



Ageing Europe – An Application of
National Transfer Accounts for Explaining
and Projecting Trends in Public Finances

This project has received funding from the European
Union's Seventh Framework Programme for research,
technological development and demonstration under
grant agreement no 613247.

<http://www.agenta-project.eu>

National Transfer Accounts in Europe

Bernhard Hammer and Alexia Prskawetz

Wittgenstein Centre for Demography and Global Human Capital

Tanja Istenic

University Ljubljana



Wittgenstein Centre
FOR DEMOGRAPHY AND
GLOBAL HUMAN CAPITAL

1. **The AGENTA Project**
2. **The National Transfers Accounts for the EU Countries**
3. **Using EU-NTA: A Sustainability Indicator for the Public Transfer System**

AGENTA

The AGENTA Project: Aims

Aim of the AGENTA Project:

- explaining the past and forecasting the future of **public transfers** in the light of demographic change in the European Union.
- special emphasis on the links between the **public and the private sectors** (particularly households) in providing transfers to children and elderly.

Provision of evidence based policy proposals to ensure long-term sustainability of public finances in Europe.

Components of AGENTA:

- Generation of National Transfer Accounts
- Generation of National Time Transfer Accounts (NTA for the household economy)
- Explaining and understanding the intergenerational redistribution of resources
- Indicators and measures of important dimensions of the economic life cycle and intergenerational transfers
- Projections and reform scenarios

NTAs introduce the age dimension into the System of National Accounts (SNA) and measure **age-specific income, public and private transfers** between age groups, as well as the age-specific use of disposable income **for saving and consumption.**

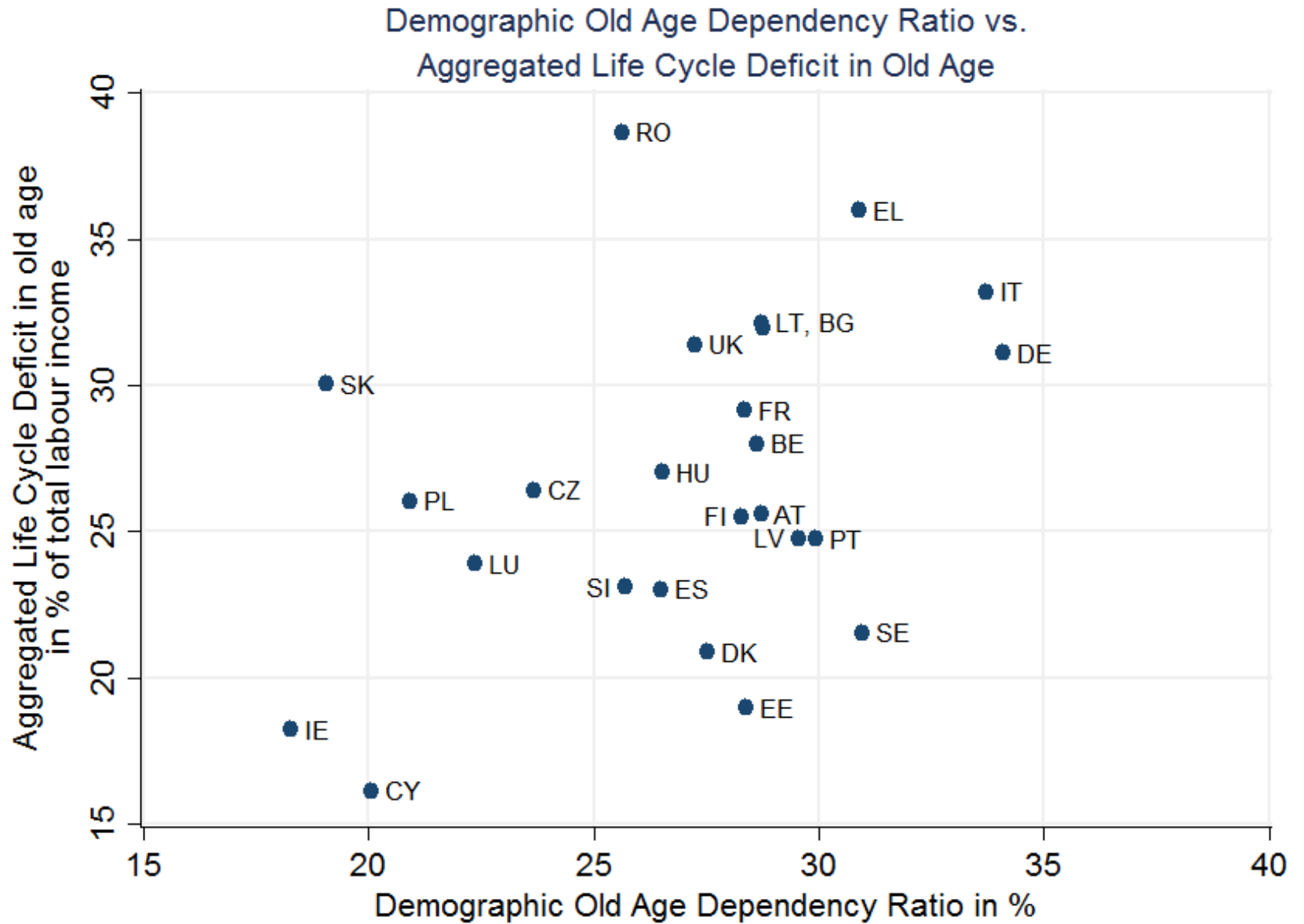
Global NTA

- NTAs generated by research teams in NTA countries
- Disadvantages: Different data sources, differences in the applied methodology

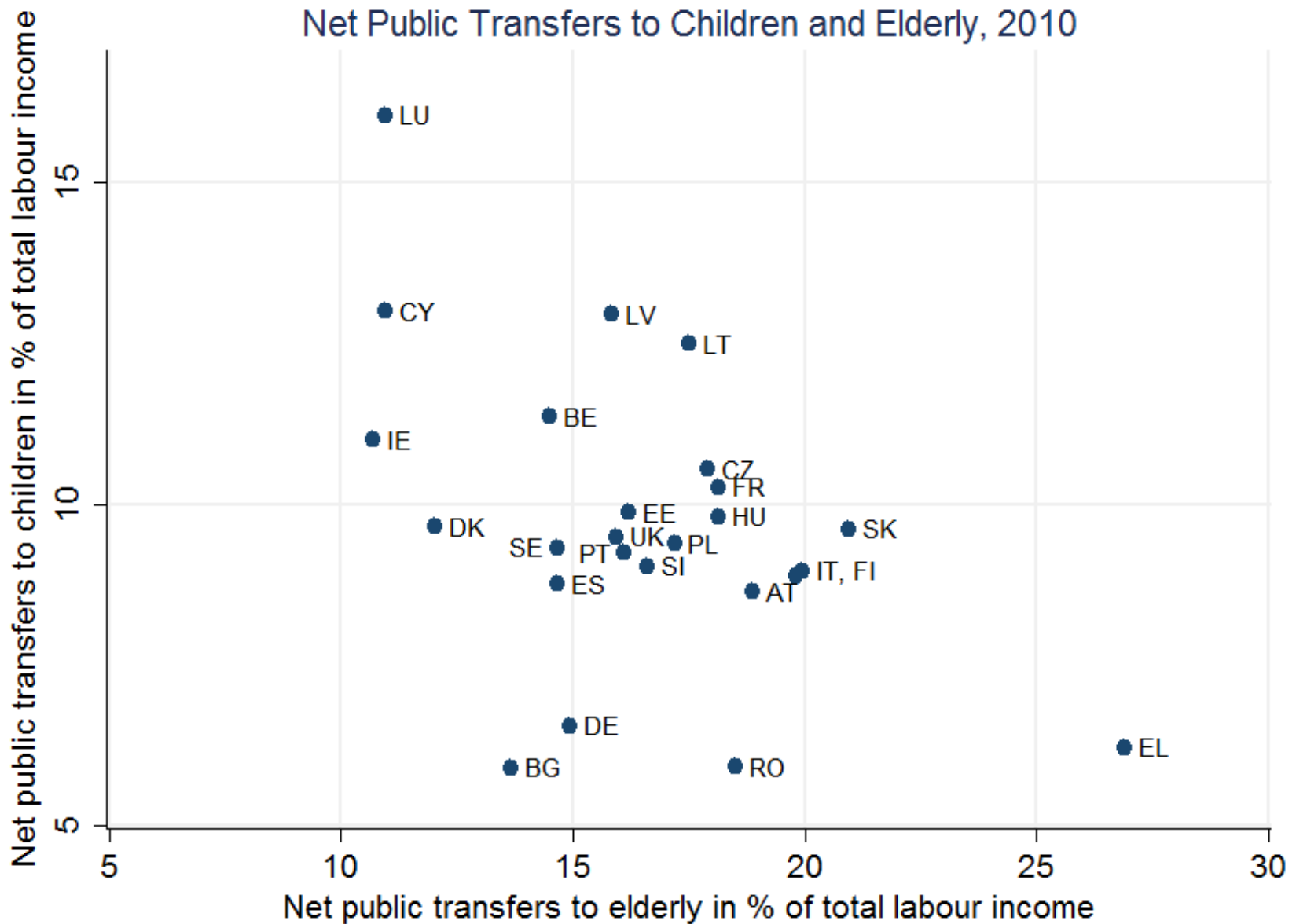
National Transfer Accounts for Europe:

- Based on **comparable and harmonized data sources** from Eurostat: European System of Accounts, EU-SILC, HBS
- **Harmonized Methodology**
- NTA **by Gender** for all Countries
- Several extensions: NTA for **several years**, NTA **by education** and NTA **by migration status**

Dependency Ratios



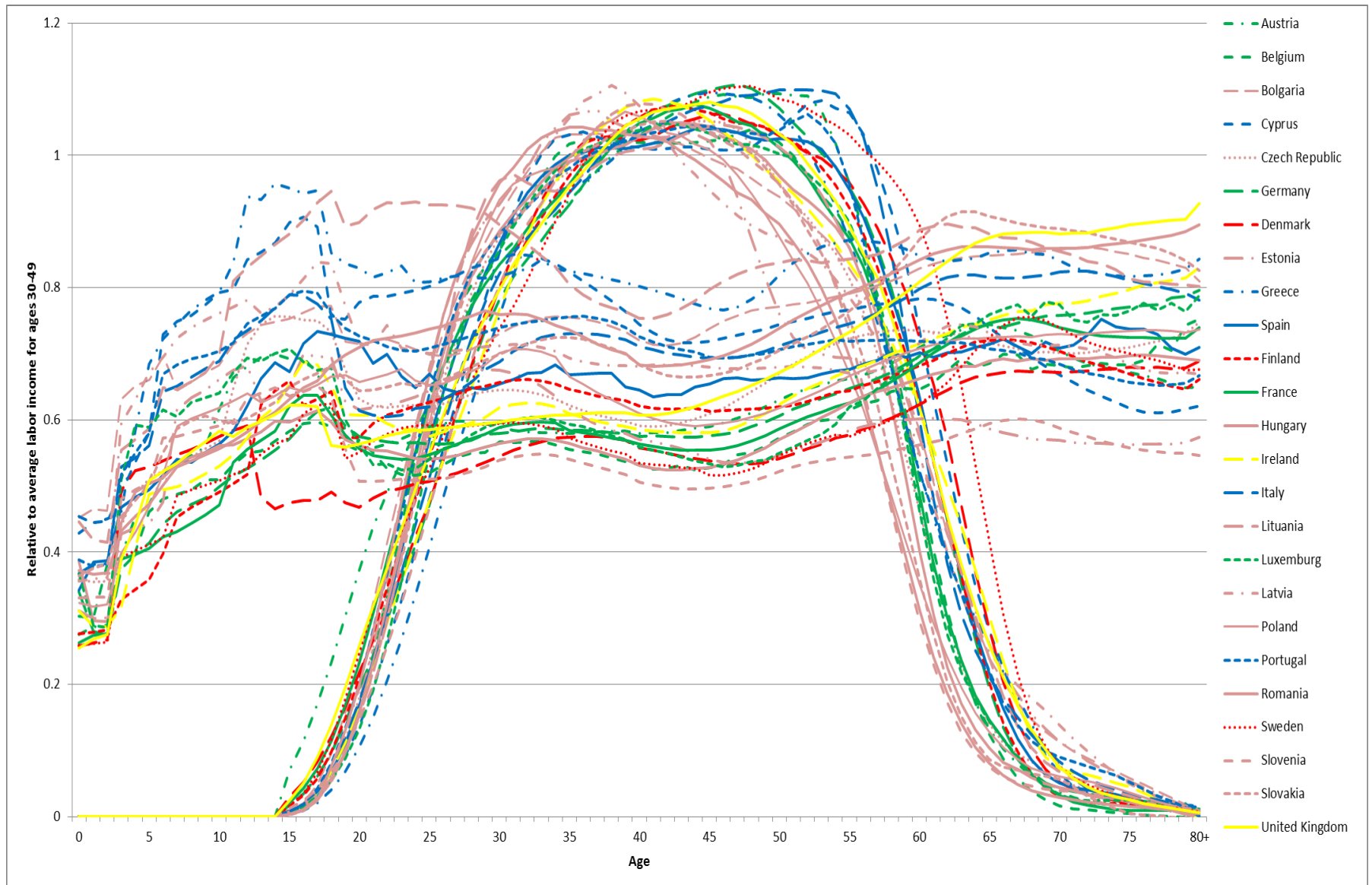
Public Transfers



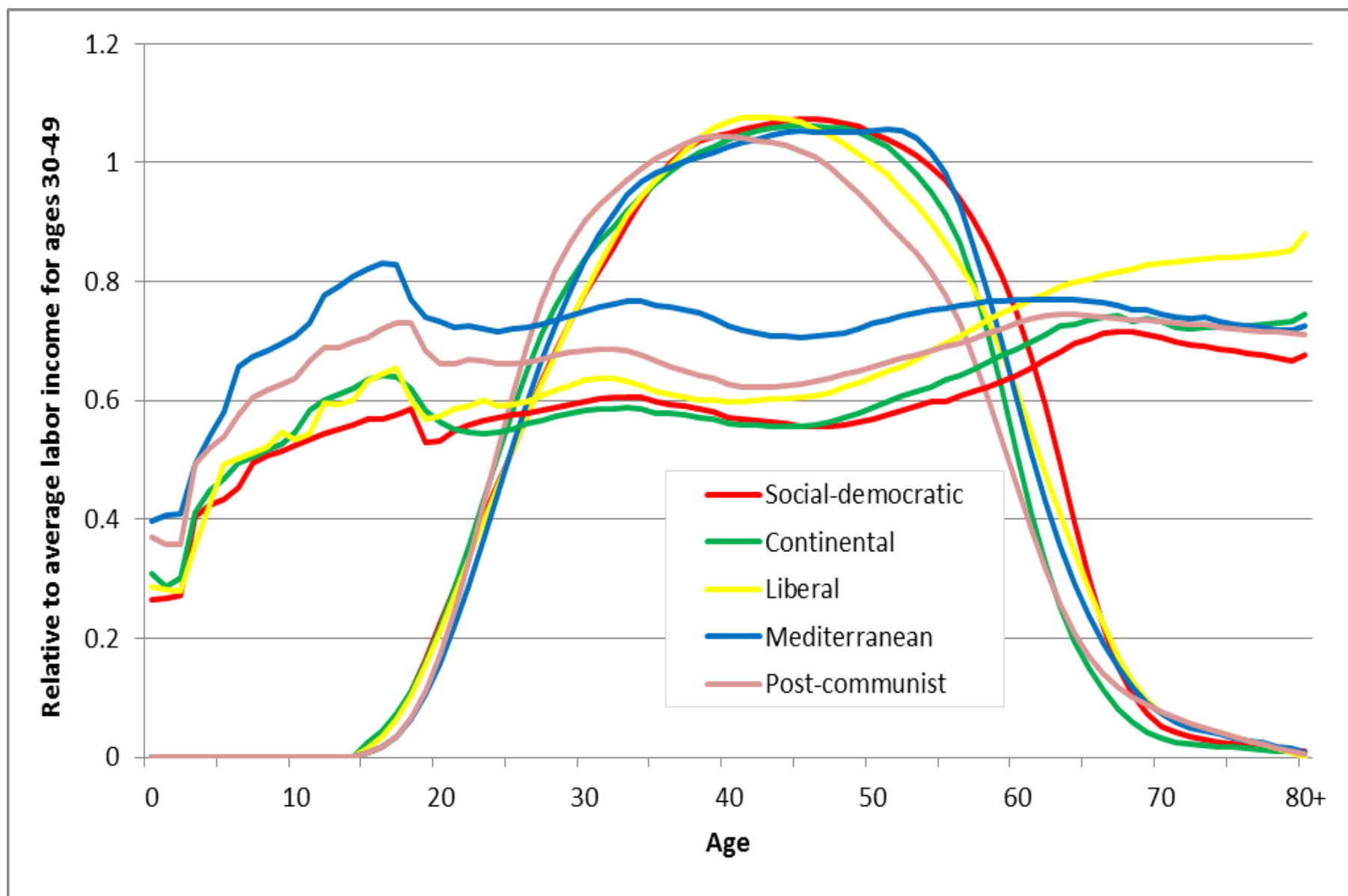
The National Transfers Accounts for the EU Countries

Tanja Istenič
Faculty of Economics, University of Ljubljana

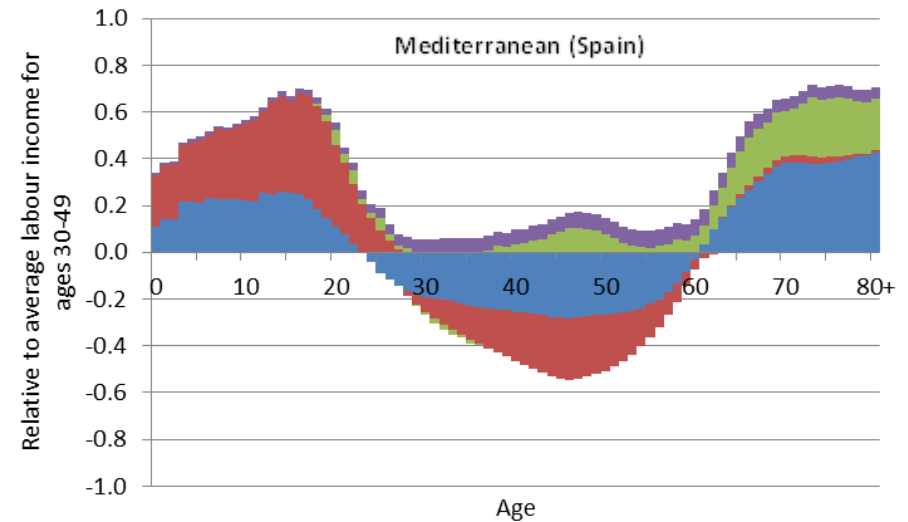
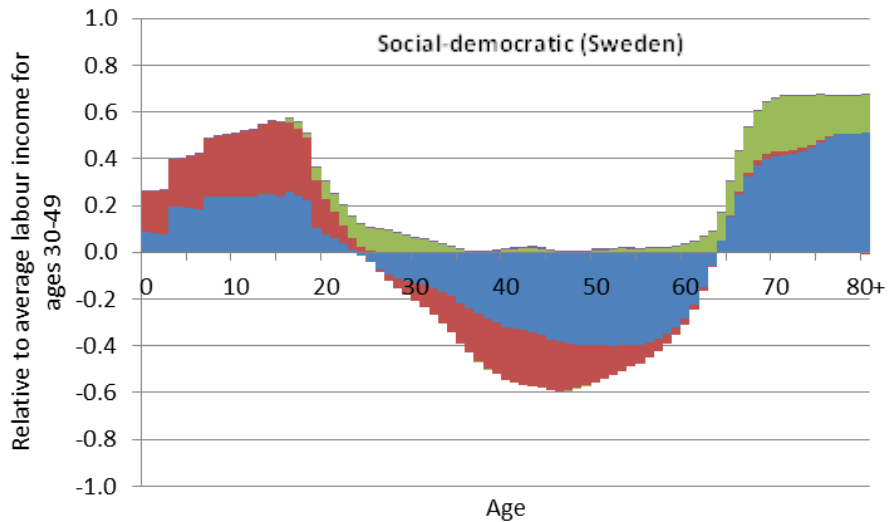
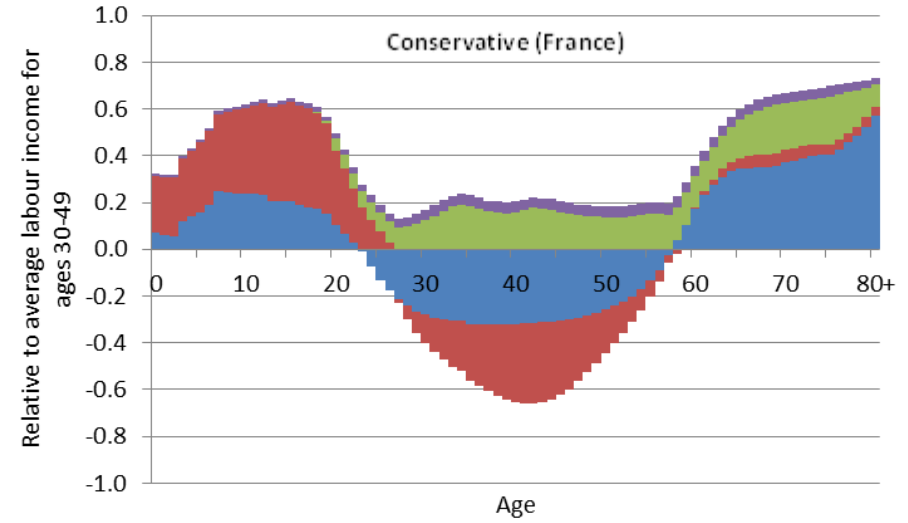
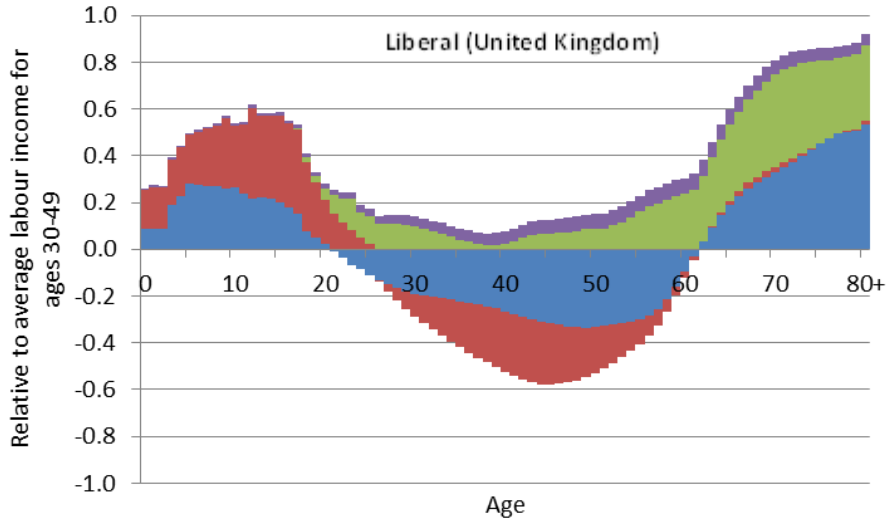
Labour Income and Consumption in the EU Countries, 2010



Average Labour Income and Consumption by Welfare Regime

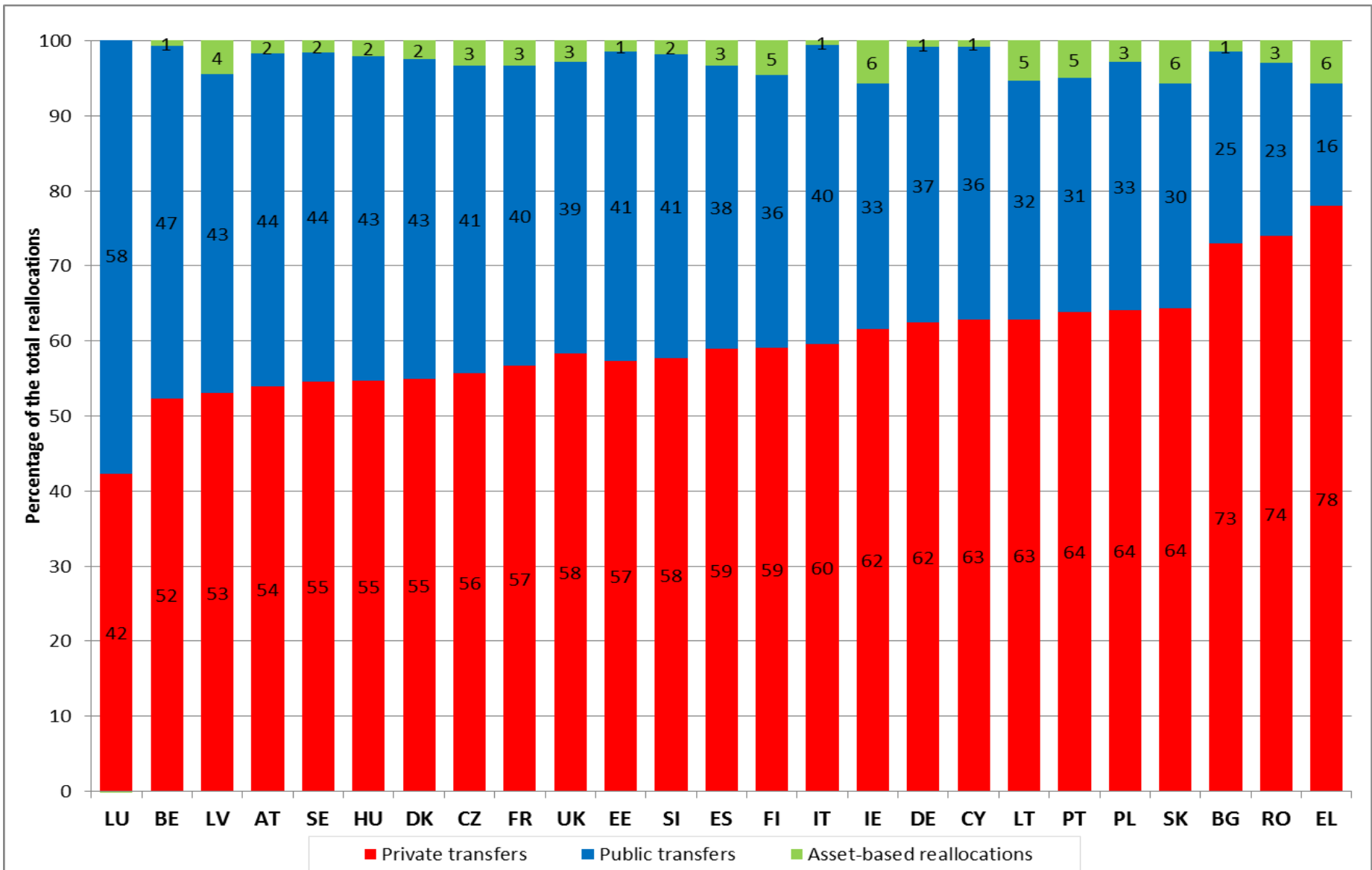


Life Cycle Deficit Financing in the United Kingdom, France, Sweden and Spain

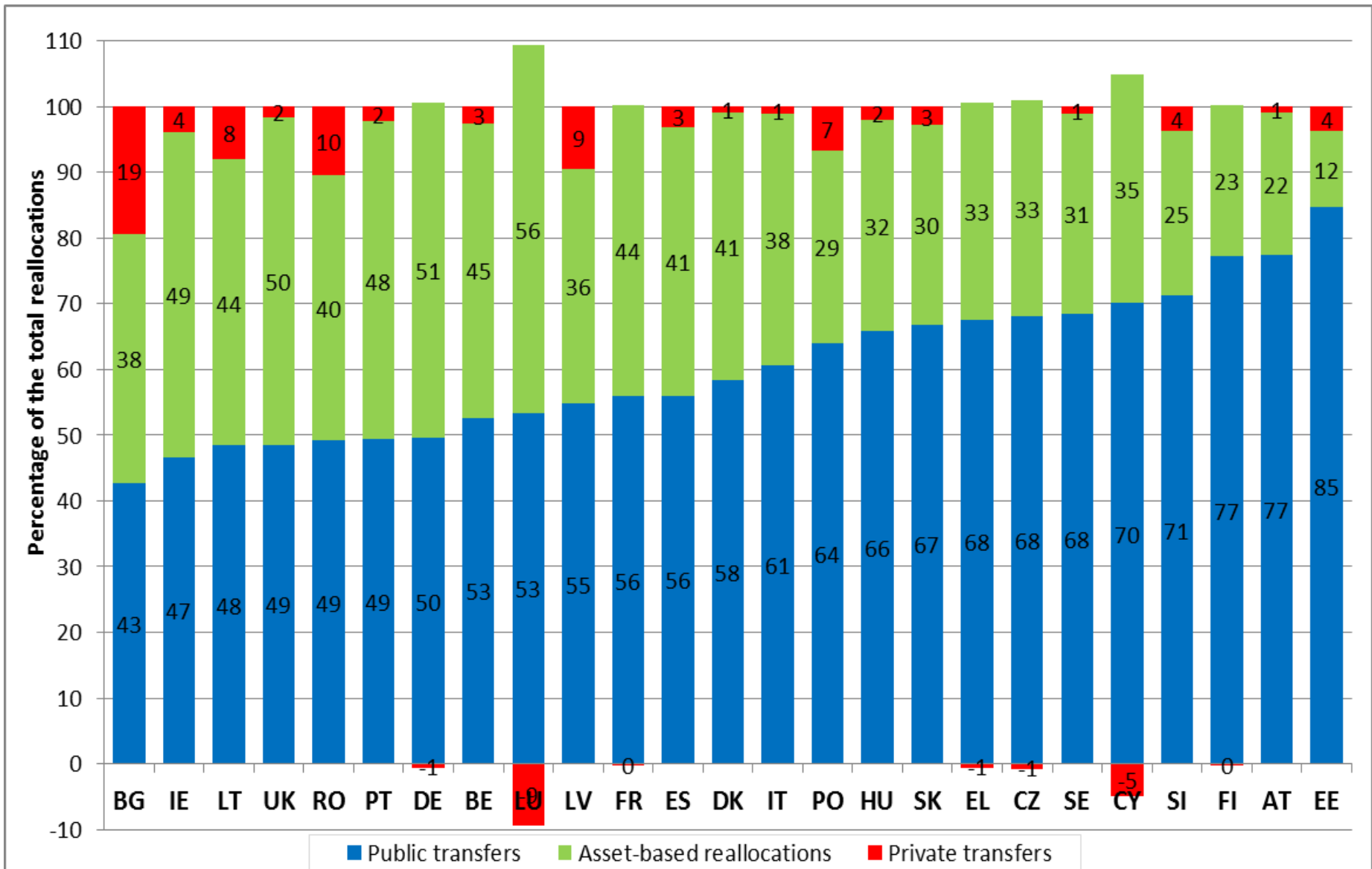


Public Transfers Private Transfers Private ABR Public ABR

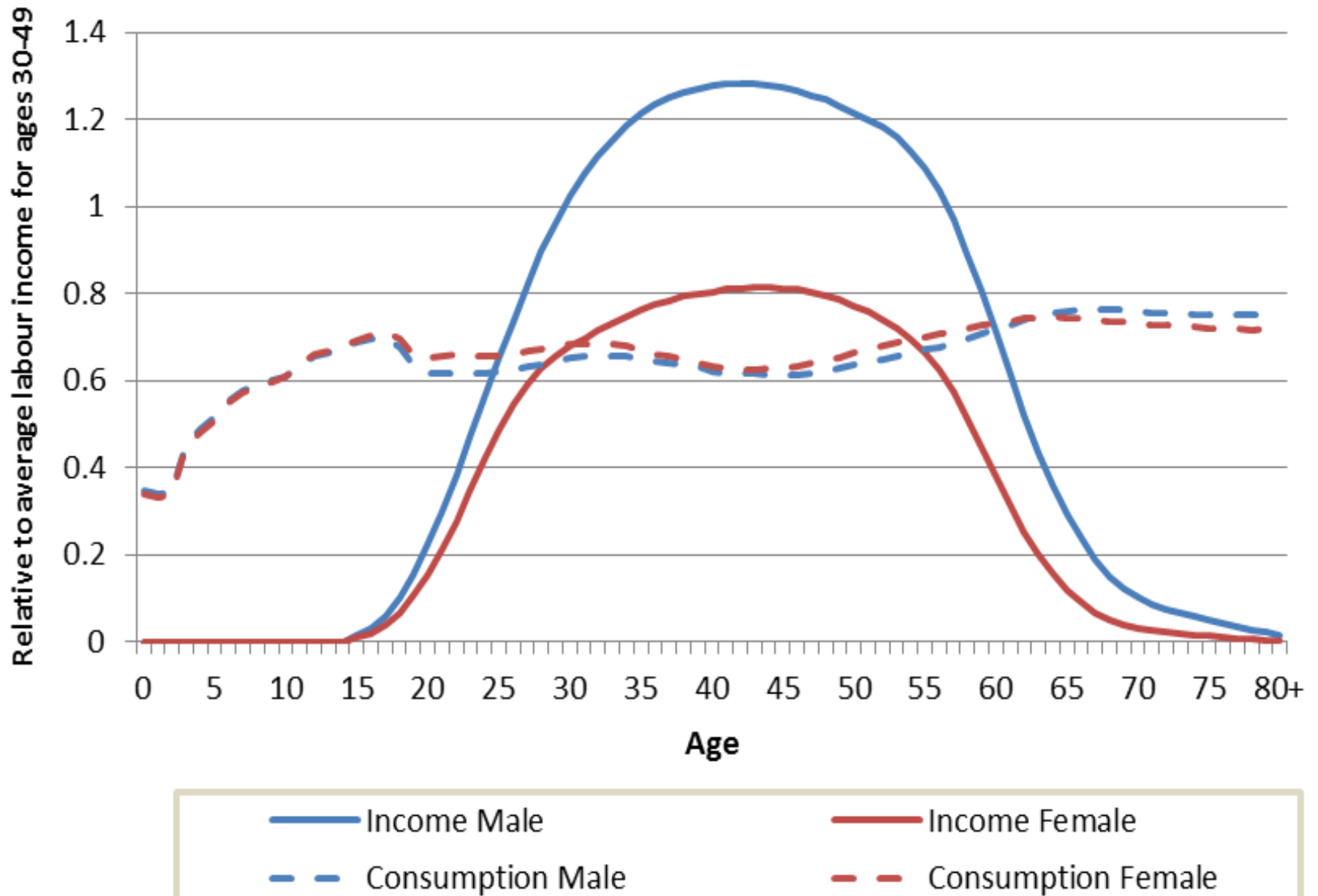
Life Cycle Deficit Financing for Ages 0-19



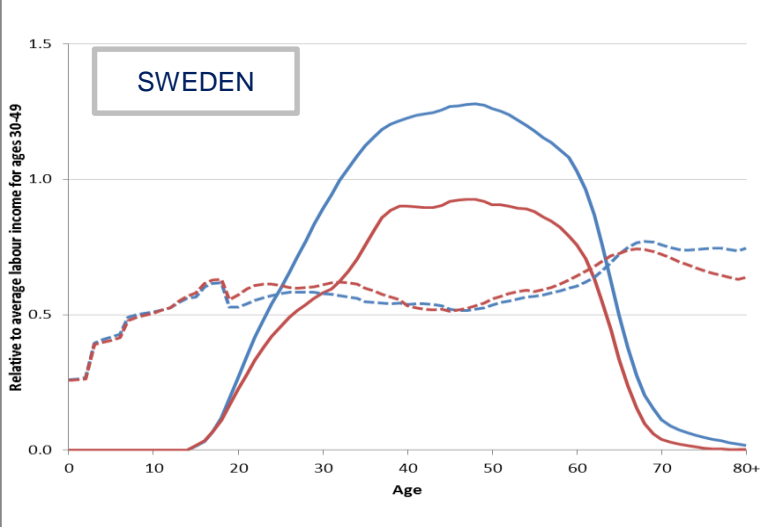
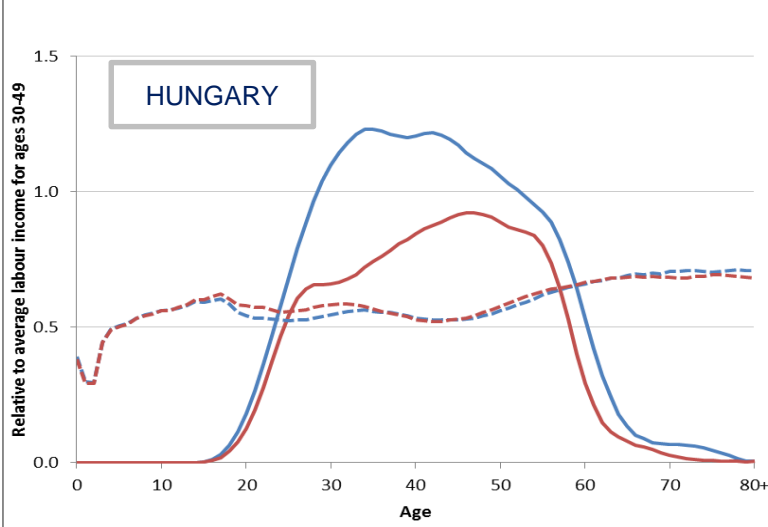
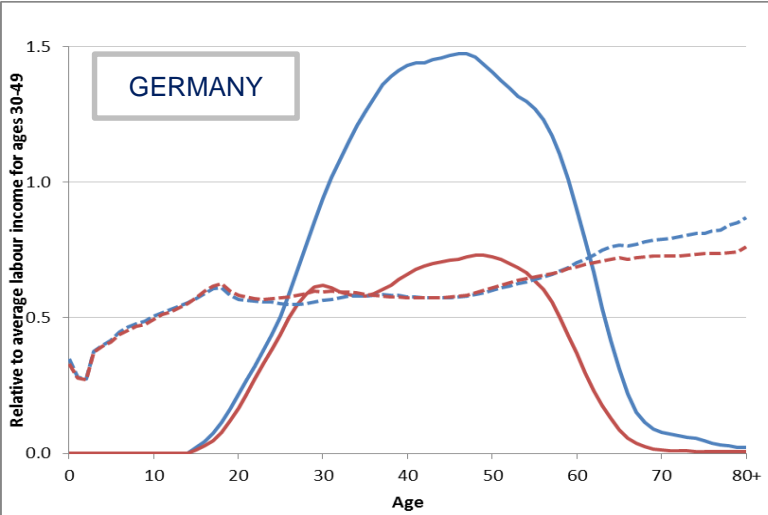
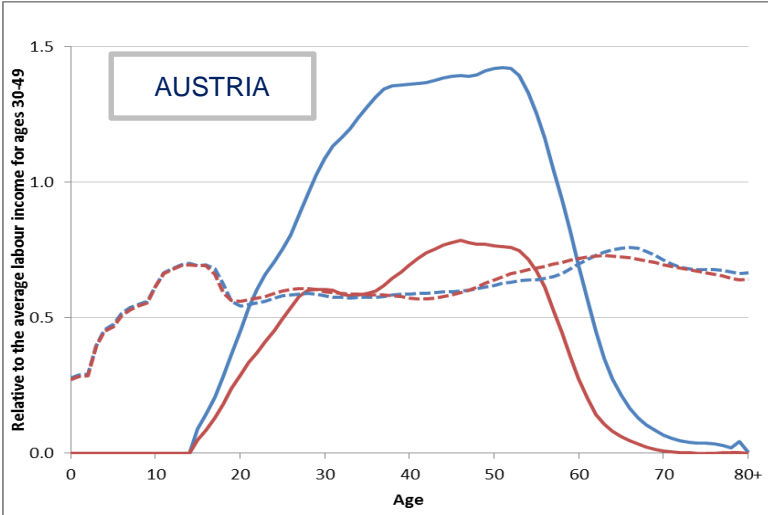
Life Cycle Deficit Financing for Ages 65+



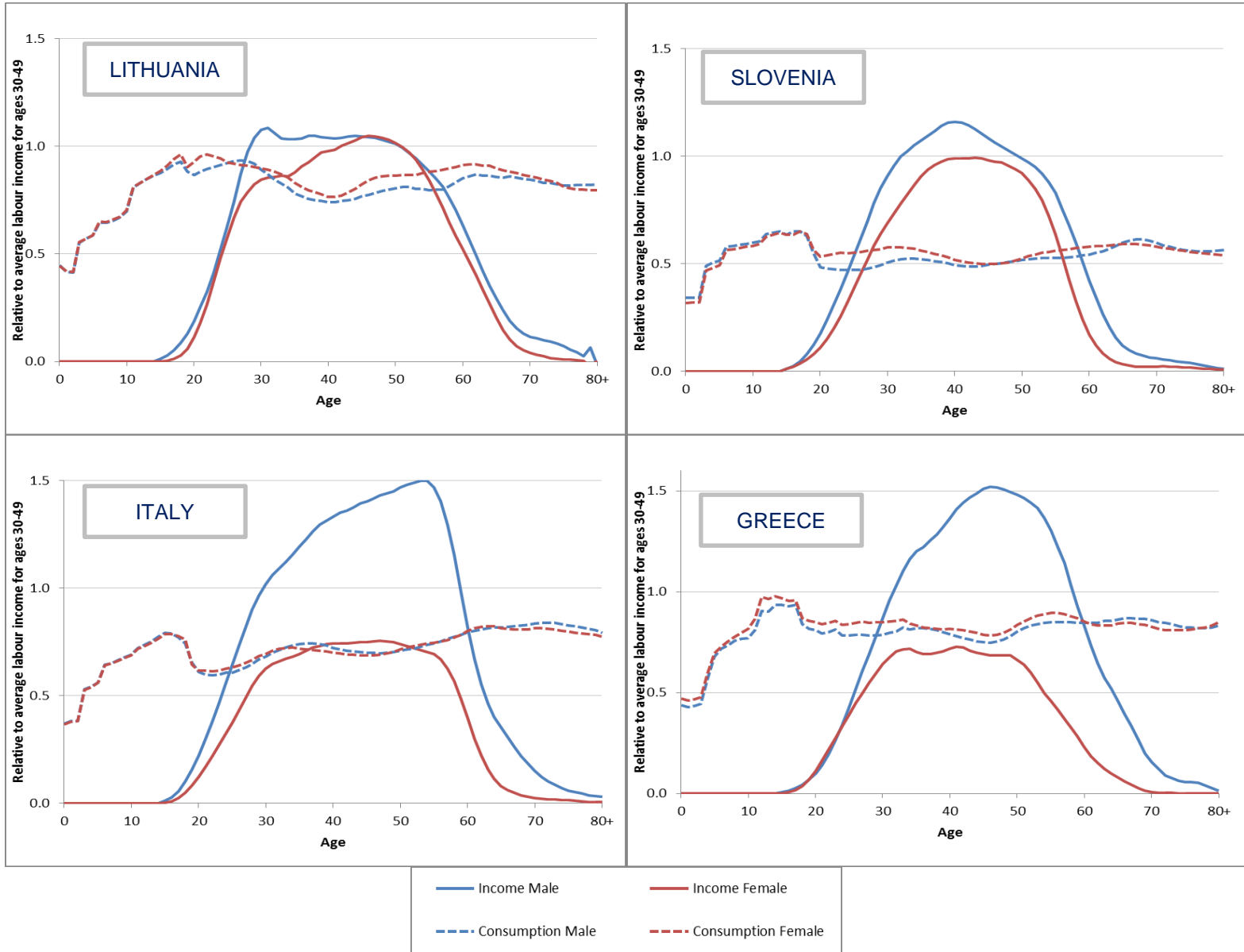
Labour Income and Consumption (EU 25 Average)



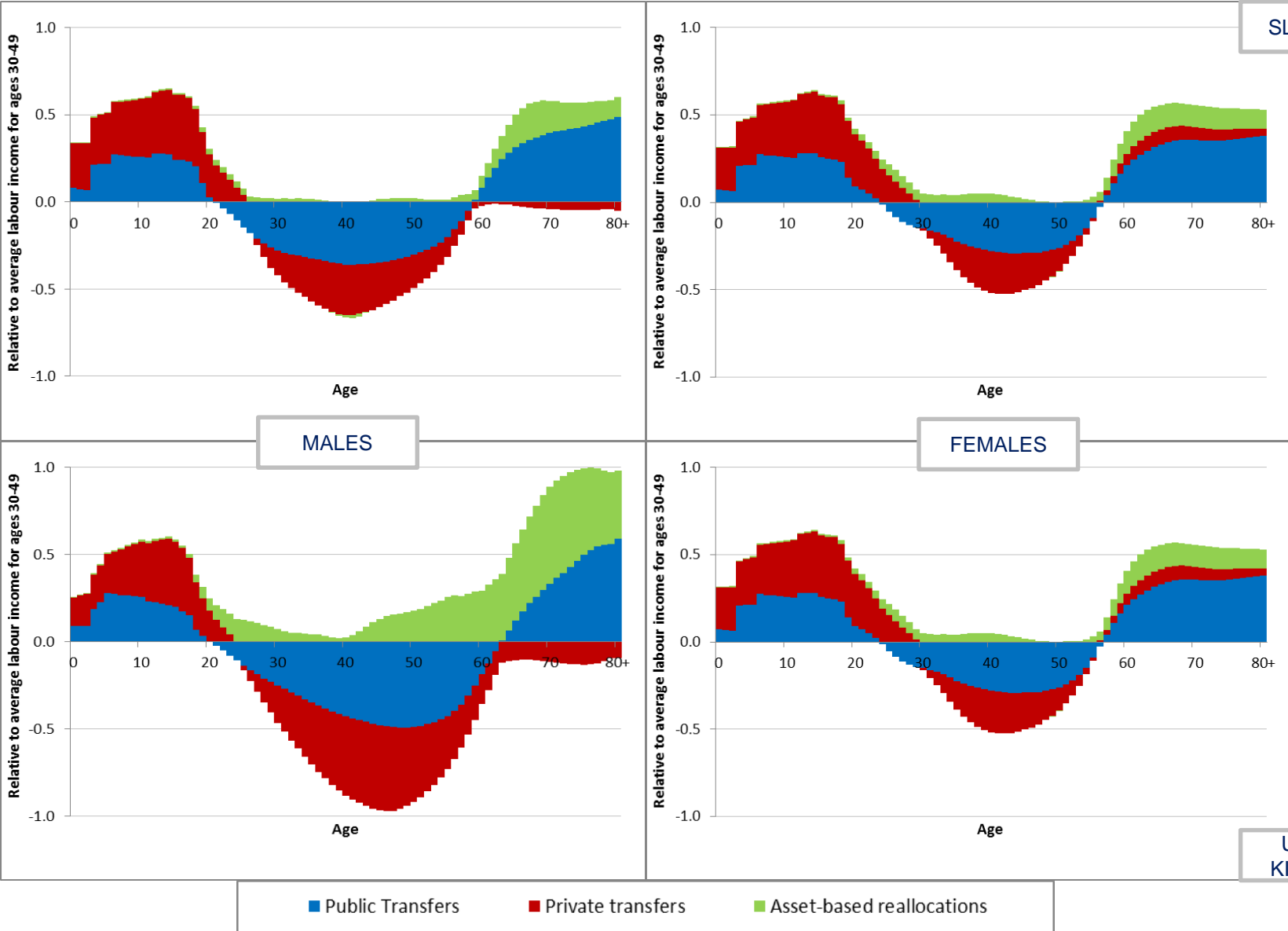
Labour Income and Consumption for Males and Females



Labour Income and Consumption for Males and Females



Life Cycle Deficit Financing for Males and Females



**Using NTA:
A Sustainability Indicator for the Public Transfer
System**

Bernhard Hammer
Wittgenstein Centre for Education and
Global Human Capital

The Human Capital Investment Gap - a NTA based sustainability indicator

Sustainability: How will the transfer system look like in 30-40 years?

Why is sustainability important?

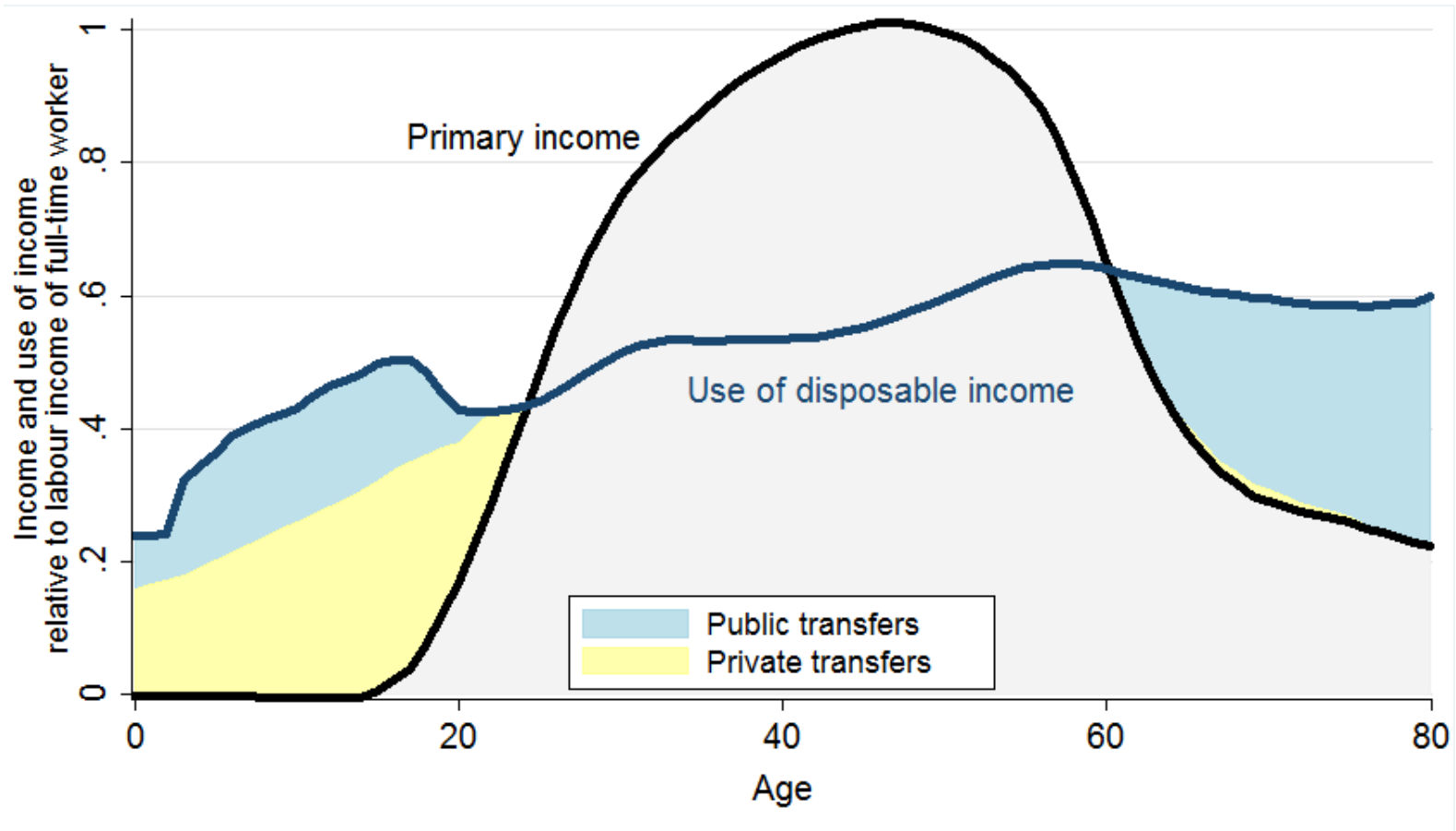
- Public transfers affect many important economic decisions, e.g. old age provision
- To make good and appropriate decisions individuals must be able to predict how public transfers will be affected by population ageing.

Literature:

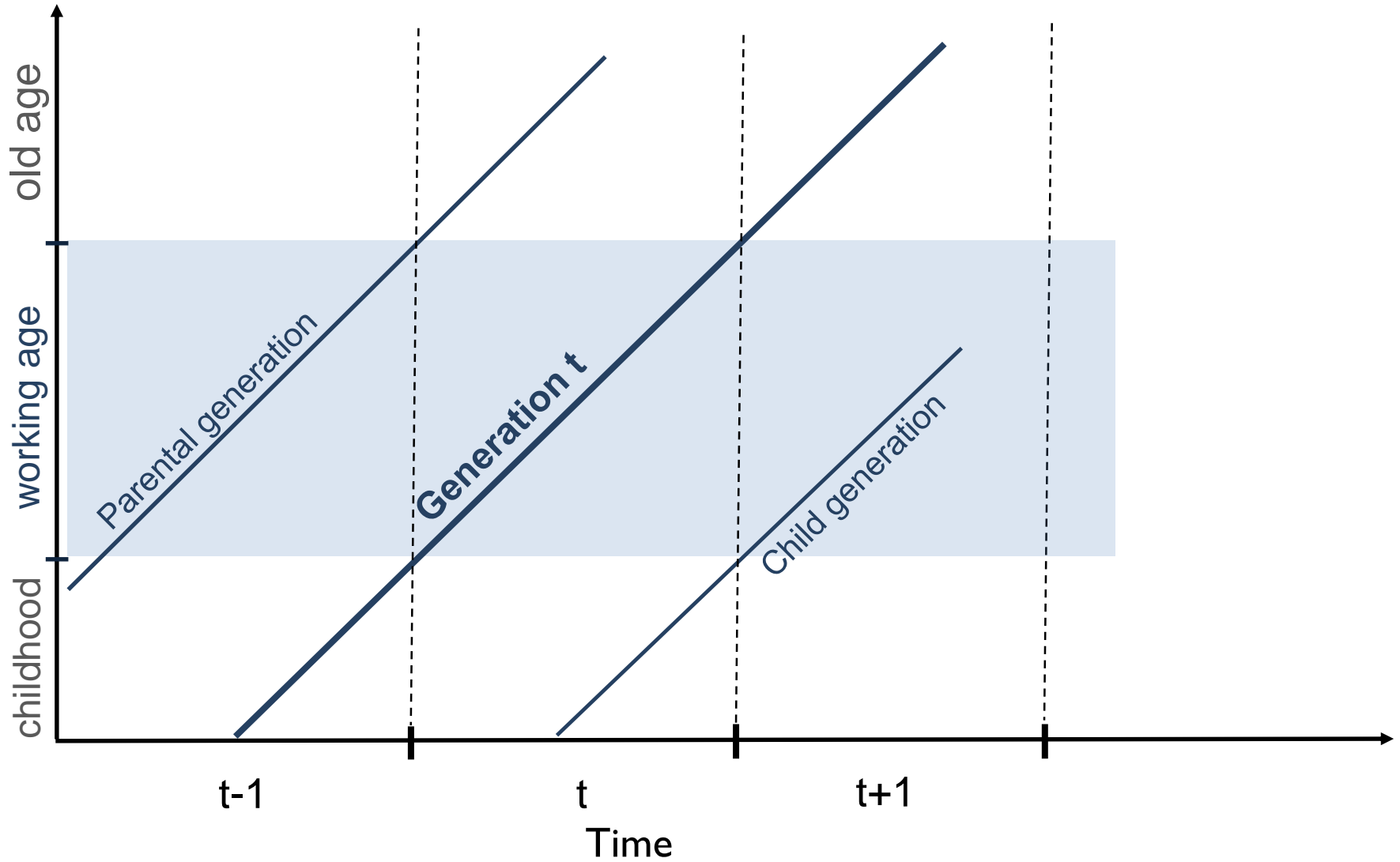
Sustainability of Inter-Generational Public Transfers in EU-Countries: A New Indicator Based on Projections of National Transfer Accounts. Bernhard Hammer, Alexia Fürnkranz-Prskawetz, Róbert I. Gál, Lili Vargha, Tanja Istenič. Download from: agenta-project.eu

Intergenerational Transfers – Cross Section

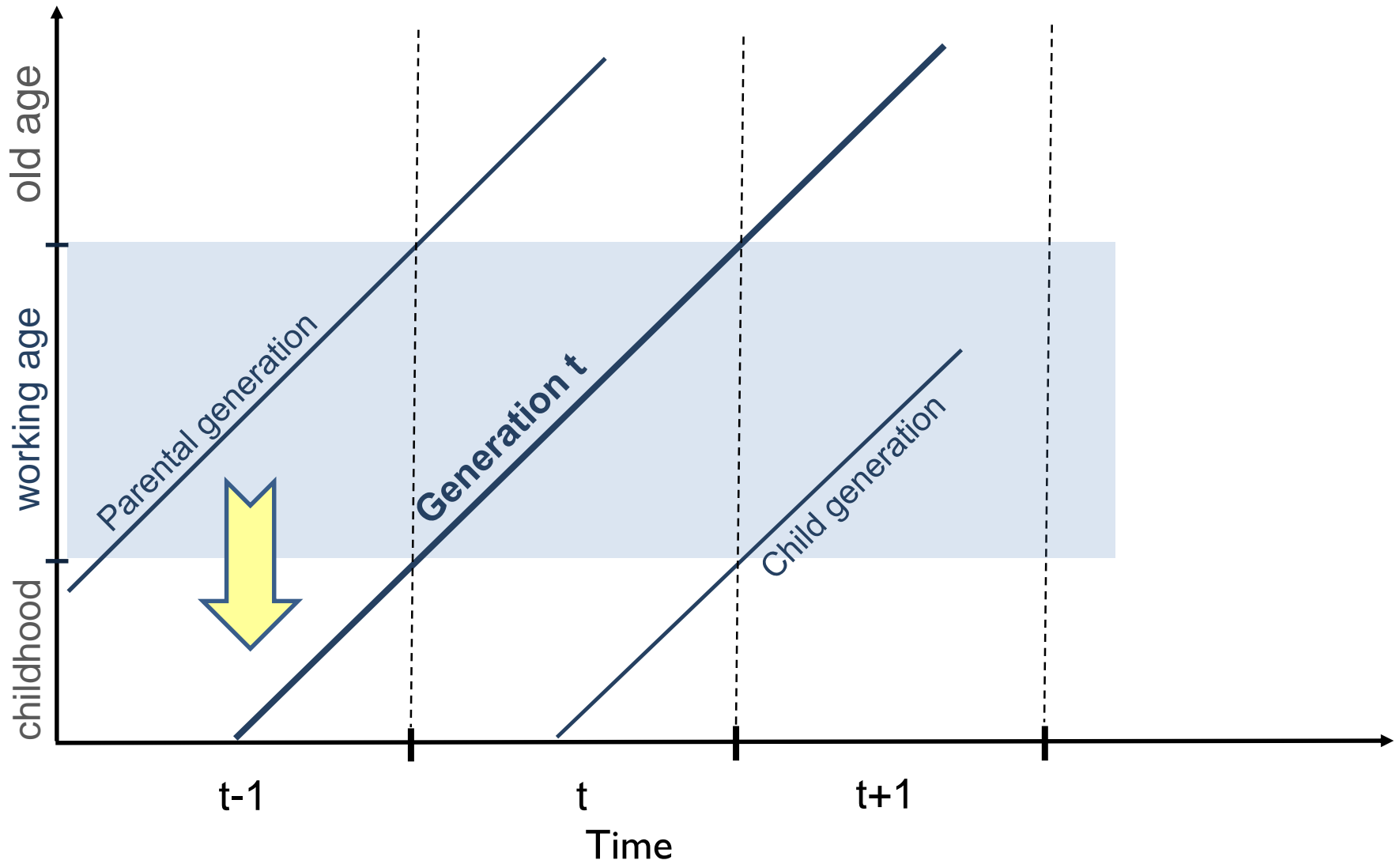
Primary income and the use of disposable income by age. 25 EU Countries 2010



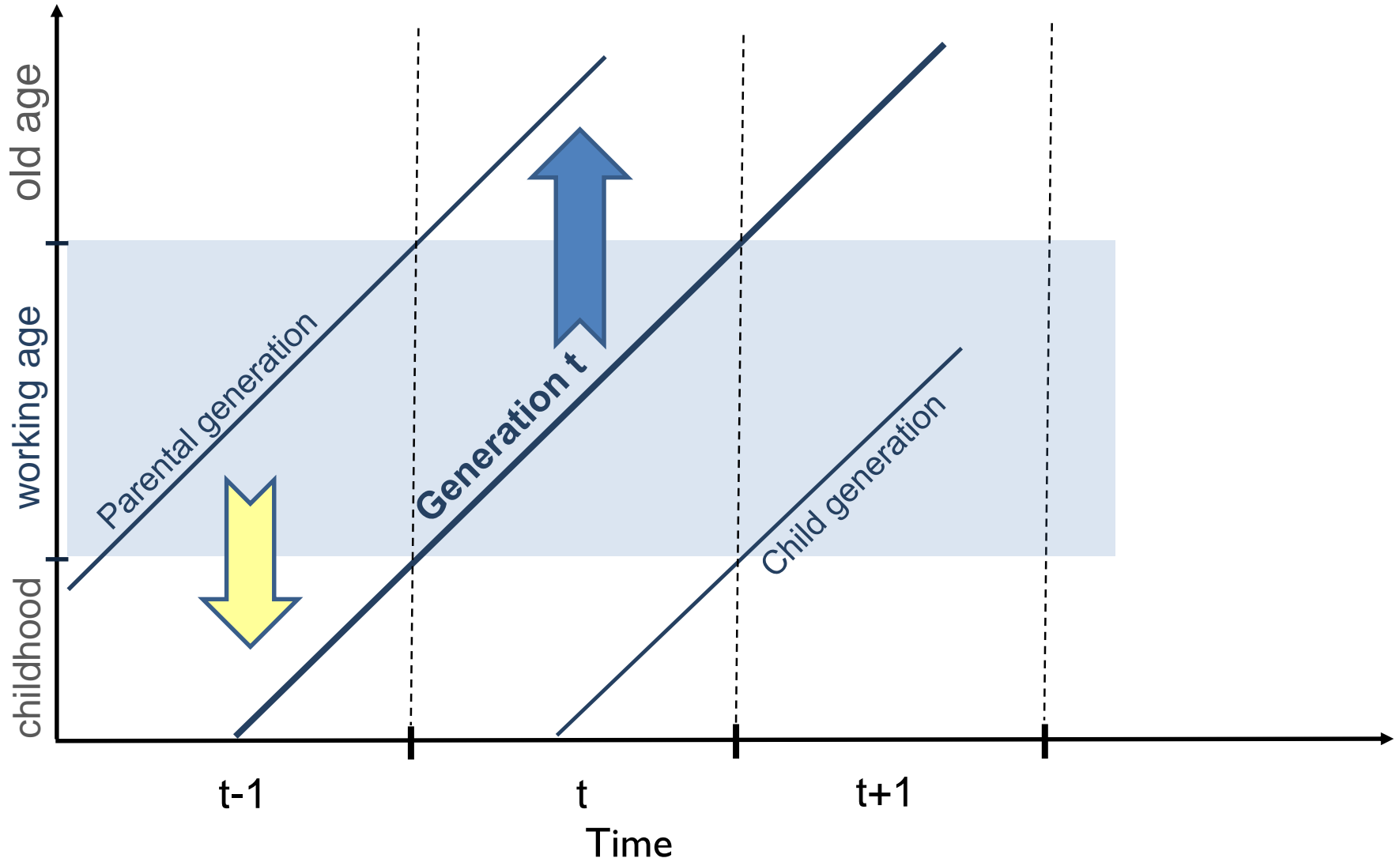
The Intergenerational Transfers Over Time



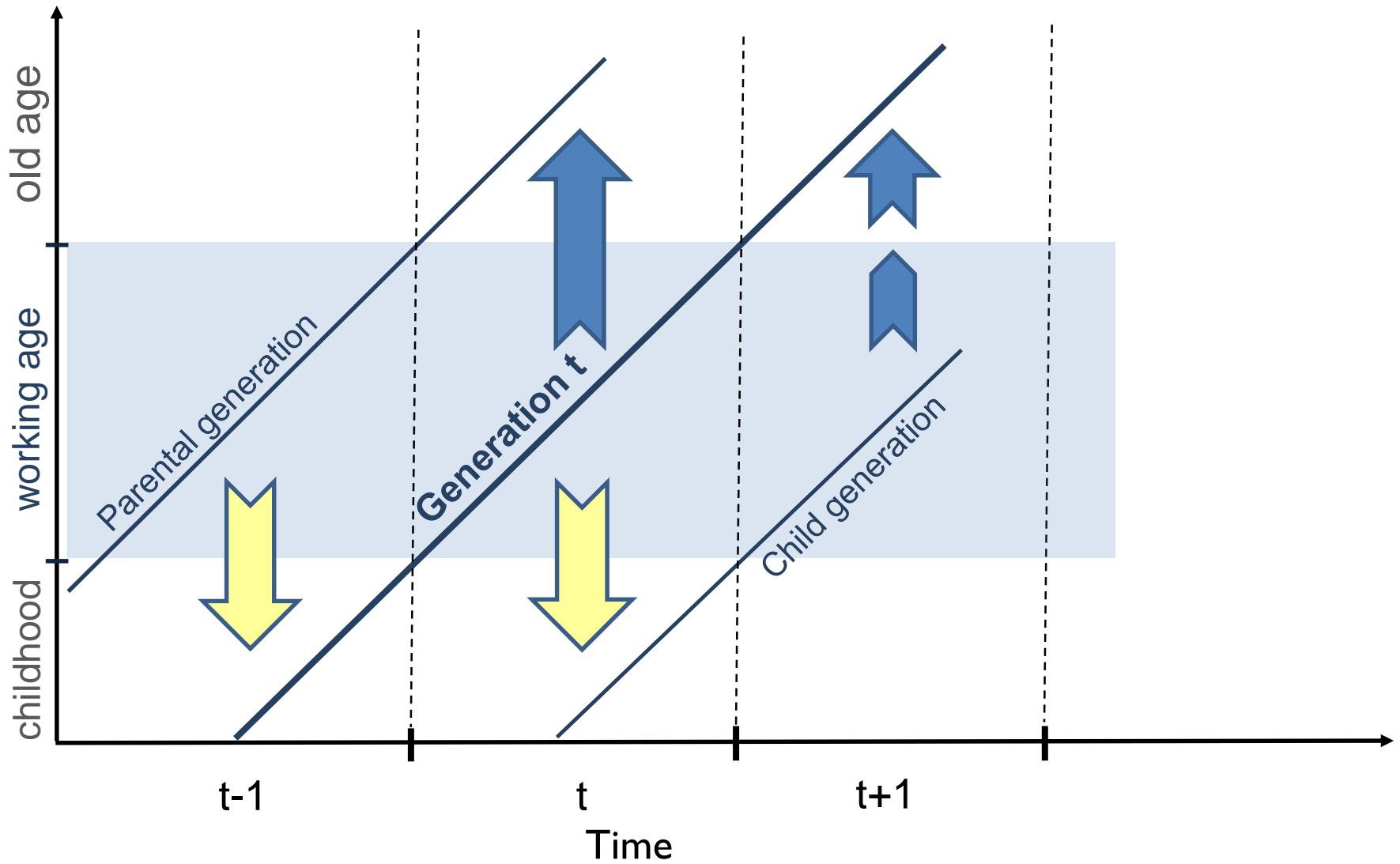
The Intergenerational Transfers Over Time



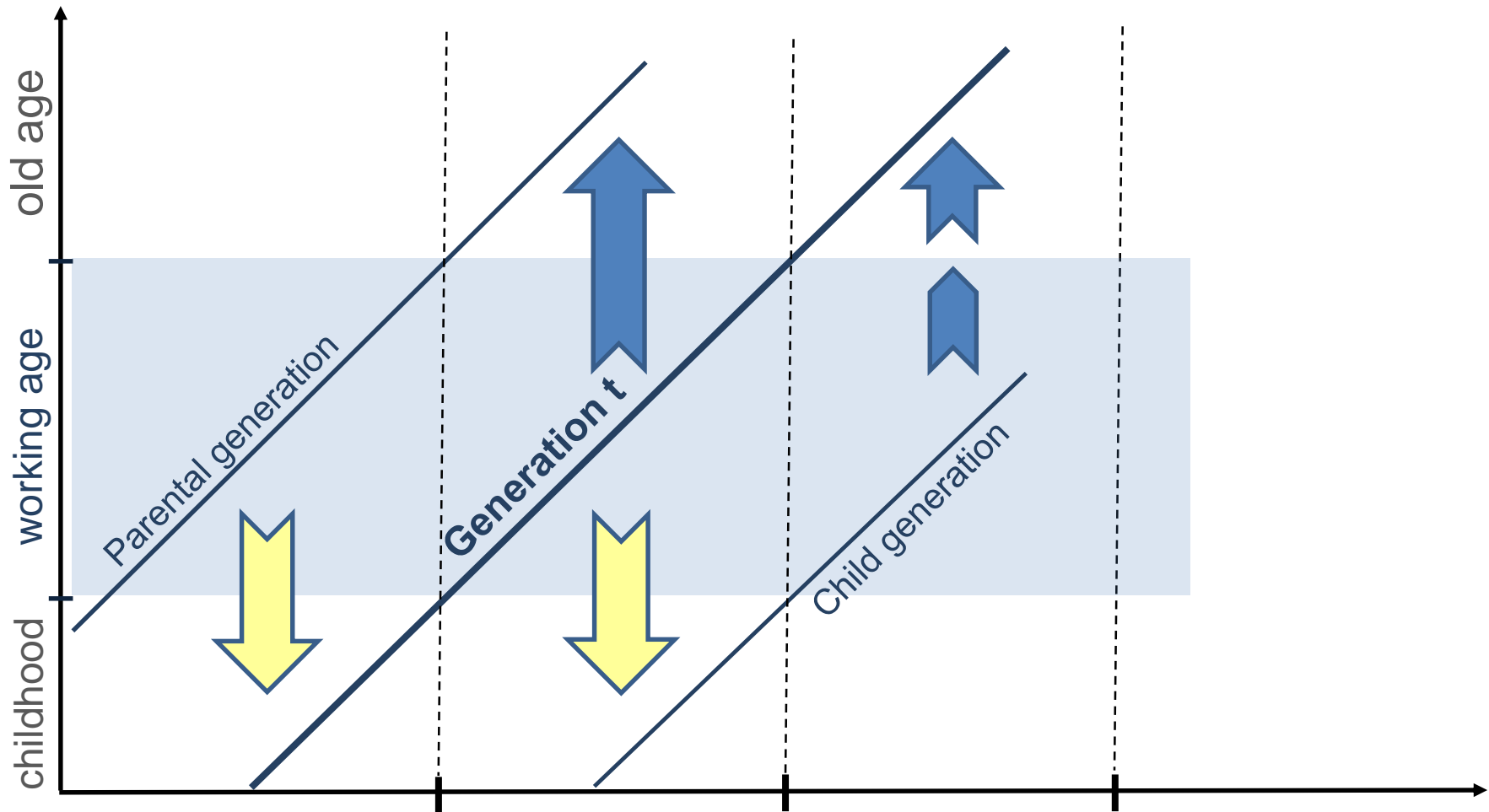
The Intergenerational Transfers Over Time



The Intergenerational Transfers Over Time



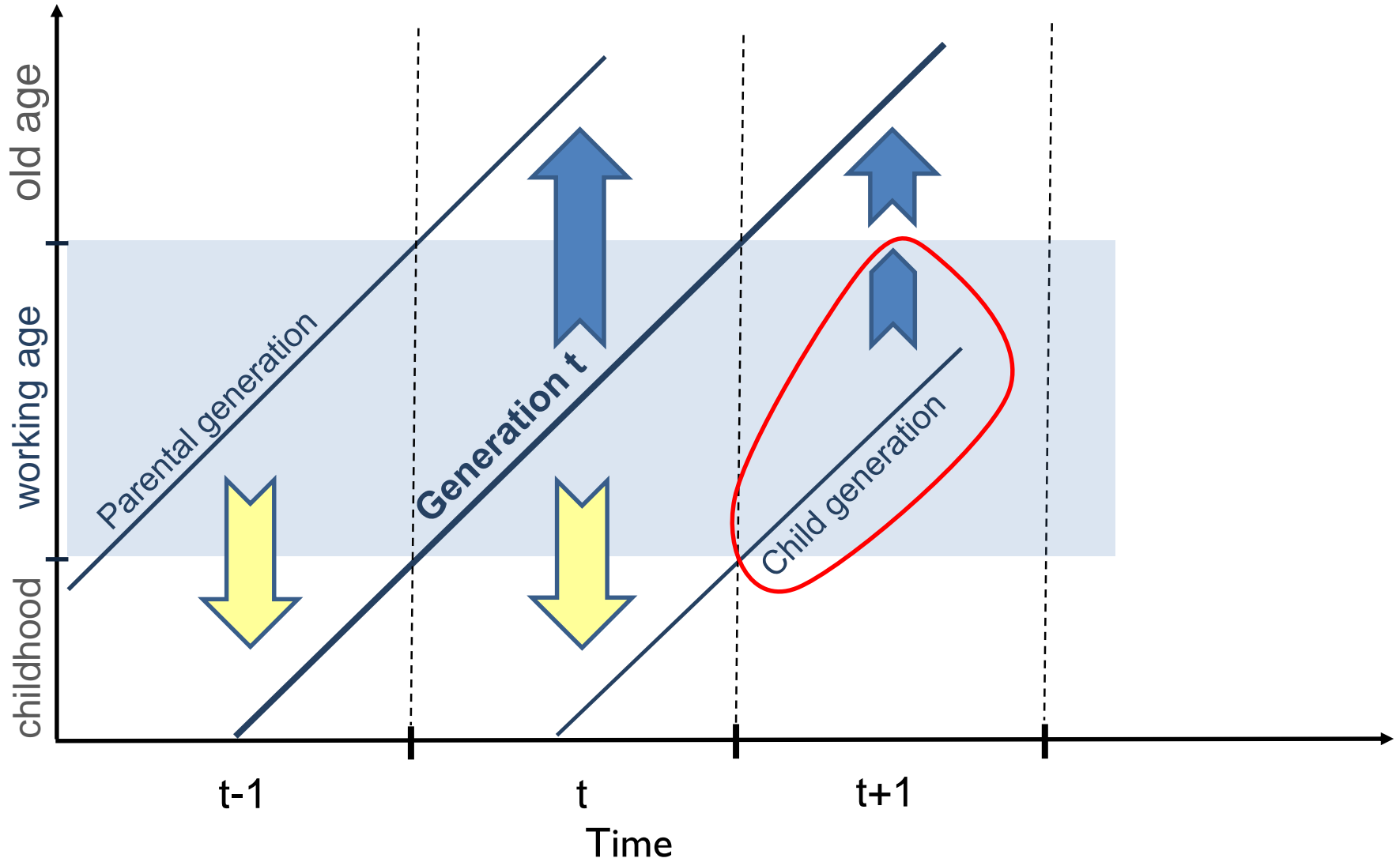
The Intergenerational Transfers Over Time



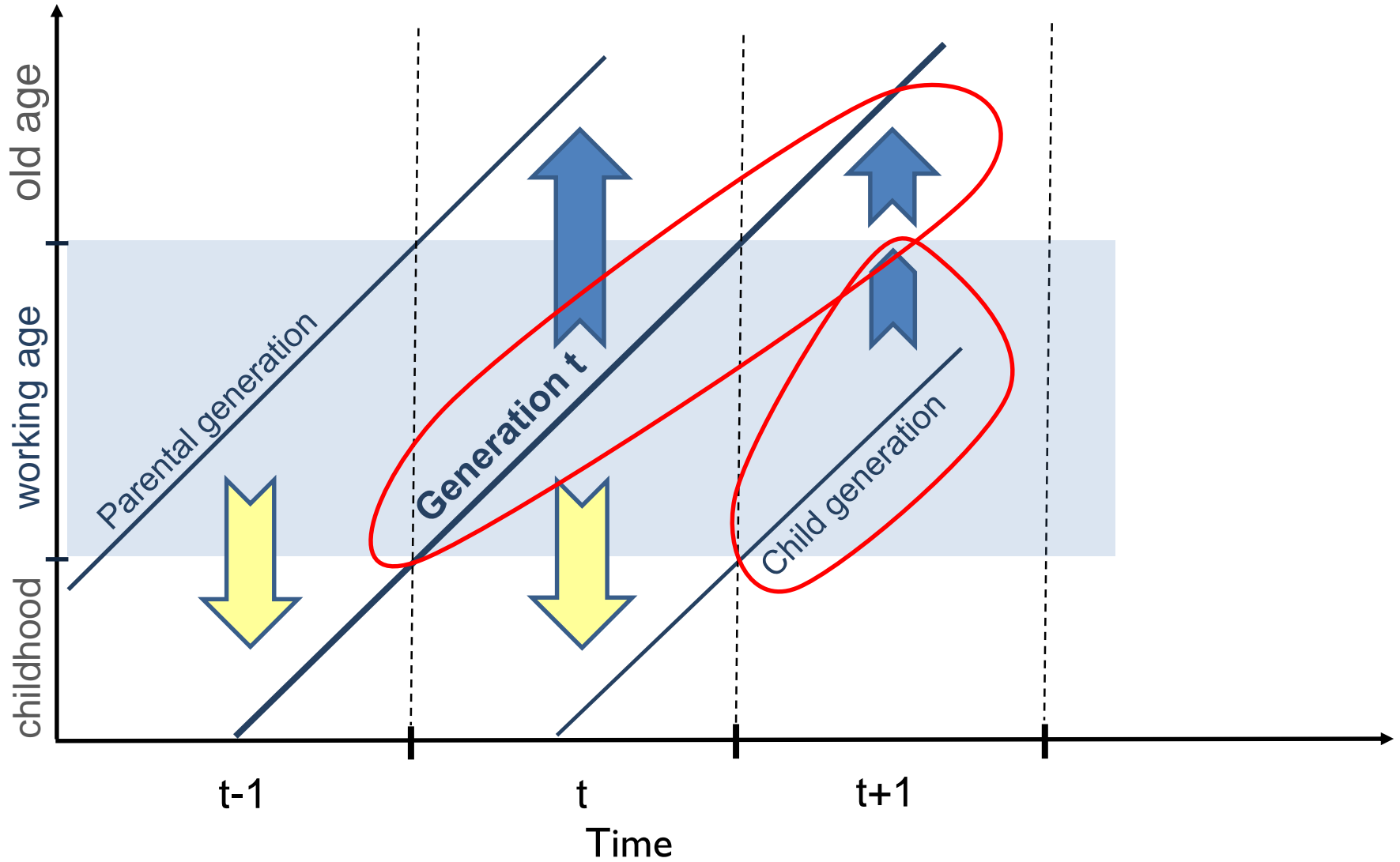
Intergenerational contract:

- Parental generation uses resources for their children (invests in children)
- Once in employment the children pay a share of their income to the retired parental generation (return to the investments in children)

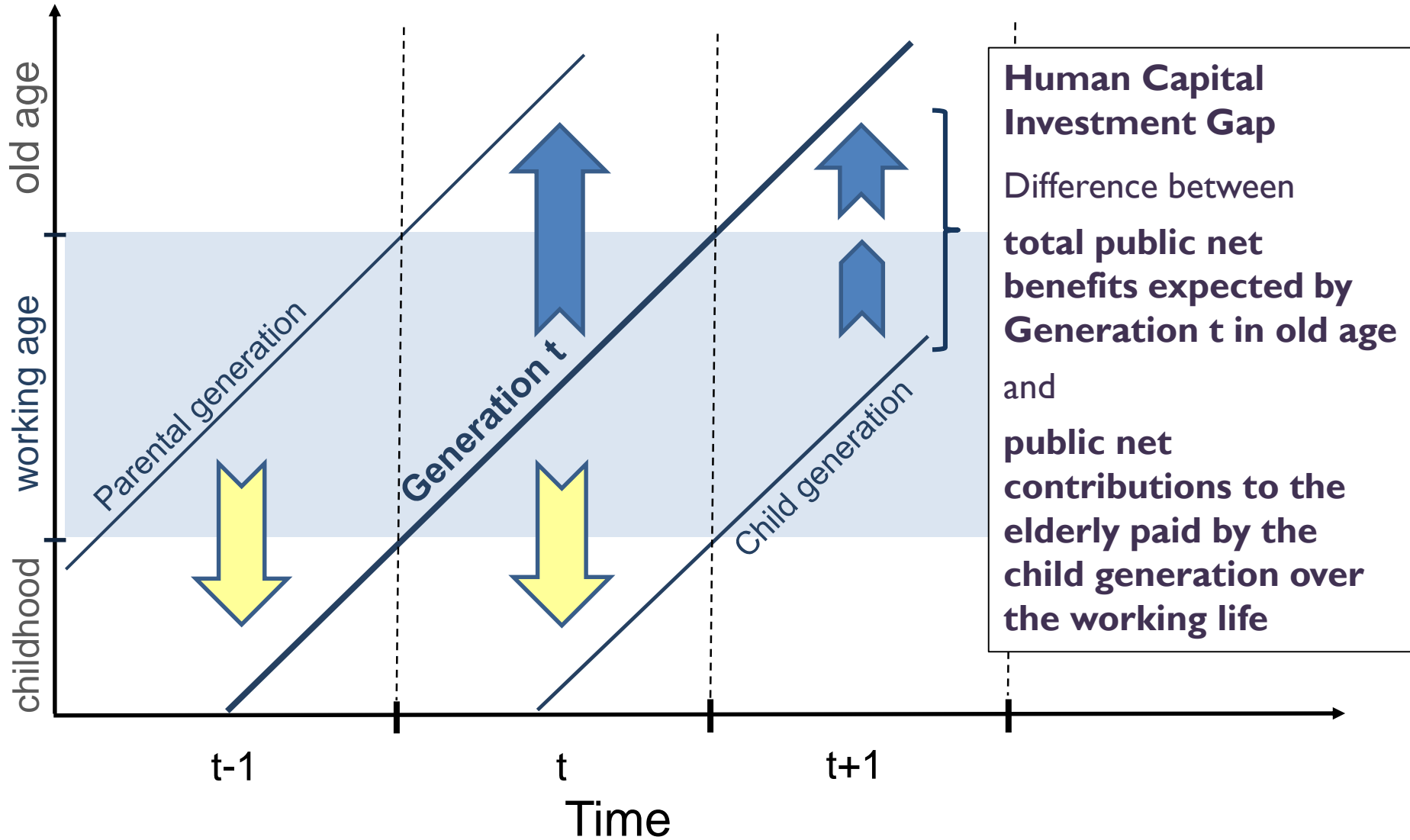
The Intergenerational Transfers Over Time



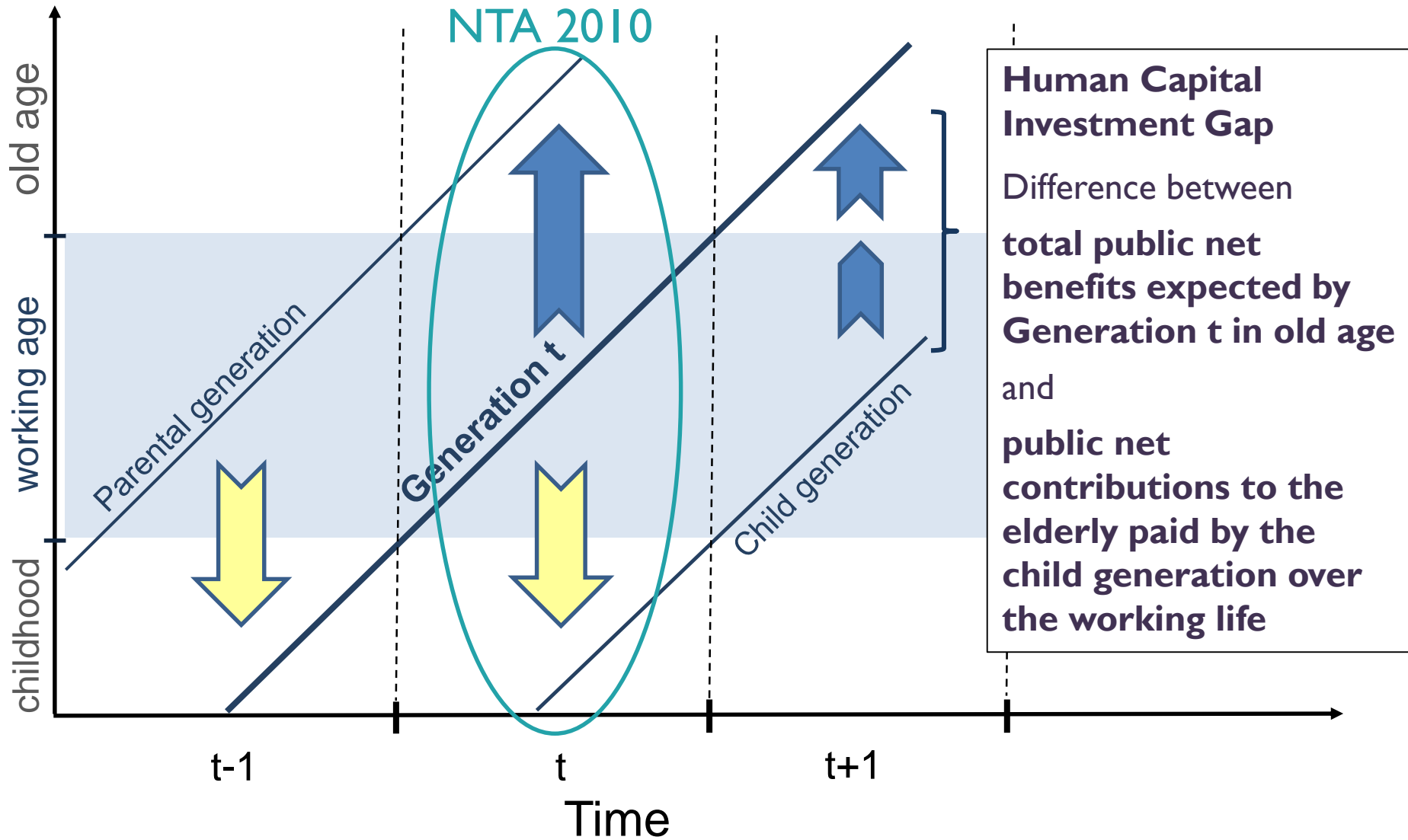
The Intergenerational Transfers Over Time



The Intergenerational Transfers Over Time



The Intergenerational Transfers Over Time



The HKIG for the Cohort Born in 1950

1. **Expected old age benefits for members of the cohort born in 1950**

- Age-specific public benefits in relation to labour income of a full-time worker remain at levels observed in 2010.
- Survival probabilities from EUROPOP2013

2. **Expected contributions of the children's generation** (members represented by a person born in 1980)

- Size of the child generation estimated using data on completed cohort fertility
- Age- and employment-specific public contributions relative to the income of a full-time worker remain at the level observed in 2010.
- Combination of age- and employment-specific contributions with employment projections.

Results

	Cohort born in 1950
Country	Public net benefits in old age relative to labour income of a full-time worker
Austria	9,9
Germany	6,6
Hungary	6,2
Spain	7,0
Sweden	7,7
Avg. 25	7,7

- Old age benefits of the 1950 cohort cannot be financed through the contribution of the children's generation

Results

	Cohort born in 1950	Generation of children	
Country	Public net benefits in old age relative to labour income of a full-time worker	Public net contributions in working life relative to labour income of a full-time worker	HKIG
Austria	9,9	6,6	3,3
Germany	6,6	5,0	1,6
Hungary	6,2	5,0	1,2
Spain	7,0	3,1	3,9
Sweden	7,7	6,2	1,5
Avg. 25	7,7	4,6	3,1

- Old age benefits of the 1950 cohort cannot be financed through the contribution of the children's generation

Summary and Recommendations

Conclusion:

High fertility together with increasing employment rates of women and high productivity growth rates after world war II until 1980s enabled an unprecedented expansion of the public transfer systems. However, the levels of public old-age benefits observed in 2010 are not sustainable for generations with low fertility and increasing life expectancy.

Towards sustainable and predictable public transfer systems:

1. Accounting for demography

- A sustainable public pension and health system has to account for demographic developments, including life expectancy and fertility rates.

2. Reconciling individual incentives and the functioning of a transfer system

- Accounting for private transfers to children in the calculation of public pensions.

Summary and Outlook: NTA

NTA

- capture many dimensions of the economic life course
- contain comprehensive information on transfers between age groups
- provide a basis for building up indicators, simulations and projections

We hope:

1. You will use our data.
2. The use of NTA will improve our understanding of the relation between demography and the economy.
3. The increased knowledge helps us to make better decisions regarding our own life course as well as regarding the organization of our ageing societies.

Acknowledgement



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 613247.



Wittgenstein Centre

FOR DEMOGRAPHY AND
GLOBAL HUMAN CAPITAL

A COLLABORATION OF IIASA, VID/OAW, WU

agenta