **Redistribution** of income through public and private transfers
- **Age-specific use of** disposable income for consumption and savings

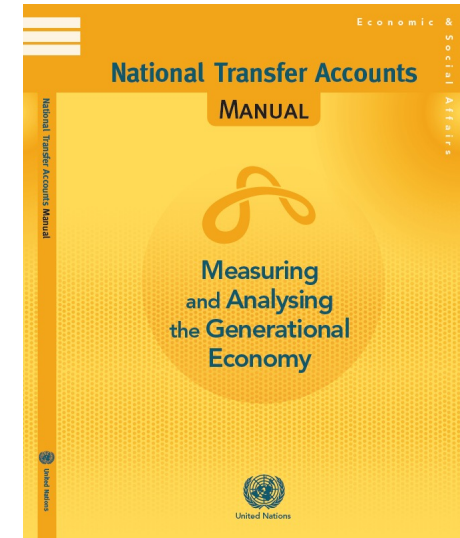
International project, developed by Ronald Lee (Berkeley) and Andrew Mason (East West Center Hawaii) : www.ntaccounts.org

Measuring and Analysing the Generational Economy: **NTA Manual** (UN, 2013)

DATA:

Global: www.ntaccounts.org

Europe: www.wittgensteincentre.org/ntadata



AGENTA www.agenta-project.eu/en, **AWA** <https://agewell.eu/> , **SUSTAINWELL**

NTTAs Donehower (2019) Methodology of the National Time Transfer Accounts

The role of public and private transfers



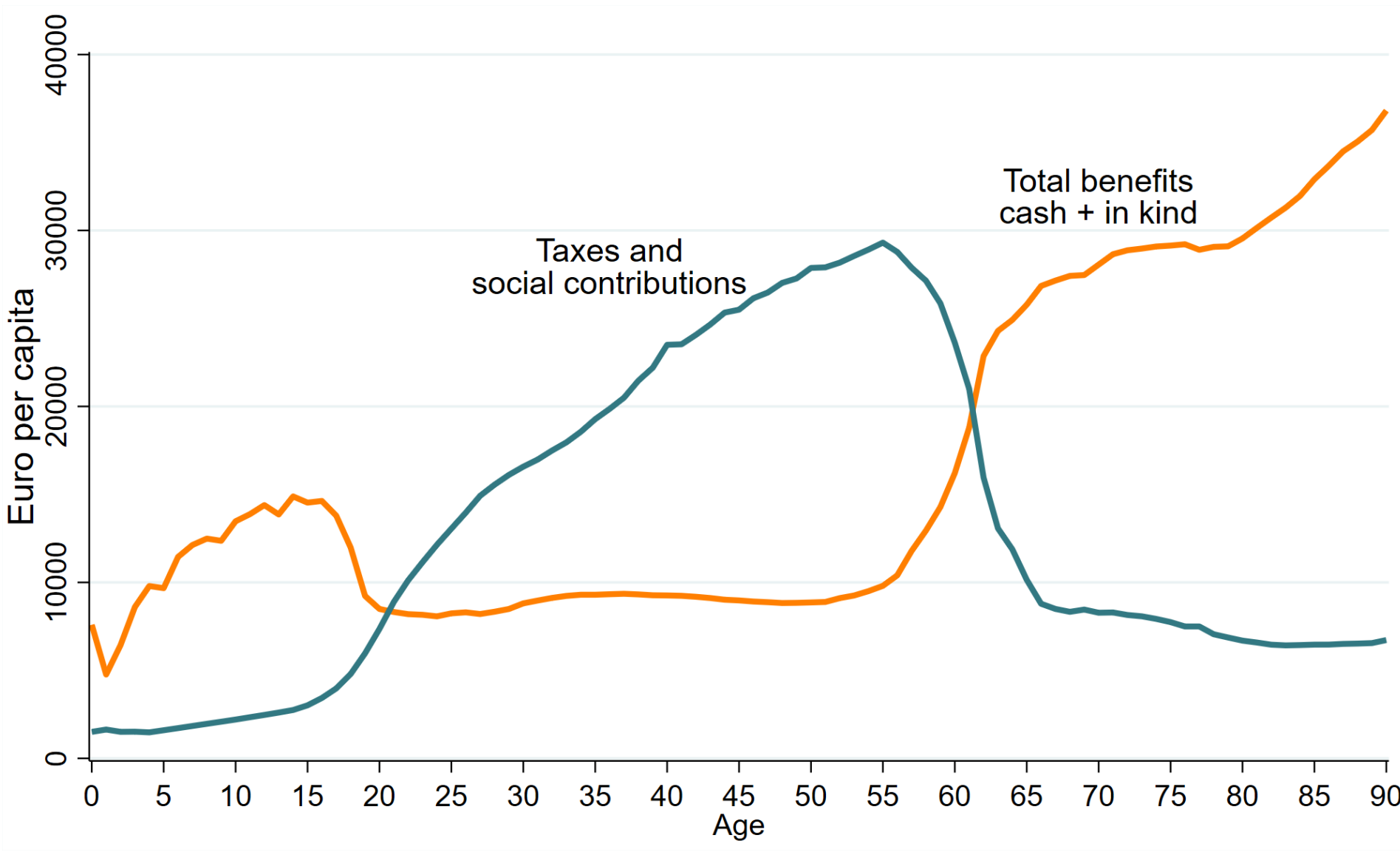
Public Transfers

Pensions, Health – mainly from employed population to retired elderly

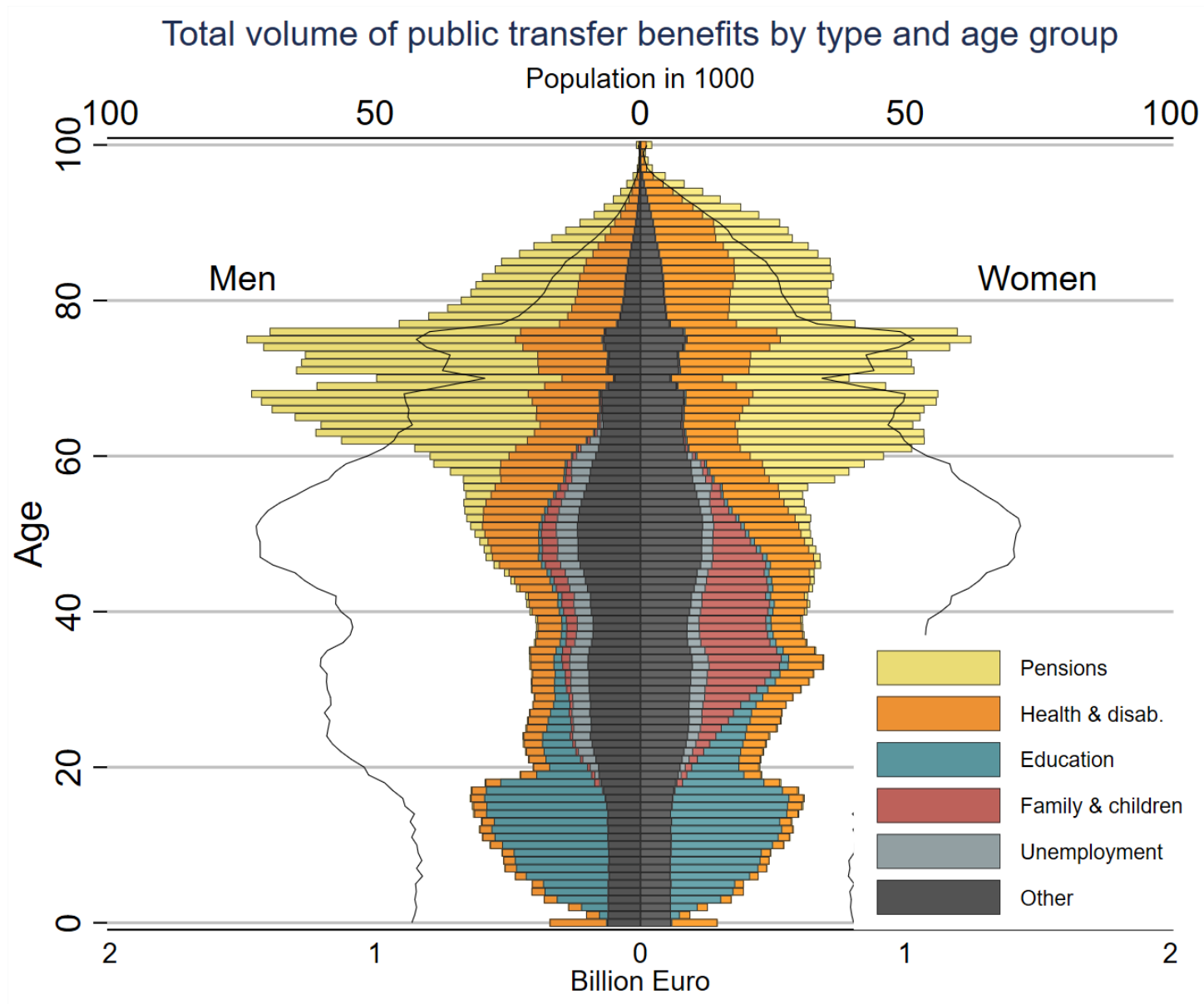
Education – from employed population to children

Unemployment – from employed to unemployed

per capita Public Transfers – Austria 2015

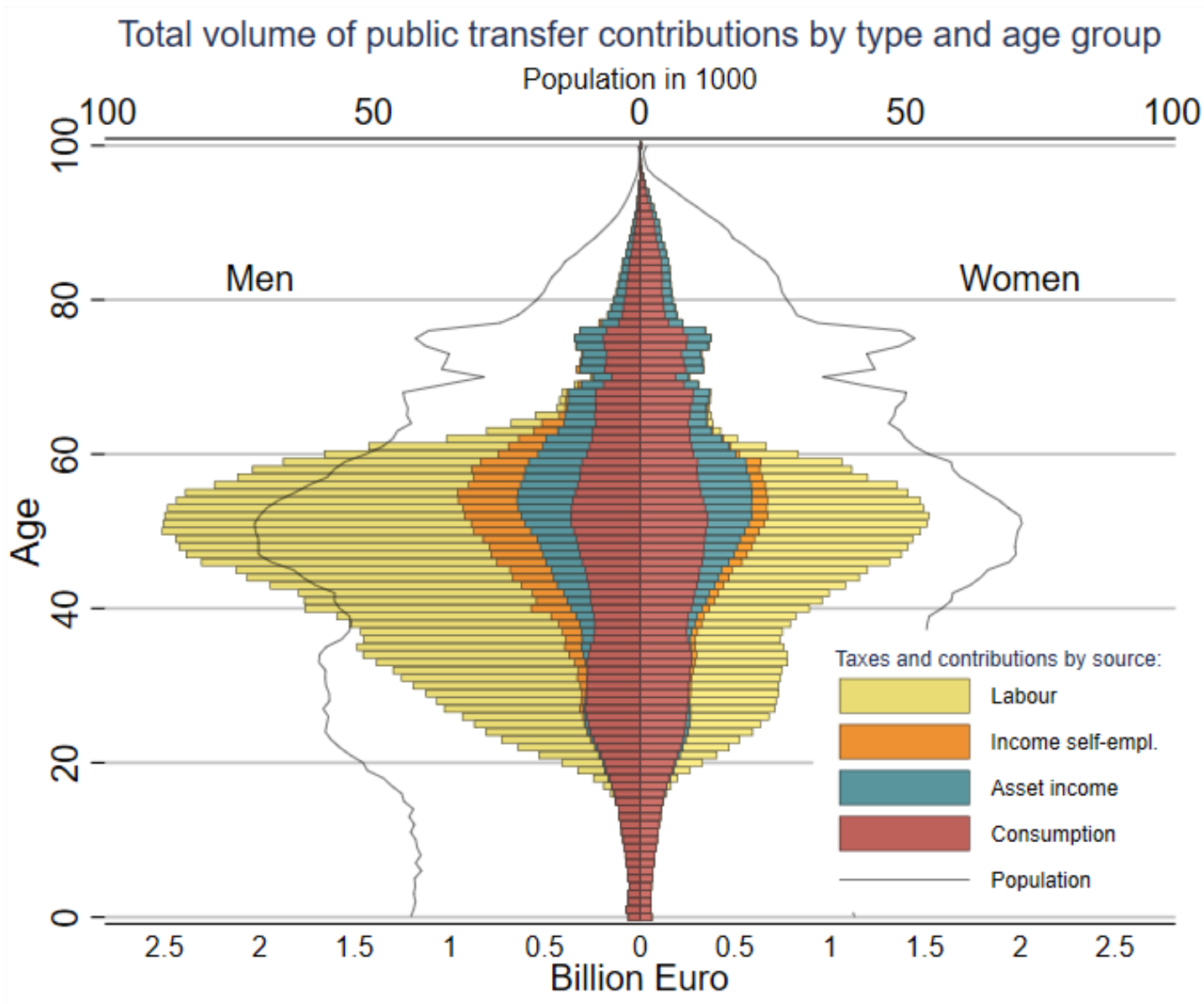


Public Transfer Benefits – Austria 2015



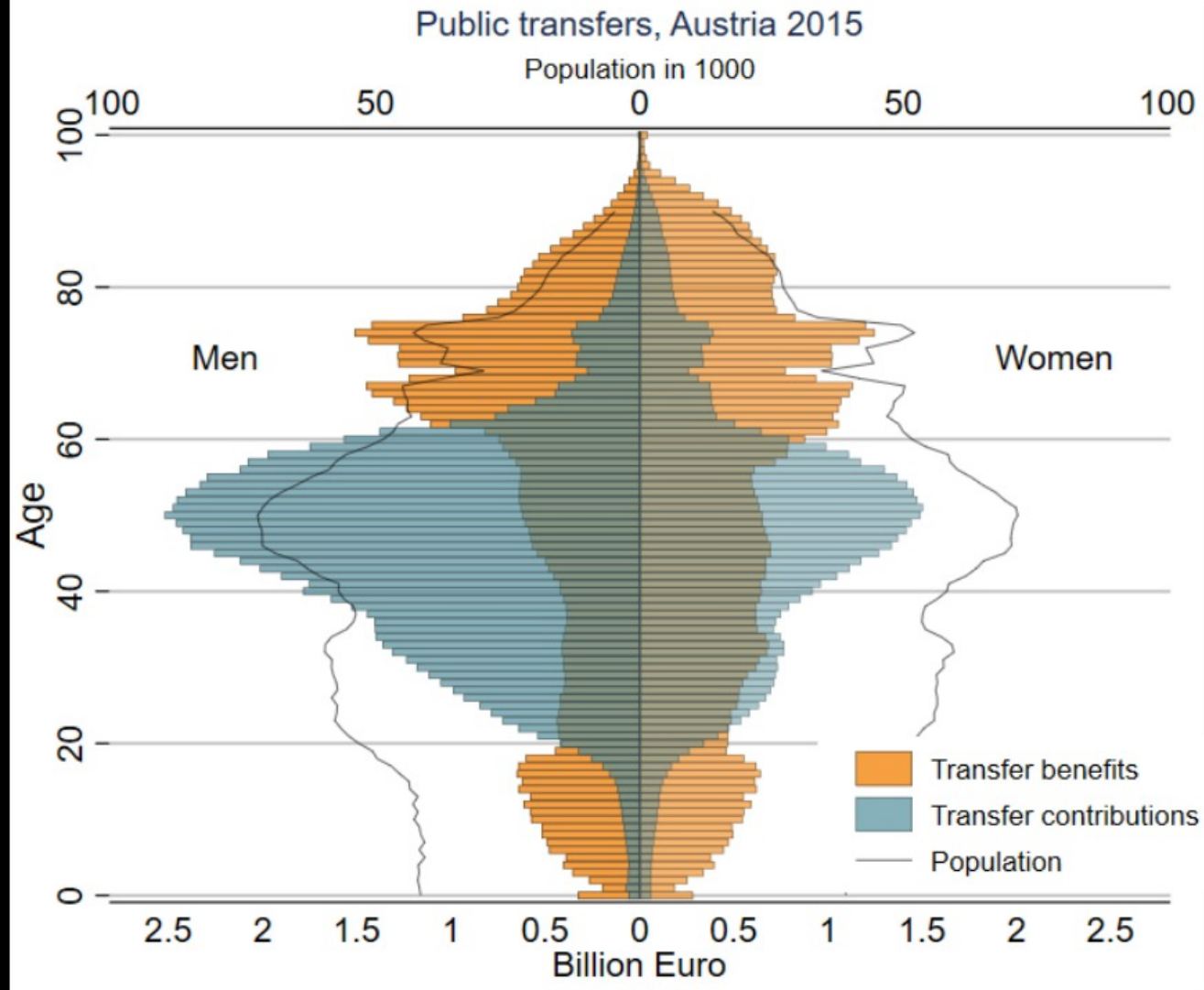
- Public benefits amount to **51% of primary income**
- **51.5%** received by **women**
- Population **0-24** receives **19%**
- Population **60+** receives **48%**

Public Transfer Contributions – Austria 2015



- Taxes and social contributions amount to **53% of primary income**
- **78%** of public transfer contributions paid **by age group 25-59**
- 30% by baby-boomer aged 45-54
- **62%** paid **by men**

Public Transfers, changes over time – Austria 2015



1. Private market transfers (monetary transfers)

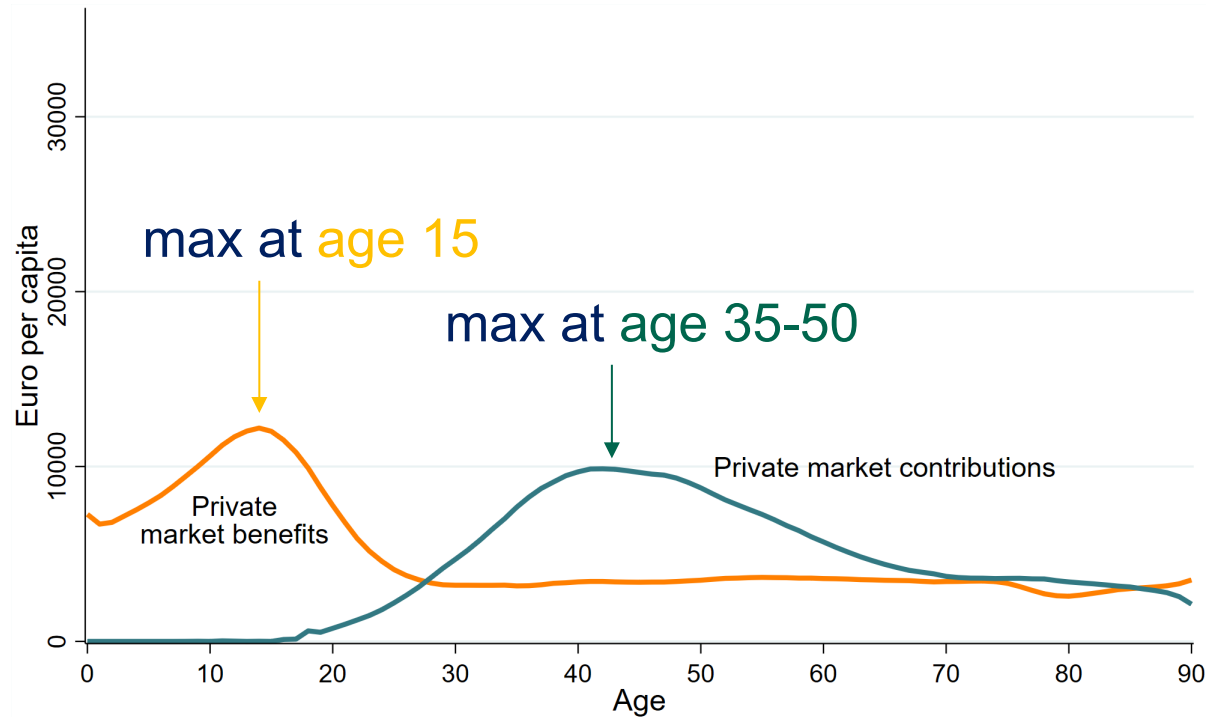
- Goods and services bought **on the market**
- Mainly from **parents to children** (and from **men to women**)

2. Private non-market transfers (transfers in form of unpaid work)

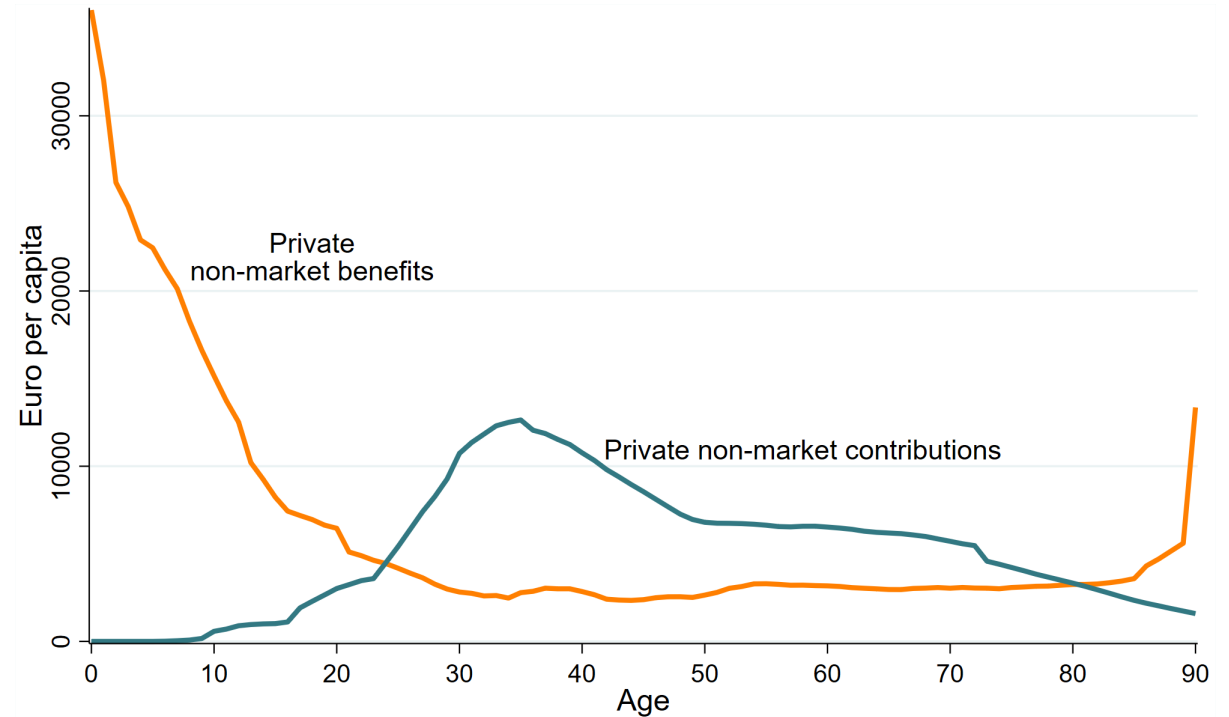
- Services and goods produced **within household** for own consumption
- Mainly from **parents to children** and from **women to men**

per capita Private Transfers – Austria 2015

Private market transfers



Private non-market transfers

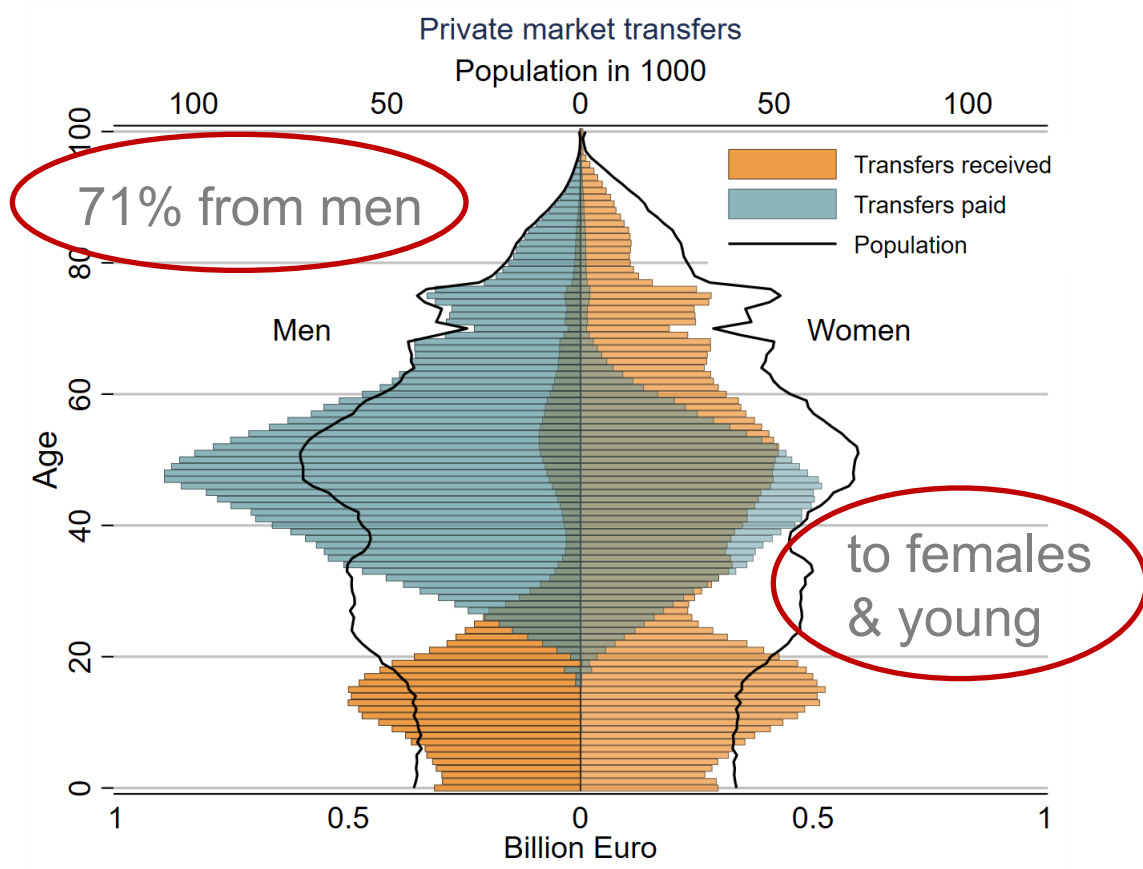


Input approach for measuring private transfers:

time used for non-market benefits and contributions is valued with wages that could be earned on the labor market with similar activities.

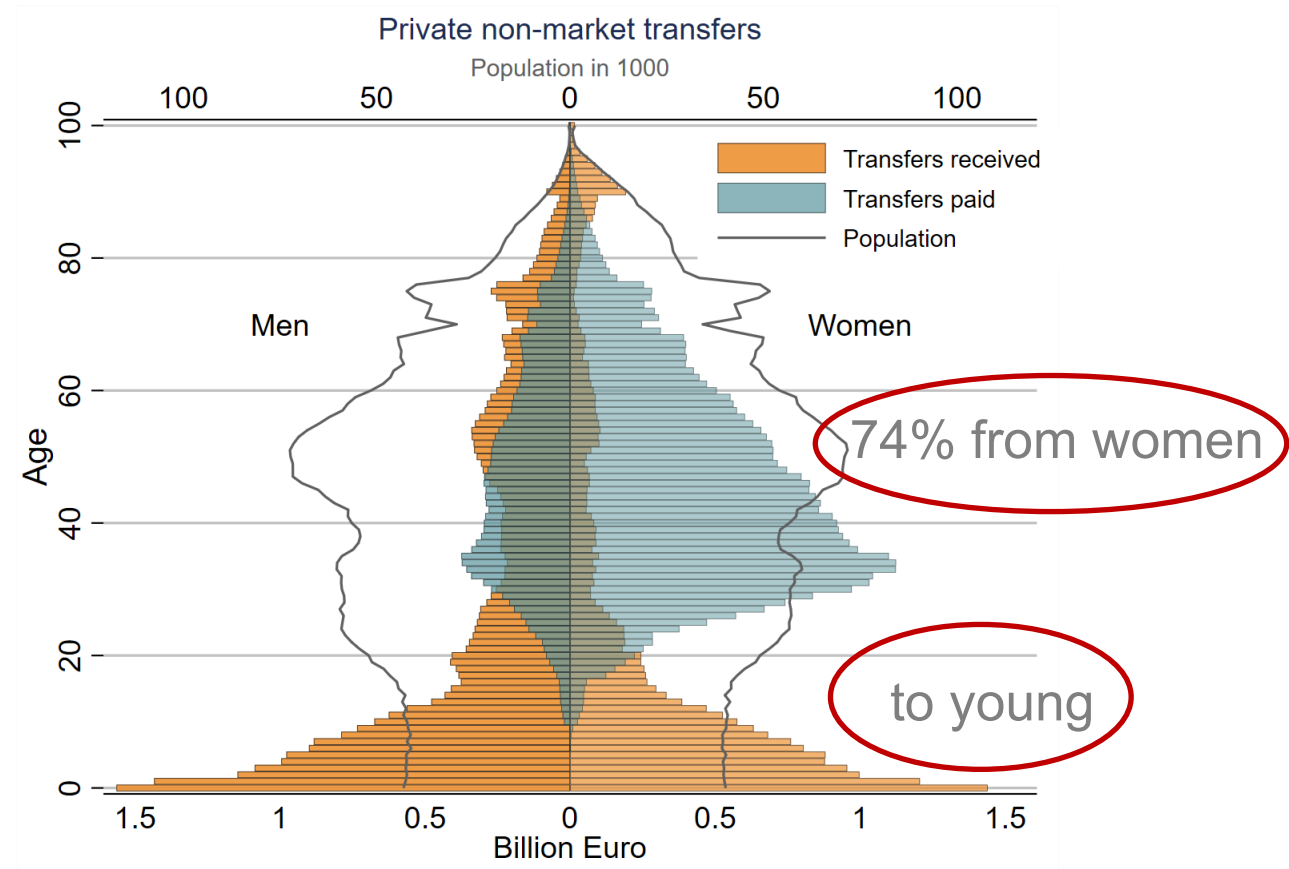
Total Private Transfers – Austria 2015

private market transfers



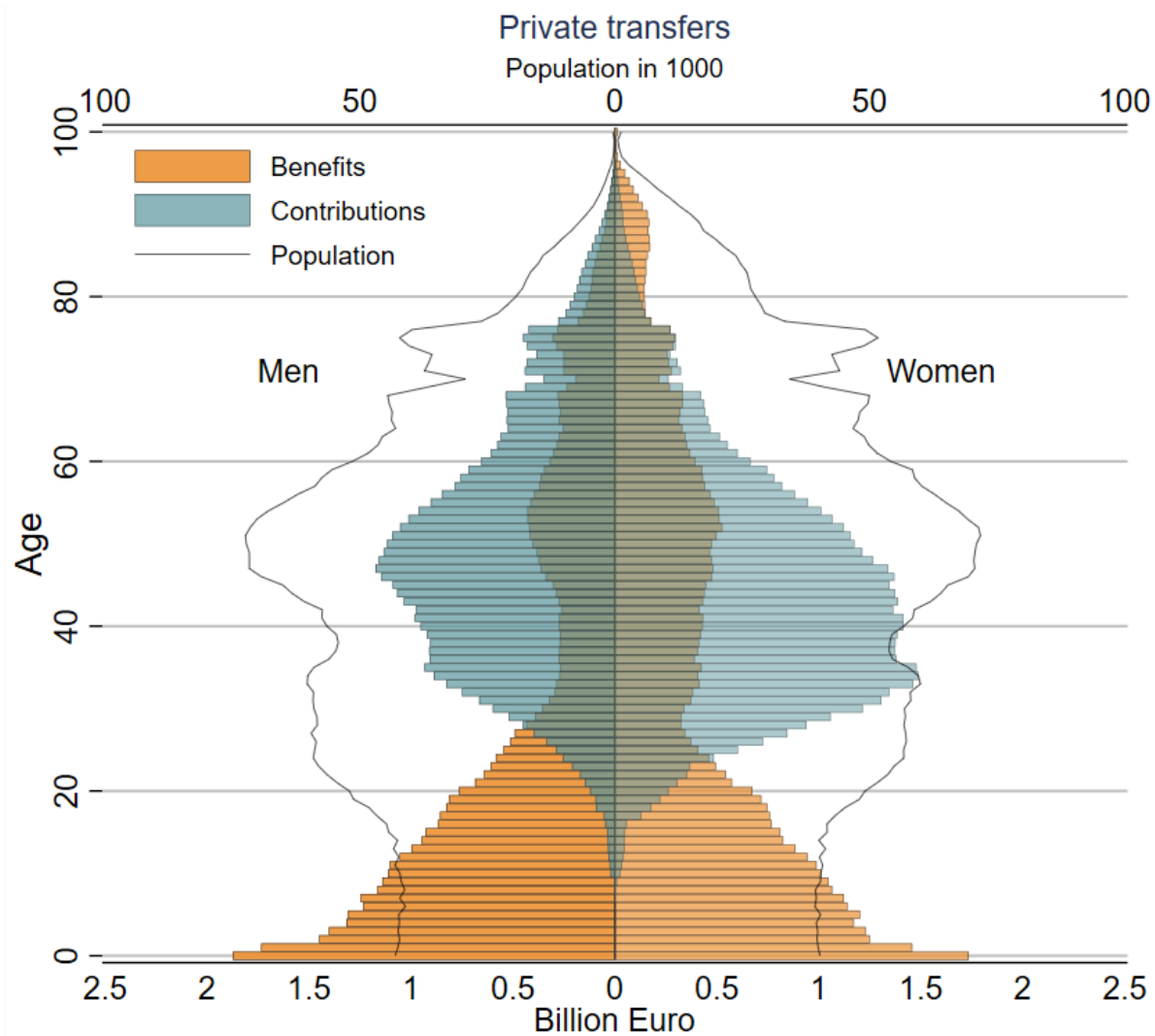
about 17% of national Income

private non-market transfers

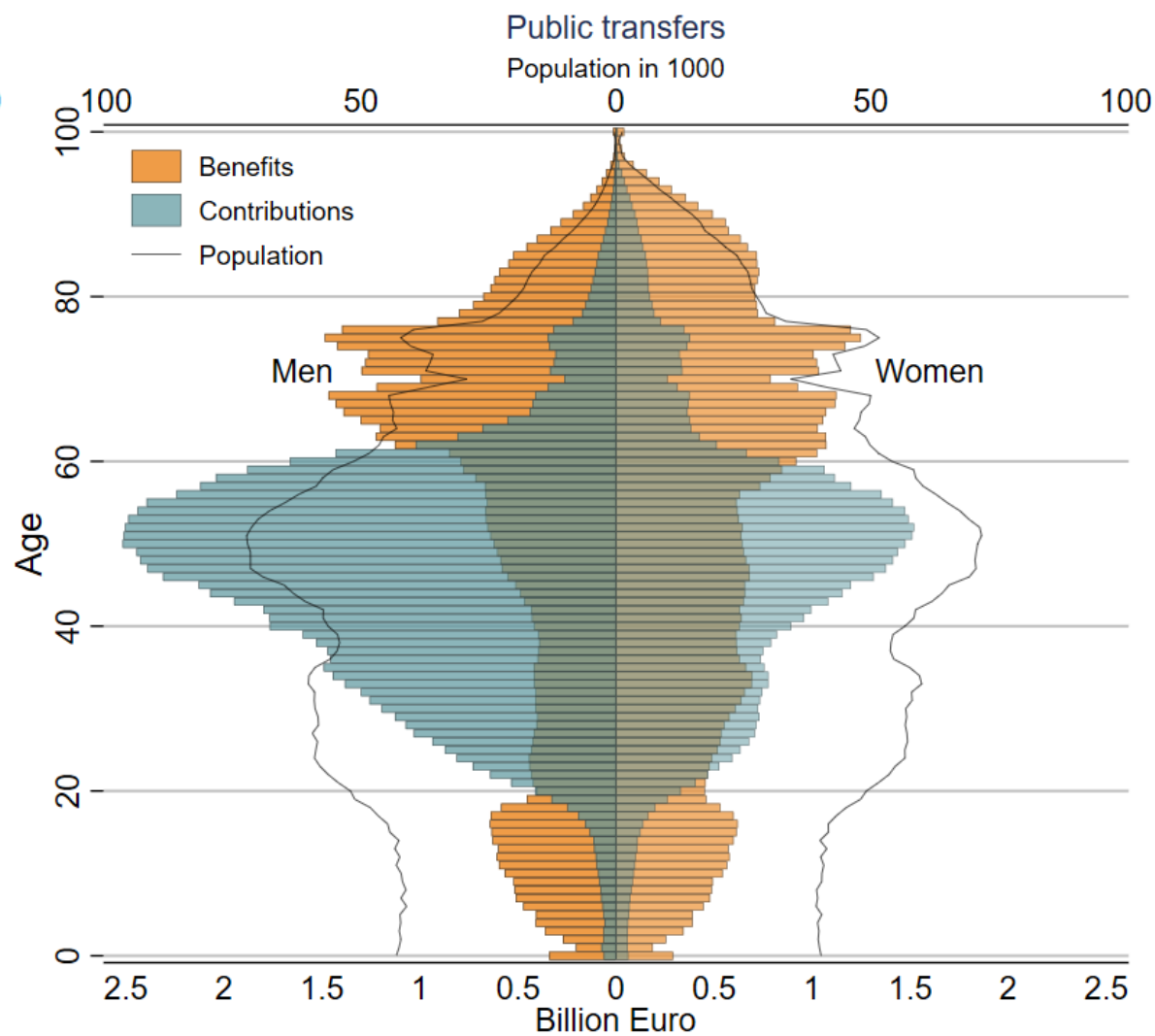


about 21% of national income

Transfers received and contributed – Austria 2015



private transfers to < 25: 50 billions



public transfers to 60+: 58 billions

Summary: Gender Roles in transfer system

Men:

- High employment rates
- Pay a larger share of the consumption of children
- Higher contributions to the public transfer system, higher yearly pensions

Women:

- Specialization in unpaid household work within families
- Provider of services produced by unpaid work
- Lower contributions to the pension system, lower yearly pensions

Diversity of the generational economy across Europe



Data Explorer

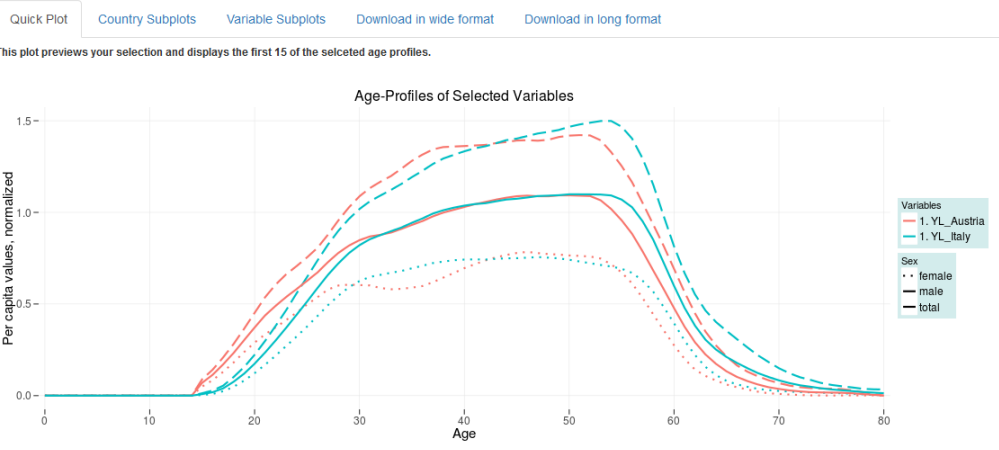
European National Transfer Accounts 2010



Countries
EU25 Population Avg. refers to the average individual in the 25 included countries.
EU25 Country Avg. to the average over all countries not weighted by population size.
Austria Italy
Select/deselect all

Central NTA Variables
1. Labour income (YL)
Select/deselect all
Units
Norm

Non-central NTA Variables
For a description of the variables and their abbreviation check the [list of NTA variables](#).
Select additional variables
Select/deselect all
Sex
 Total
 Men
 Women

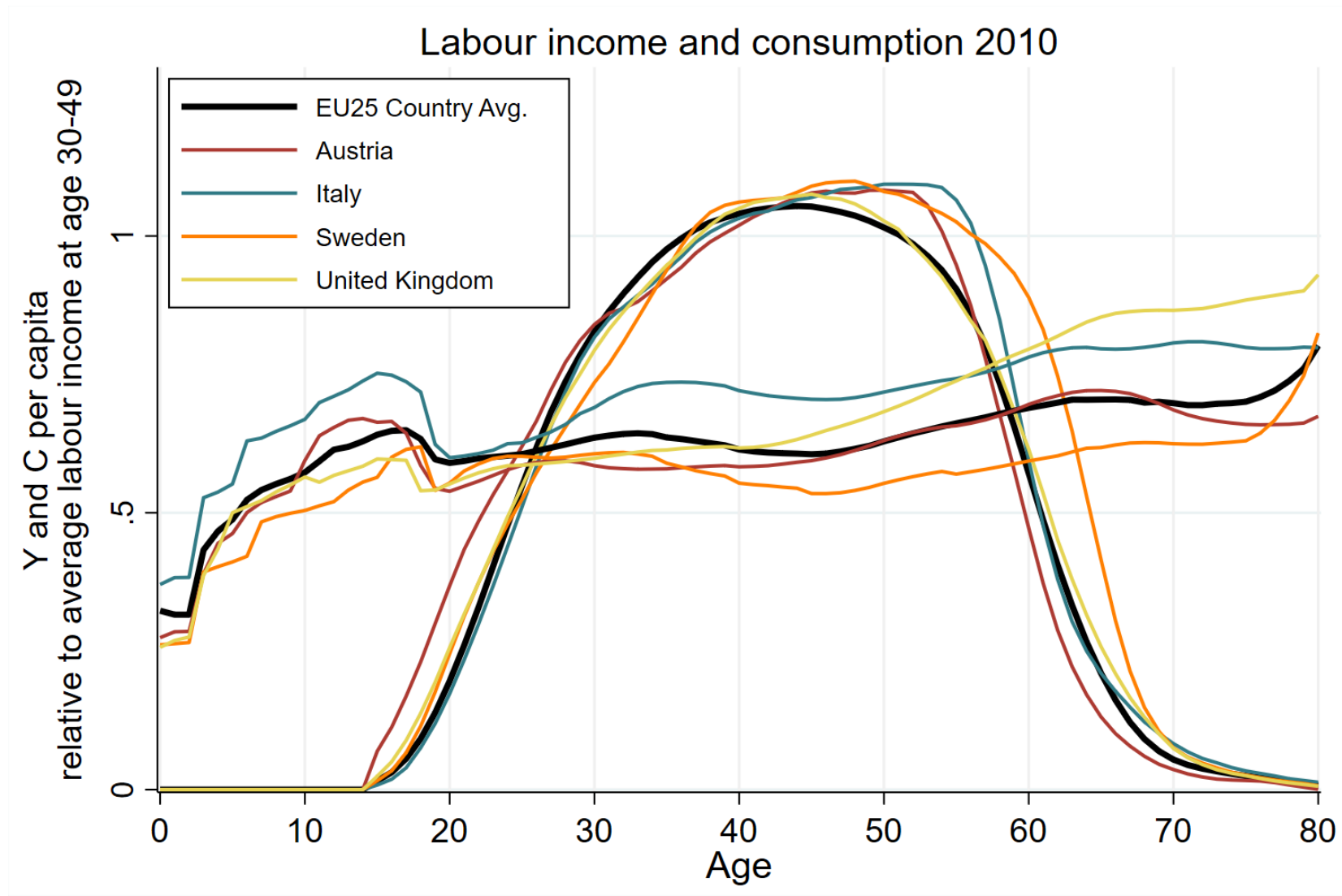


Information and Help

A preliminary version of the [European NTA Manual](#) describes in detail the data sources and methodology. The final manual will be available in November 2017. The [NTA manual](#) of the global NTA project describes the NTA methodology in general.

Citation: We suggest the following citation: Istenic, T., Seme, A., Hammer, B., Lotric Dolinar, A., Sambt, J. (2016). European National Transfer Accounts. Available at: <http://www.wittgensteincentre.org/ntadata>.

Diversity of production and consumption



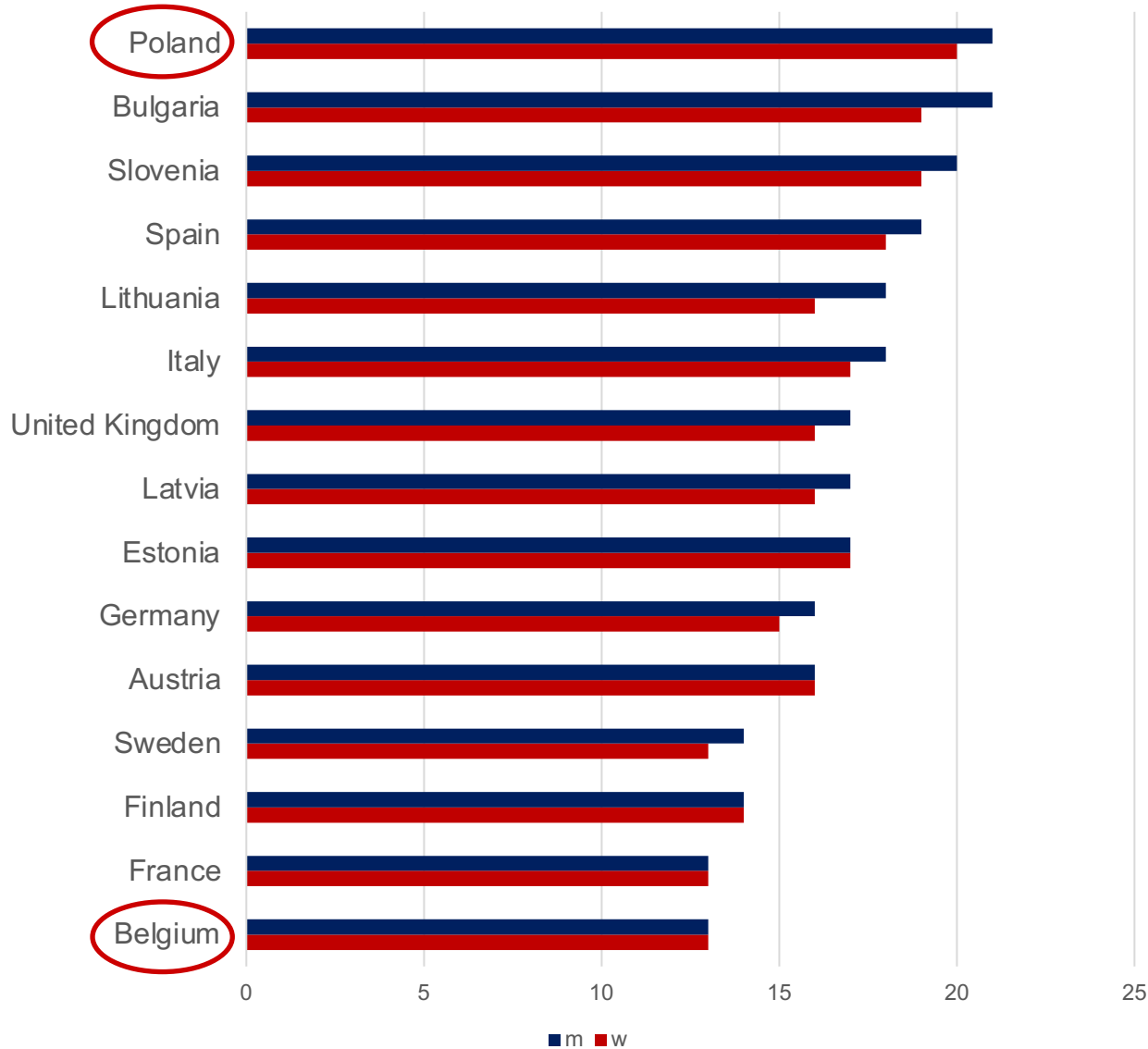
Intergenerational Transfers from a Life Course Perspective

Take 2010 cross section pattern of transfers weighted by survival probability in 2010 to investigate the transfers between generations and gender by life stage (measure in terms of average yearly labor income of a full-time worker)

EU15	Men			Women		
	Young	Work	Old	Young	Work	Old
Total	17	-15	5	16	-15	6
Private market	5	-7	-1	6	0	1
Private non-market	8	0	1	7	-11	-2
Public	3	-8	5	4	-3	6

Diversity of intergenerational transfers TO CHILDREN across Europe

transfers received by children (YL)



POLAND

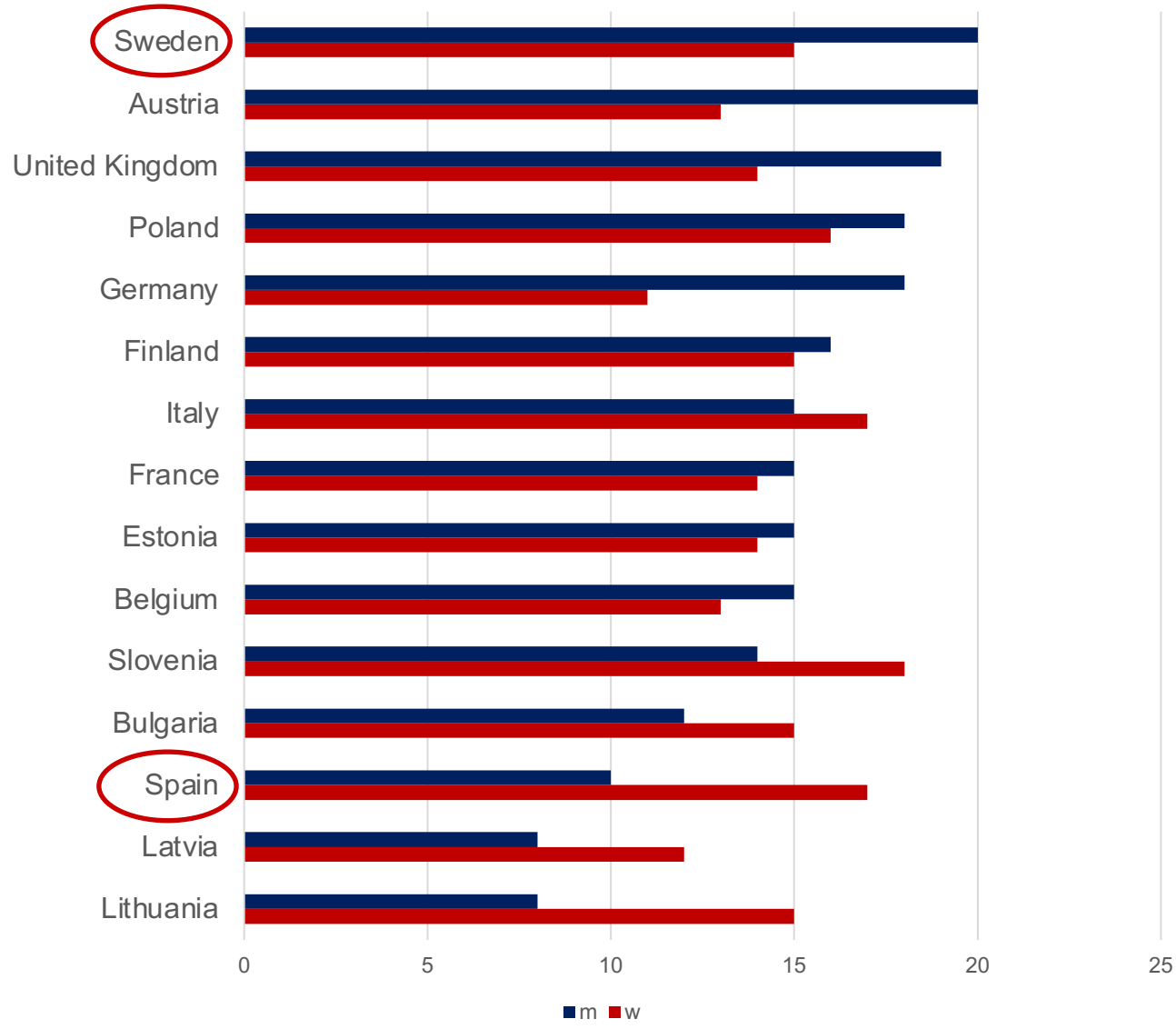
	m	w
Total	21	20
private market	6	6
private non-market	9	9
public	4	4

BELGIUM

	m	w
Total	13	13
private market	3	4
private non-market	6	5
public	3	3

Diversity of intergenerational contributions by WORKERS across Europe

transfers contributed in working age (YL)

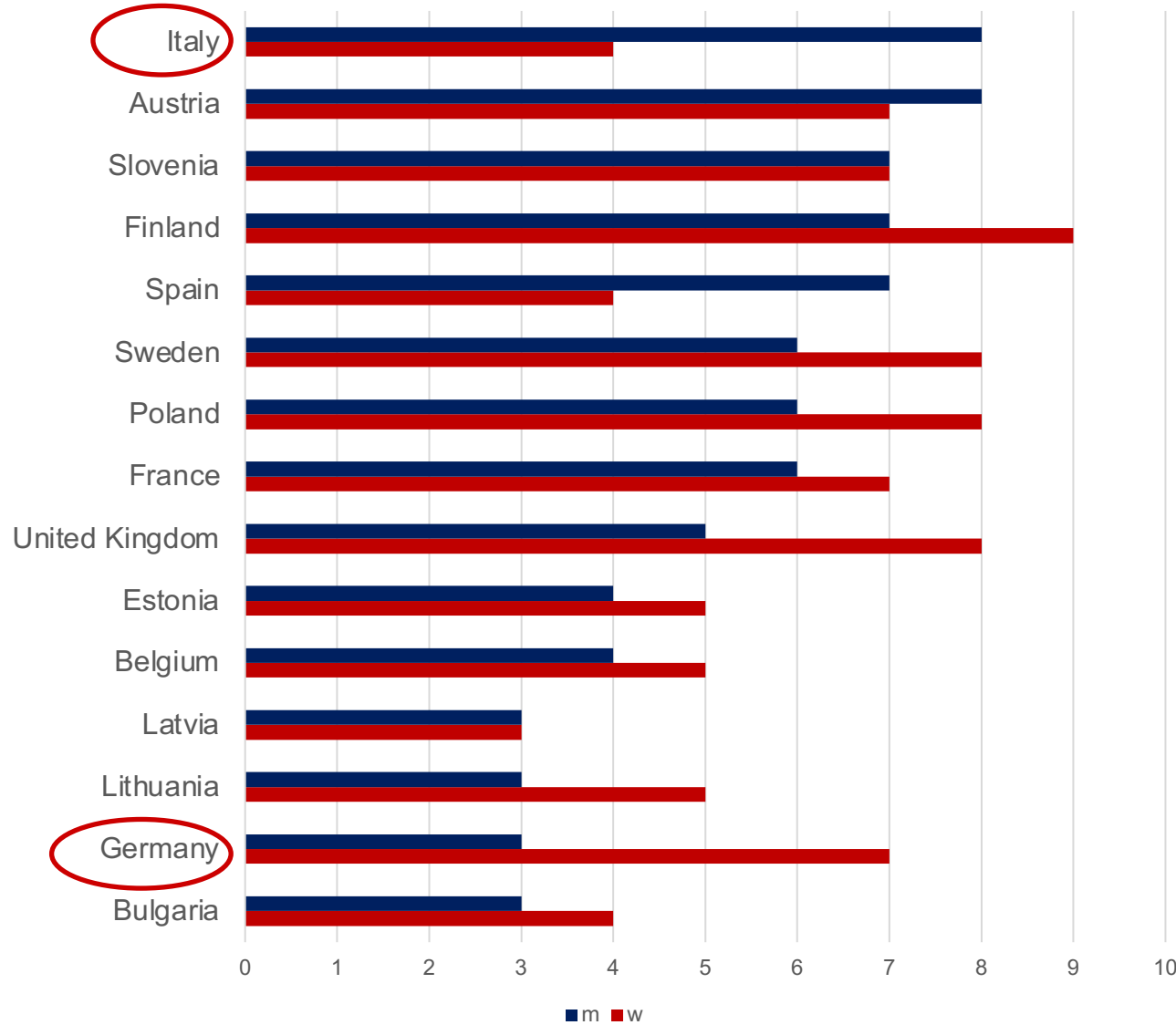


SWEDEN		
	m	w
Total	-20	-15
private market	-6	-2
private non-market	-2	-8
public	-12	-5

SPAIN		
	m	w
Total	-10	-17
private market	-7	1
private non-market	2	-17
public	-5	-1

Diversity of intergenerational transfers to ELDERLY across Europe

transfers received in old age (YL)



ITALY

	m	w
Total	8	4
private market	-2	1
private non-market	3	-2
public	7	5

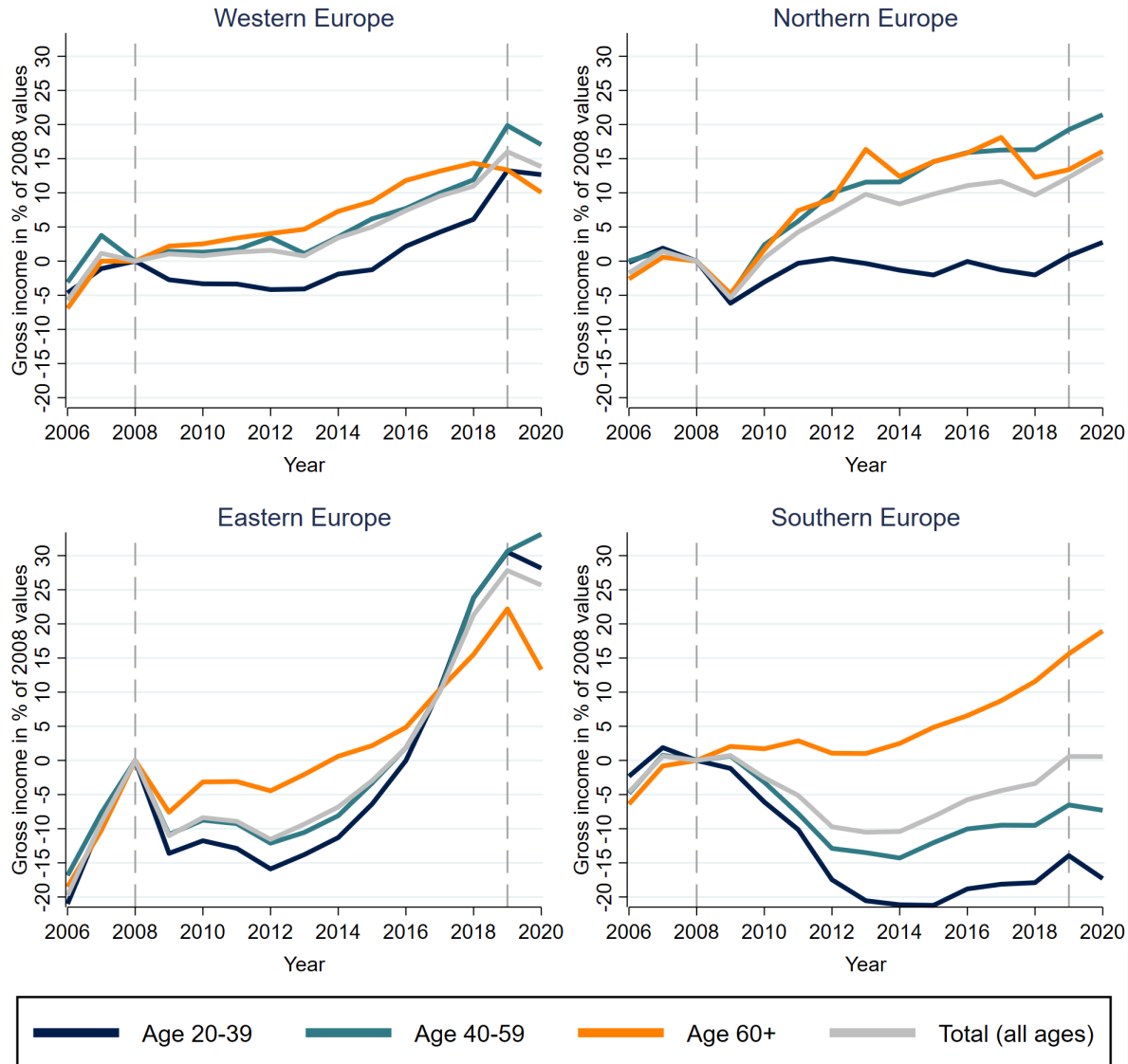
GERMANY

	m	w
Total	3	7
private market	-2	2
private non-market	1	-1
public	5	6

Increasing intergenerational inequality

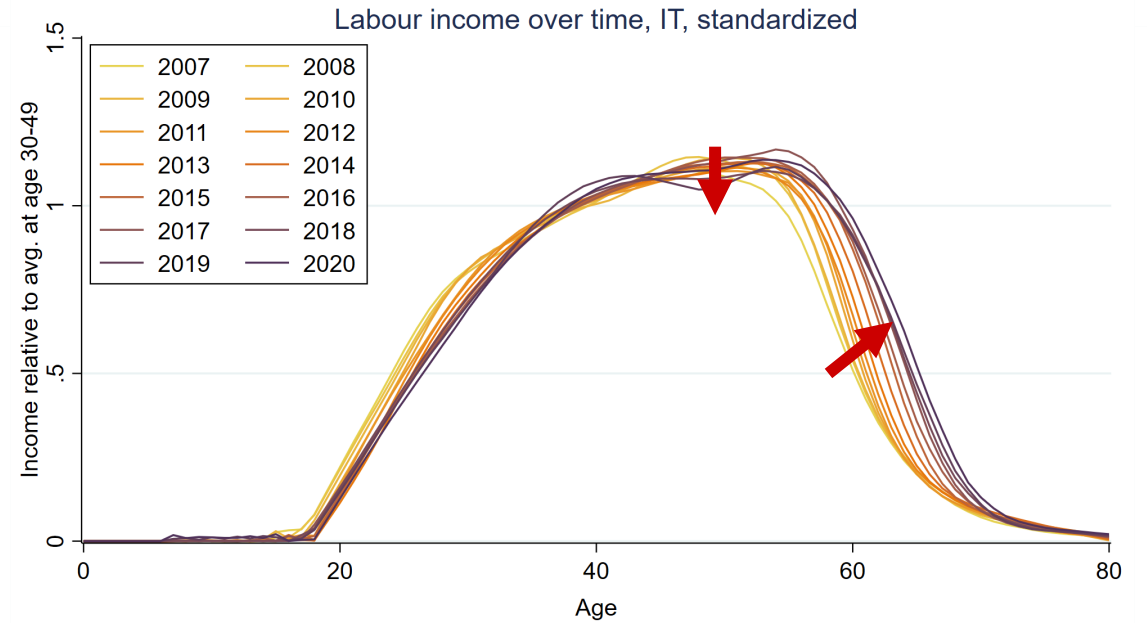
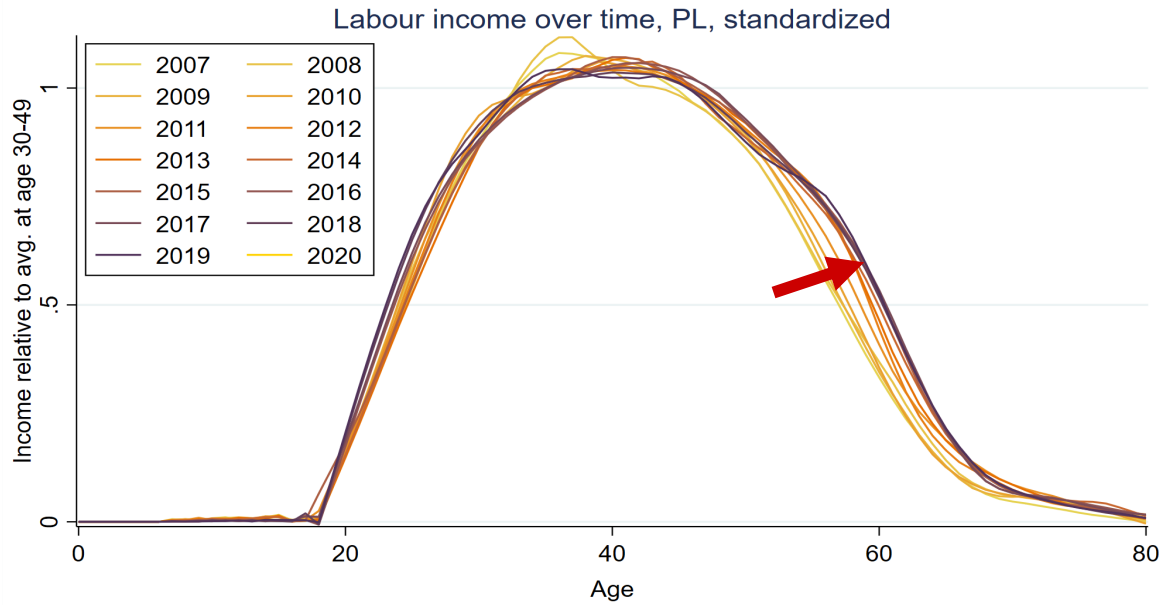
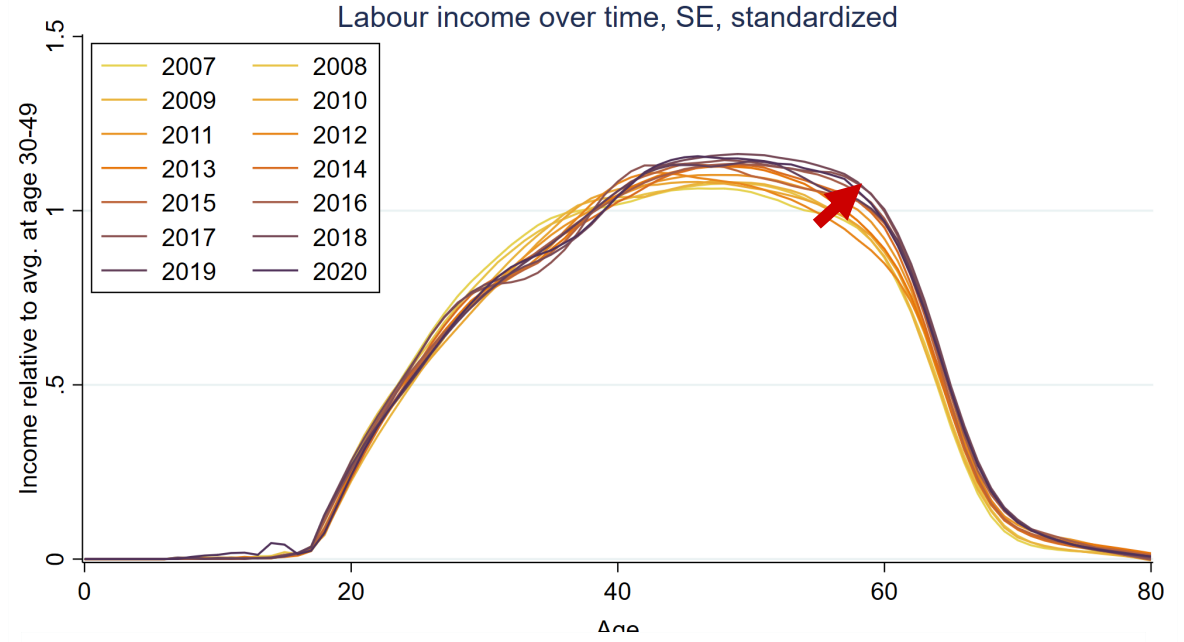
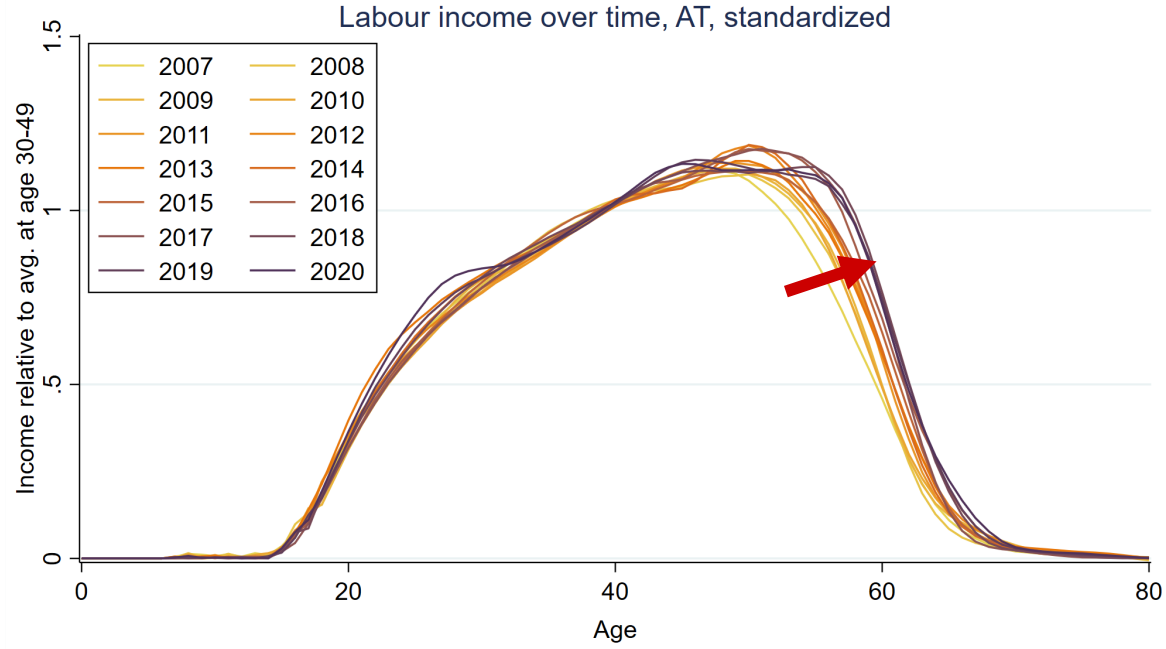


Changes in age-specific gross income in % of 2008 values by region

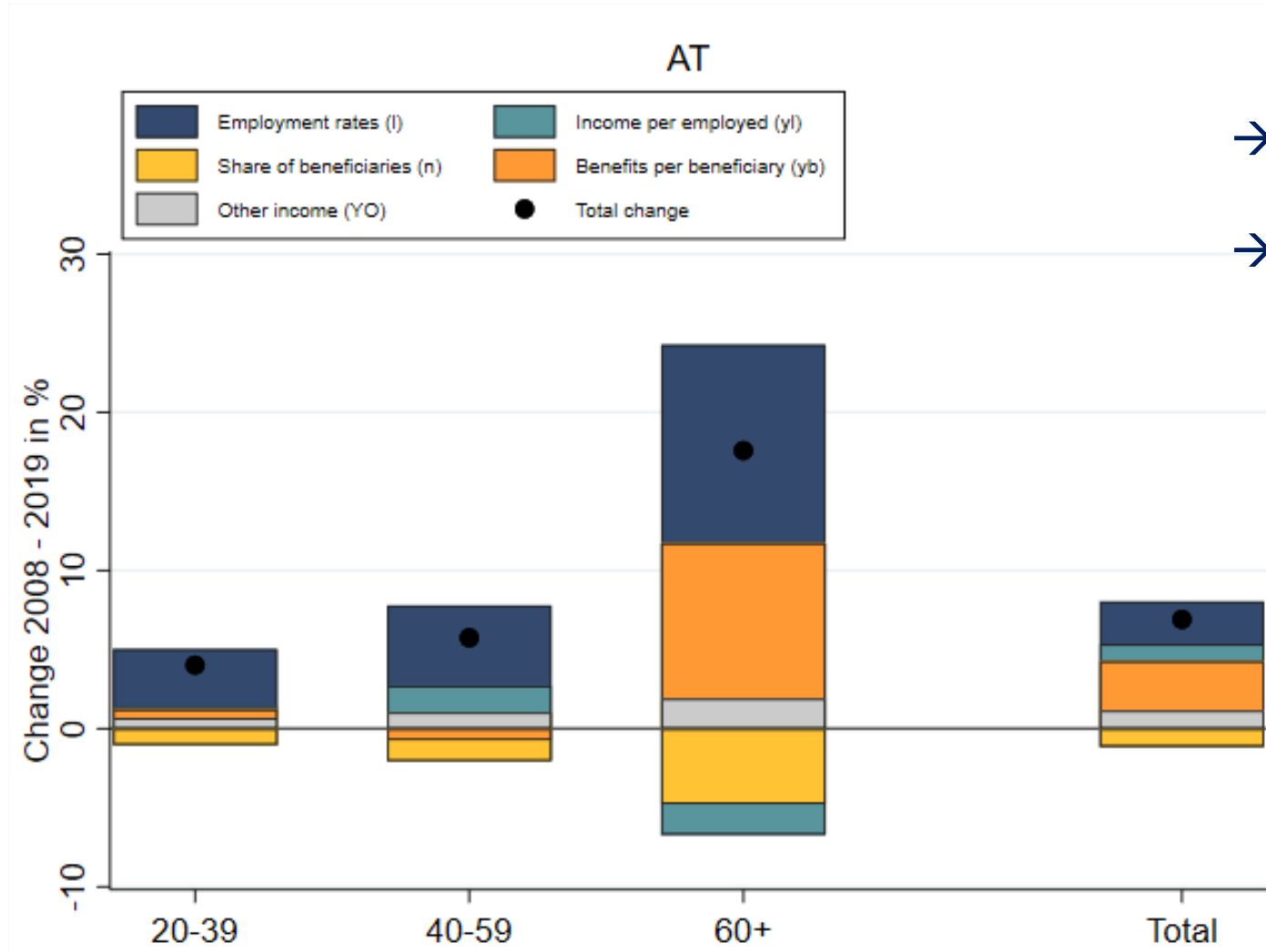


Income of the **young** decreased relative to income of the **older population** (except in Eastern Europe).

Changes in age specific income over time, 2007-2020



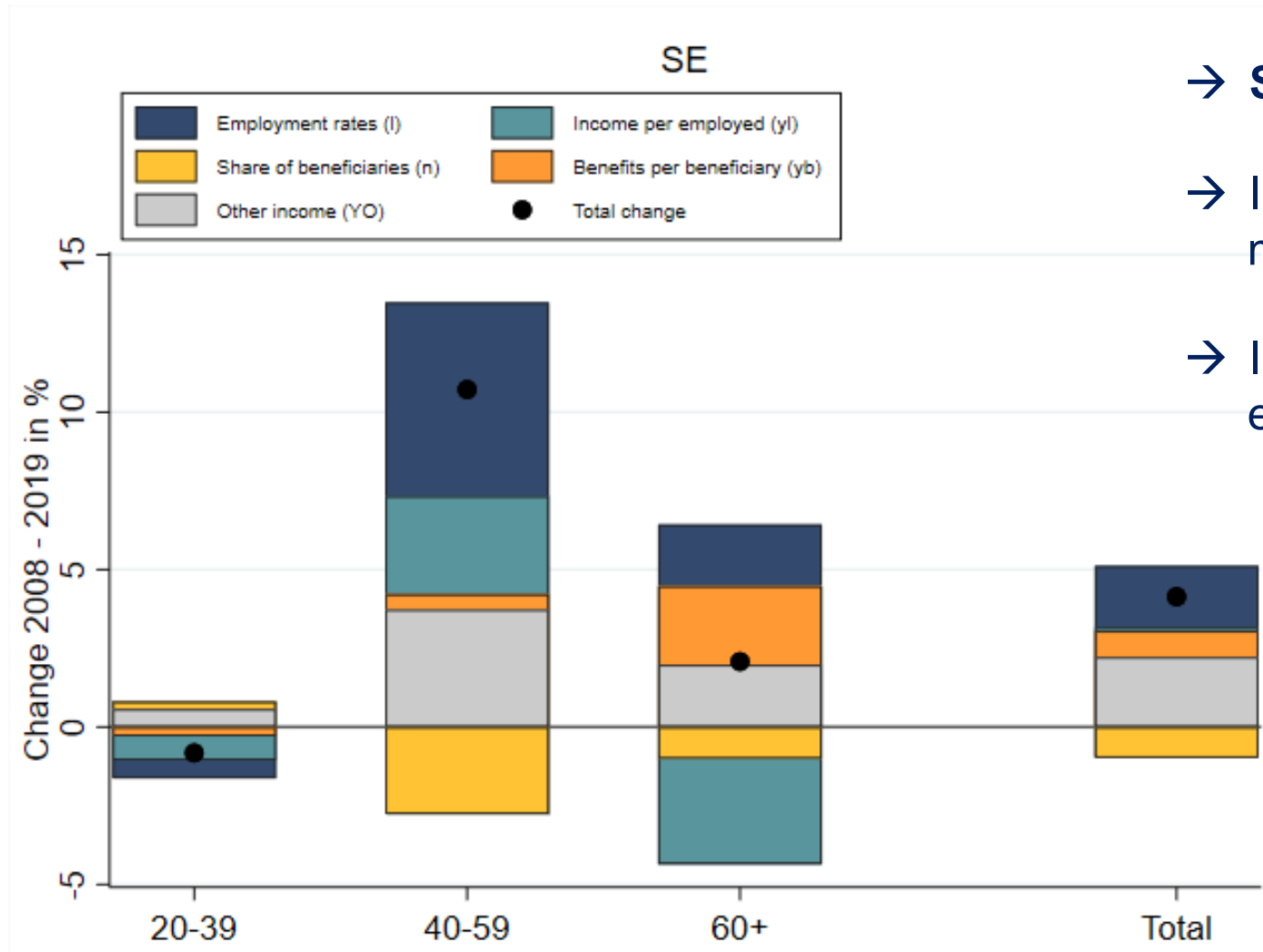
The role of employment, wages and social transfers for age-specific income trends (2008-2019), AUSTRIA



→ Stagnating income for the **young**

→ Increasing per capita pensions and higher employment for the **older** population

The role of employment, wages and social transfers for age-specific income trends (2008-2019), SWEDEN

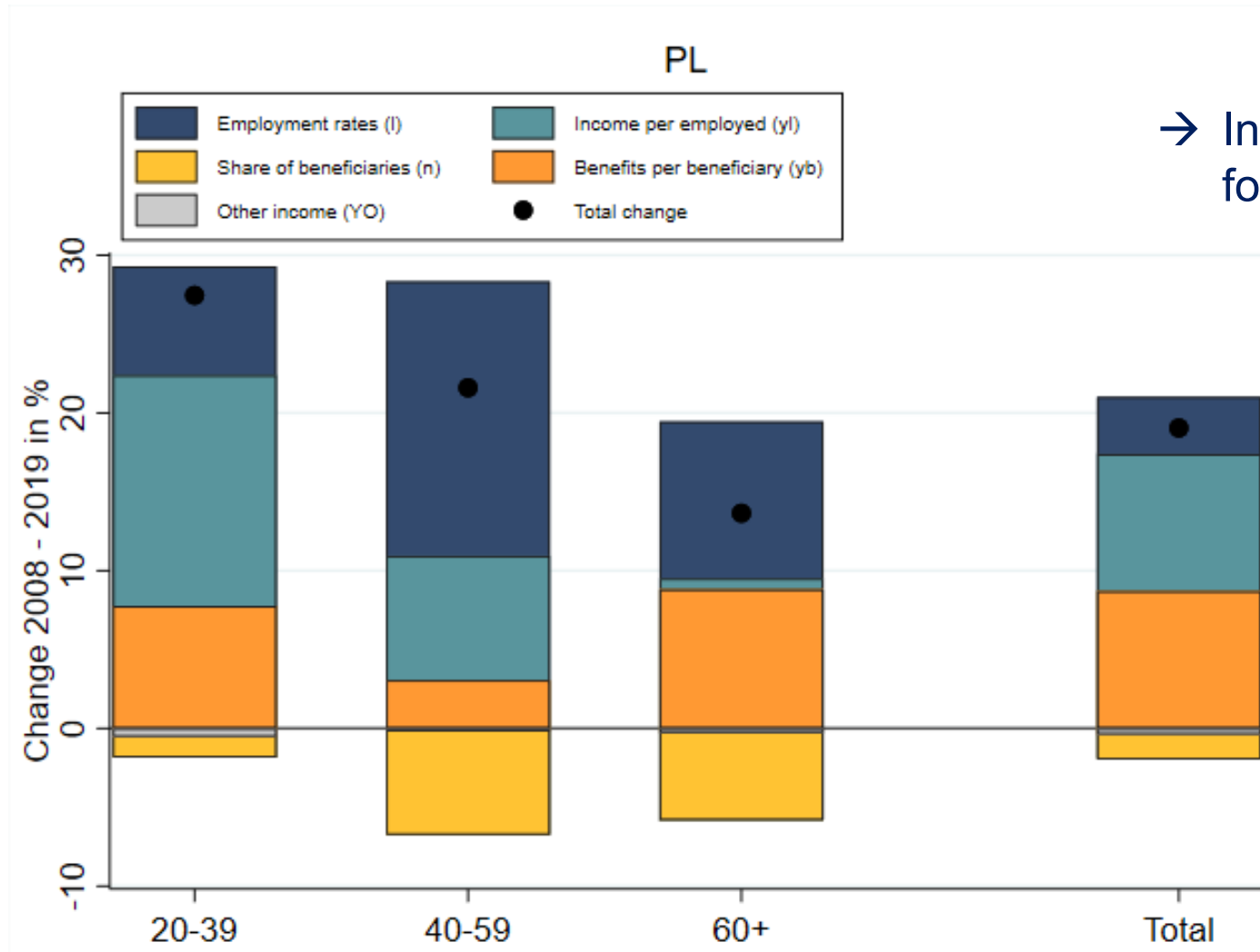


→ Stagnating income for the **young**

→ Increasing employment and income for middle aged

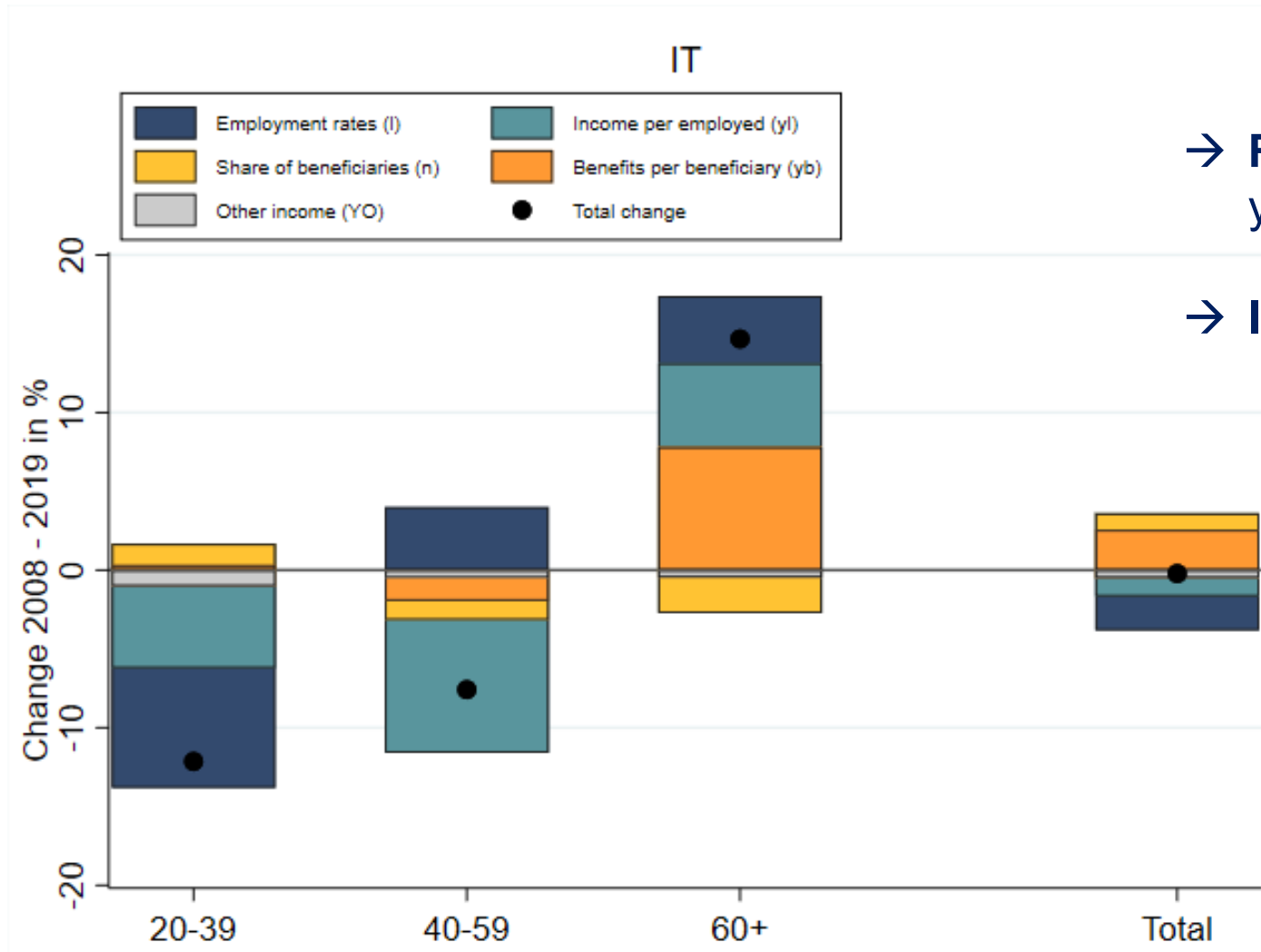
→ Increasing employment and benefits for elderly

The role of employment, wages and social transfers for age-specific income trends (2008-2019), POLAND



→ Increasing **employment, income and benefit** for all age groups

The role of employment, wages and social transfers for age-specific income trends (2008-2019), ITALY



→ **Reduction in employment and income** for the young and middle aged

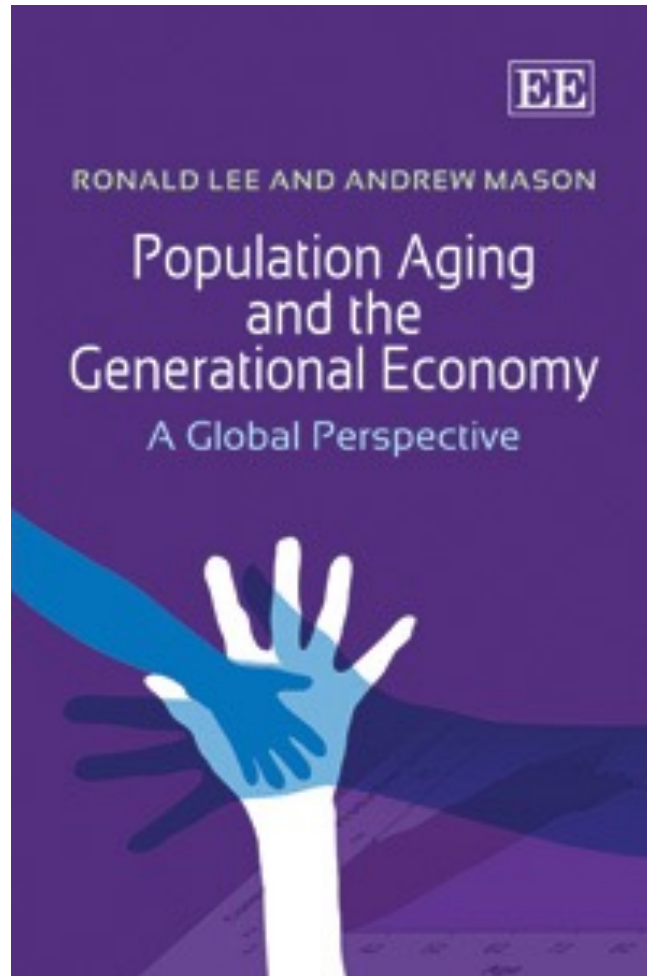
→ **Increasing benefits** for elderly

Summary/Discussion



- **Diversity in ageing** implies **diversity of challenges**
- **Economic life cycle** determines economic challenge of demographic change
- **Role of public sector** shaped by **reforms & changing age structure.**
- **Private transfers** are an important contribution to the generational economy
- **Decreasing** income of young and **increasing** employment & benefits for old

“... the main danger of population ageing is the lack of adaptation to a new demographic situation.” (Börsch-Supan, 2013)



“Over coming decades, changes in population age structure will have profound implications for the macroeconomy, influencing **economic growth, generational equity, human capital, saving and investment, and the sustainability of public and private transfer systems.** **How the future unfolds will depend on key actors in the generational economy: governments, families, financial institutions, and others.** This path-breaking book provides a comprehensive analysis of the macroeconomic effects of changes in population age structure across the globe.”

END