WELLCARE

Measuring the Care Economy along the lifecycle

Stakeholders meeting on Care Policy 10/01/2024

Ció Patxot (BEAT, Universitat de Barcelona)

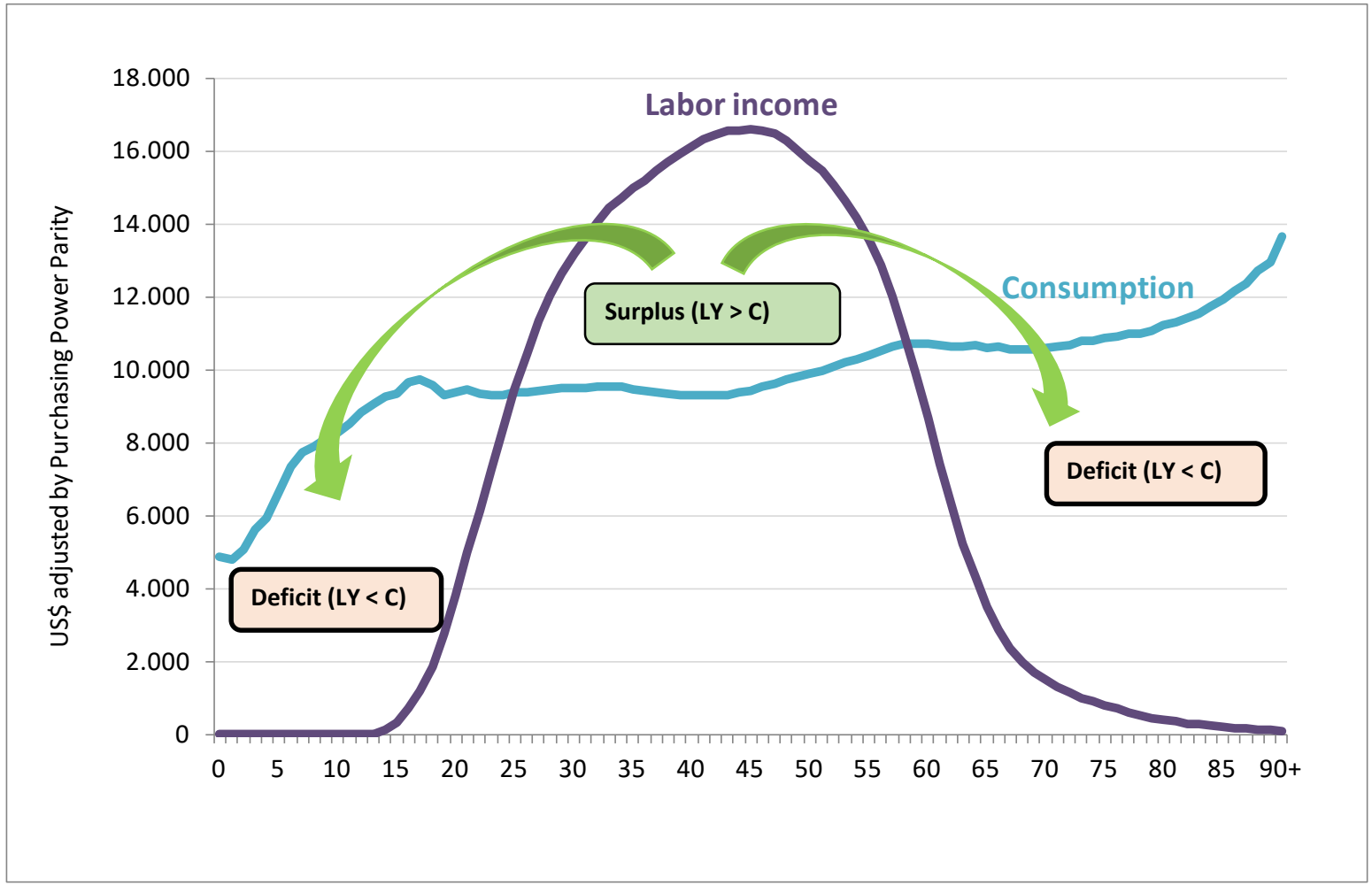
Outline

1. Motivation: a wider approach on role of the welfare state
    1. Accounting for the three ways to provide welfare (family, market, government) – changing during development process (economic, demographic, political)
    2. Taking a lifecycle perspective

2. A quantification of the role of the welfare state along the lifecycle

3. Visualizing the size of the care economy: comparable EU data

2. A quantification of the role of the welfare state along the lifecycle the National Transfers Accounts (NTA) project: SNA by age



Surpluses finance deficits by: Asset based reallocations and transfers (public and private)

The National Transfer Accounts identity

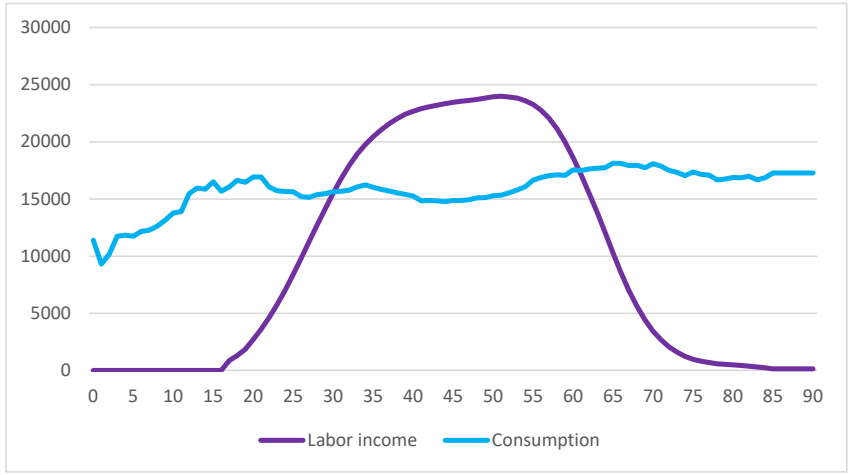
- The NTA project estimates the flow of resources among age groups.
- Starting from the SNA identity and rearranging:

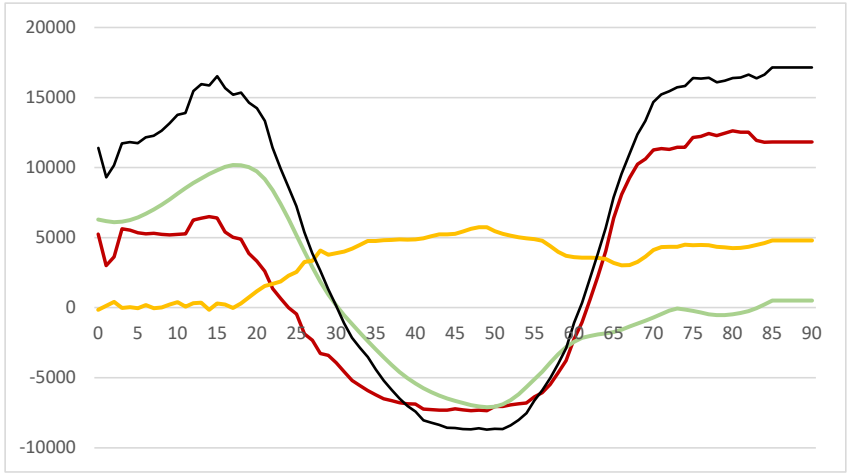
$$\underbrace{C_{x,s} - Y^{l}_{x,s}}_{LifeCicleDeficit} = \underbrace{TG^{+}_{x,s} - TG^{-}_{x,s}}_{PublicTransfers} + \underbrace{TF^{+}_{x,s} - TF^{-}_{x,s}}_{\mathrm{Pr}ivateTransfers} + \underbrace{Y^{a}_{x,s} - S_{x,s}}_{AssetBased\,\mathrm{Re}allocations}$$

- The equation holds at each age (x) and gender (s) and also at the aggregate level (uprate to NA aggregates)
- The household head (main earner) owns the assets, gives transfers and saves
- SNA by age + estimation of private transfers YF

NTA age profiles measure intergenerational income redistribution

Lifecycle Deficit (**LCD**) is financed using public (TG) or private transfers (TF) or Asset based reallocations (ABR)





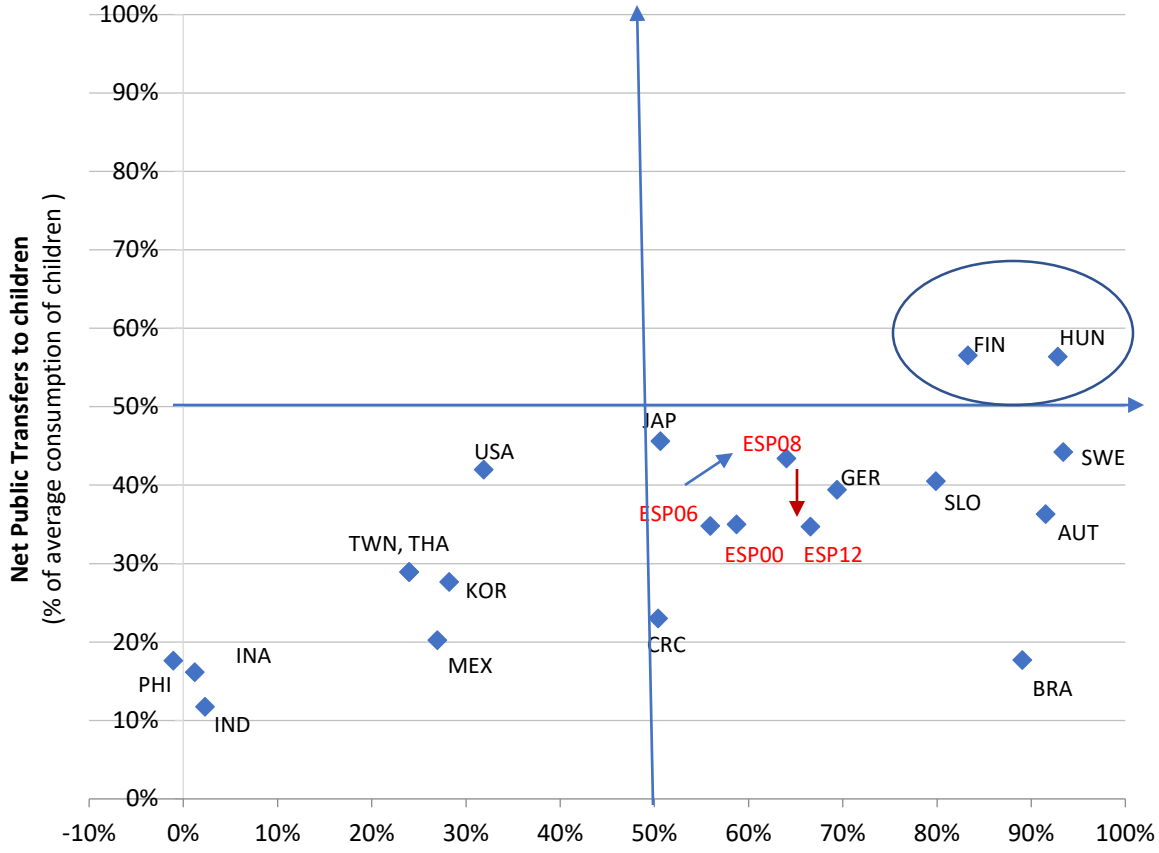
Spain 2012

NTA

- Breaks down SNA by age => how resources move across age groups
- Adds an otherwise missing estimation of family transfers
- It permits measuring intergenerational redistribution produced by welfare state transfers

A key result of the NTA project: % Consumption financed by net public transfers (children vss elderly)

Children



Source: Sole et al., (2020) JEOA

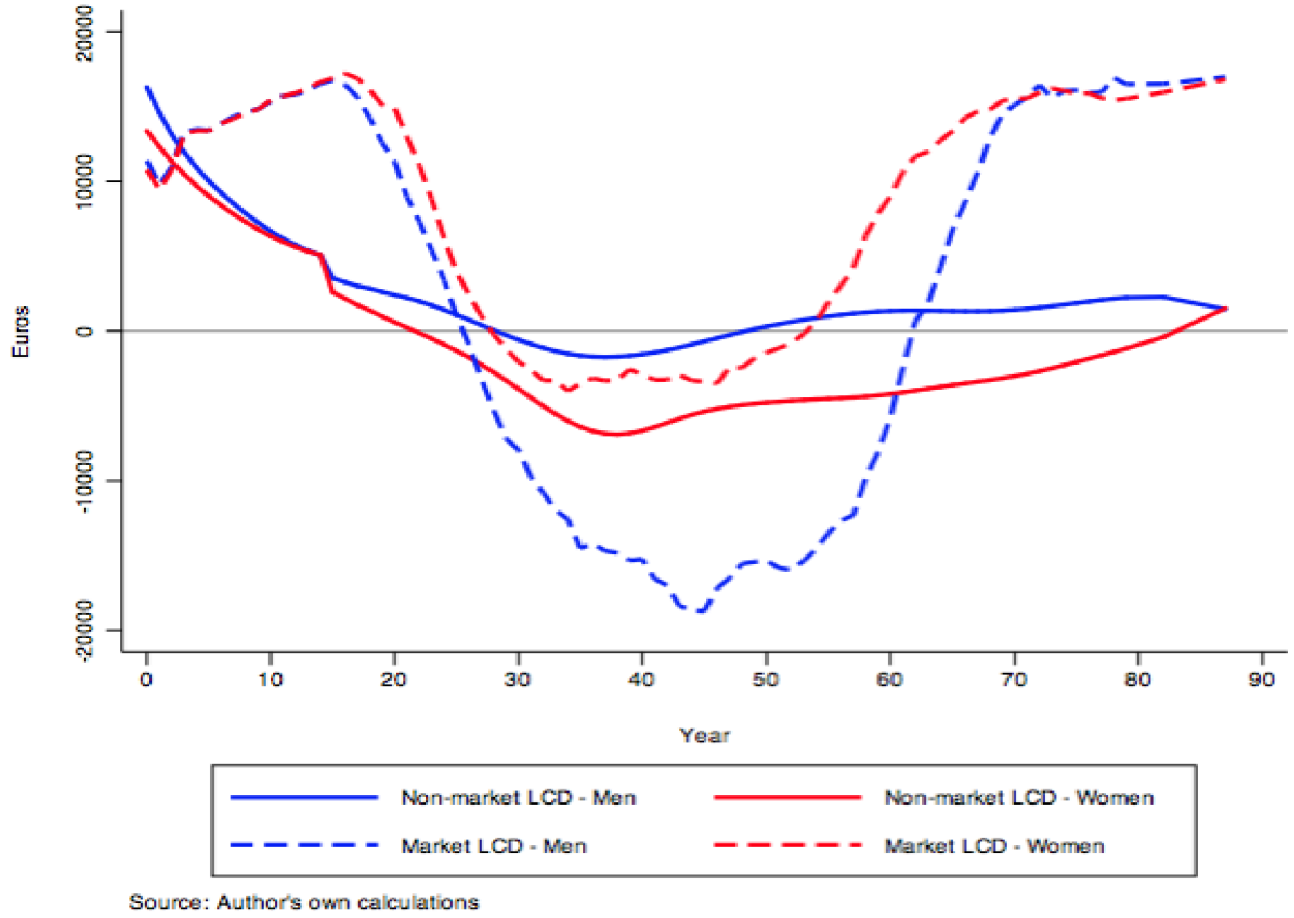
Net Public Transfers to the elderly
(% of average consumption of the elderly)

Elderly

Still missing **TIME** transfers => National **Time** Transfer Accounts

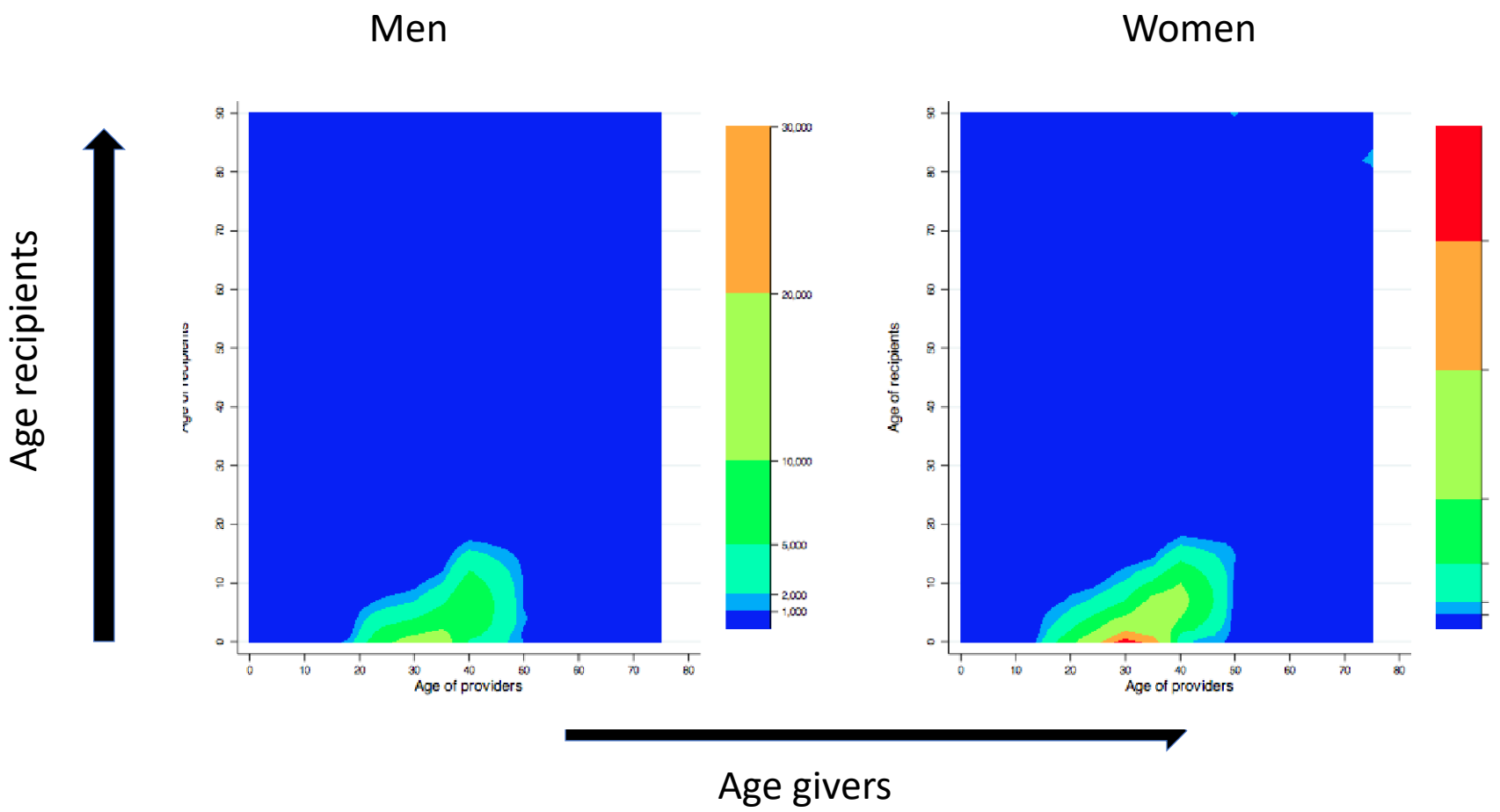
In Spain the crises => back to low protection for children

Adding non-market production (and gender): Total “economic dependency”



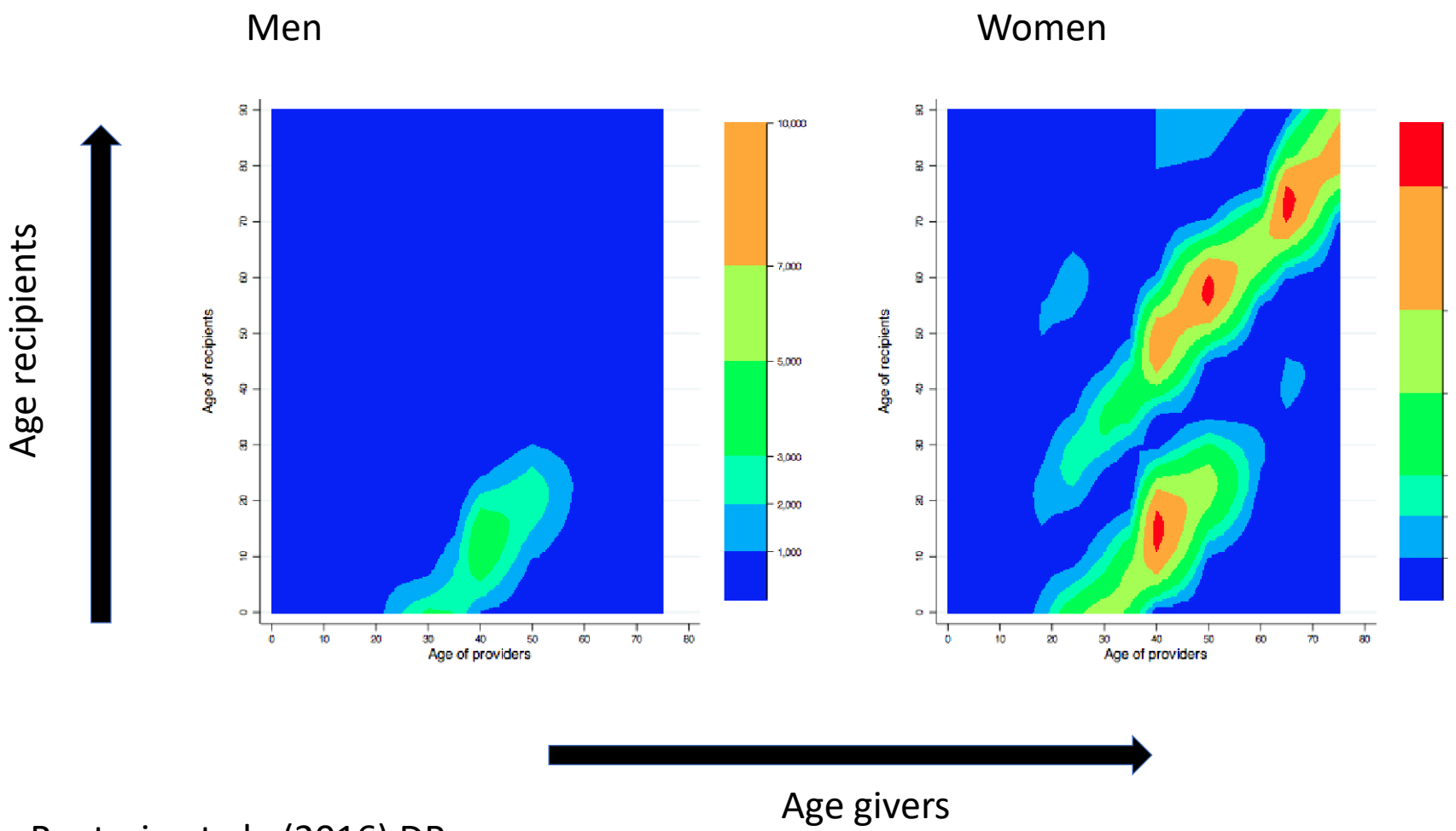
Source: Renteria et al., (2016) DR.

Time transfers: Who gives/receives **CARE**



Source: Renteria et al., (2016) Dem. Research

Time transfers: Who gives/receives **HOME PRODUCTION**



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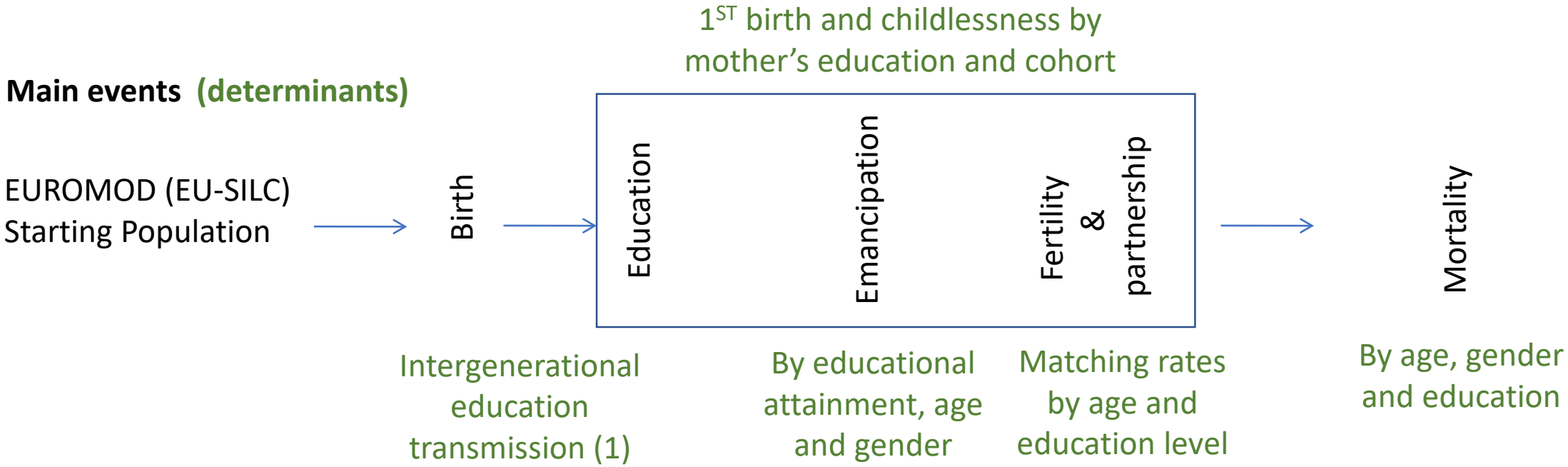
Outline

1. Motivation: a wider approach on the role of the welfare state
2. A quantification of the role of the welfare state along the lifecycle
    1. Standard NTA-NTTA and inter-generational income redistribution
    2. Bringing NTA-NTTA further at micro level: Adding intra-generational income redistribution
3. Visualizing the size of the care economy: comparable EU data

2.2. Bringing NTA-NTTA further at micro level

- The family dimensions is intrinsic to NTA-NTTA => Make it more visible
- It requires simulation
- Build a dynamic microsimulation model to capture this. A first prototype build in a previous project (www.microwelt.eu) incorporating NTA accounting logic
- Individual characteristics beyond age and gender (education and family status) allow for measuring intra generational income redistribution

microWELT model structure: Population dynamics



Economic variables:
NTA summary magnitudes: C-Yl=TG+TF+ABR (Ya-S)

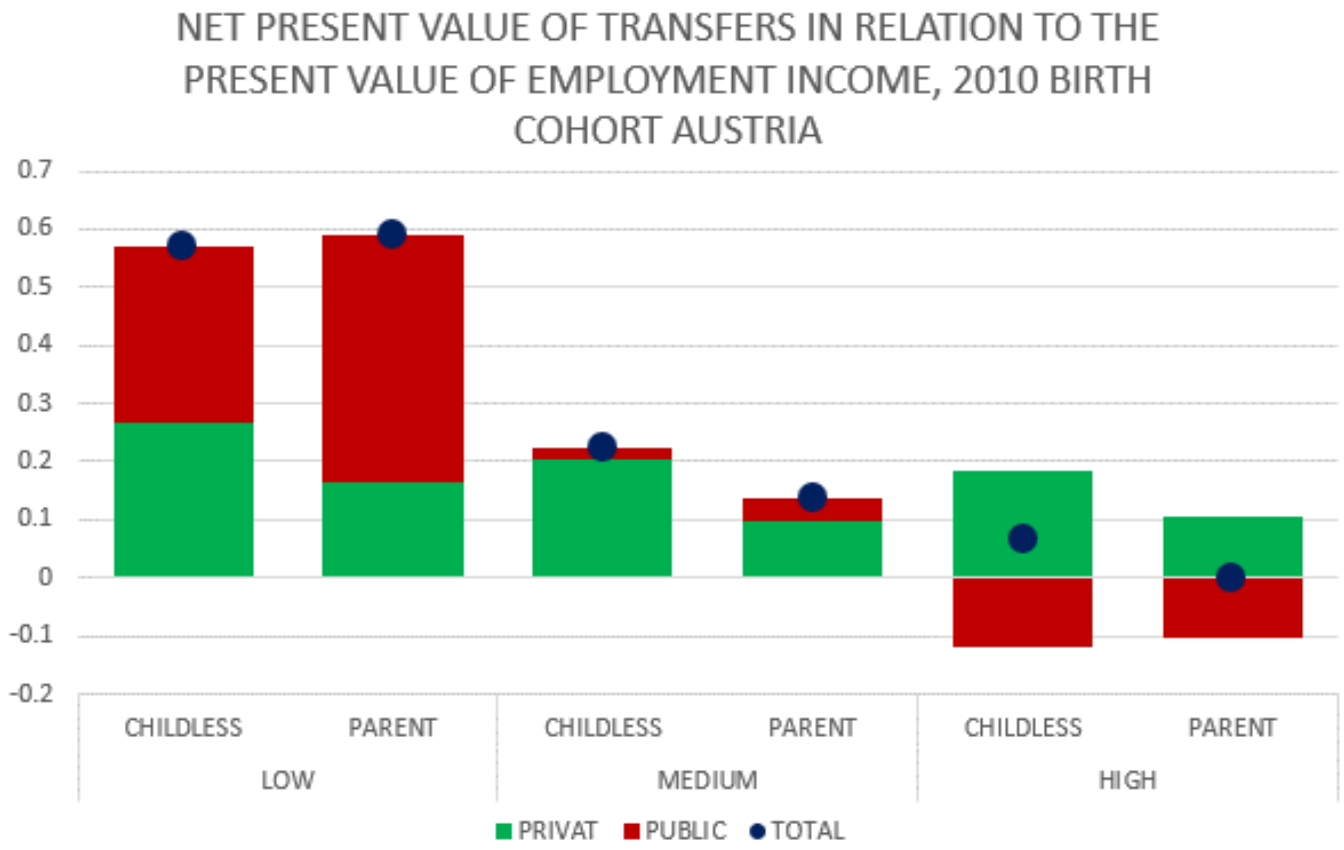
Build NTA disaggregated by age, gender, education and family type => parameters in microWELT

Measures NTA along the lifecycle and the impact of ageing

Going deeper: disaggregating NTA and lifetime simulation

Present value (PV) of lifetime Privat, Public & Total transfers (net of taxes) / PV of lifetime income (parents versus childless individuals by level of education)

Austria



Source: **Weltransim Project** (https://www.microwelt.eu/Report/08_LongitudinalWFS/LongitudinalWFS-Index.html)

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    1. Standard NTA-NTTA and inter-generational income redistribution
    2. Bringing NTA-NTTA further at micro level: Adding intra-generational income redistribution
3. Visualizing the size of the care economy: comparable EU data
    1. Previous estimations of aggregate expenditure
    2. Micro data available to improve the projections

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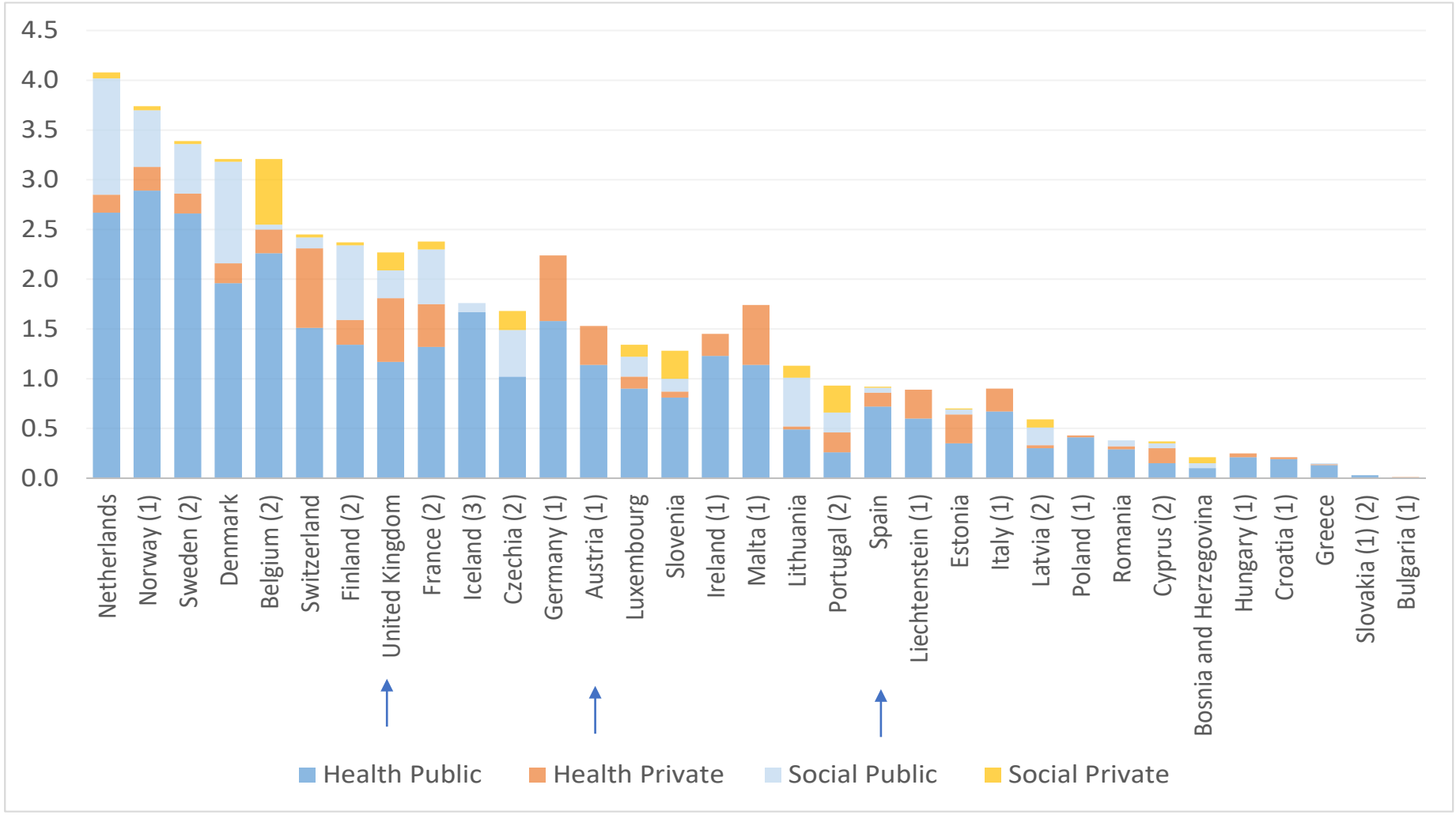
- Build a dynamic microsimulation model to capture this. A first prototype build in a previous project (www.microwelt.eu) incorporating NTA accounting logic
- Individual characteristics beyond age and gender (education and family status) allow for measuring intra generational income redistribution
- A close and wider look to care: visualize and project the future care along the lifecycle (implicit in the NTA-NTTA profiles) - WELLCARE project Comparable EU data available

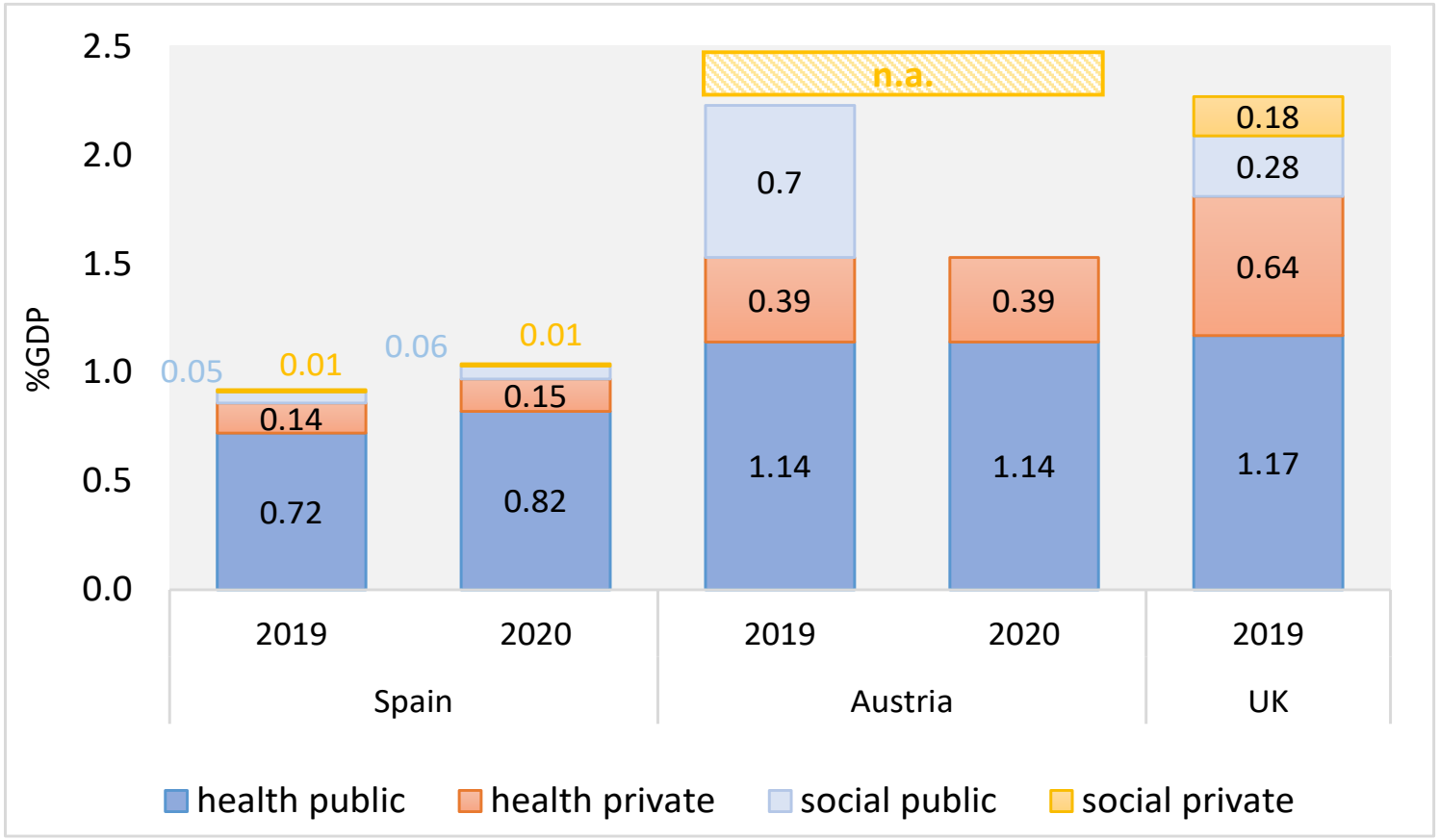
3.1. Visualizing and quantifying the size of the care economy: Previous estimations of aggregate expenditure

Care mix	**Type of service**		**Aggregate expenditure estimations**
Public formal (government)	cash benefits		AWG report
	in kind	institutional	AWG report
		home care	AWG report
Private formal (market) - mostly social		institutional & home care	SHA
Private informal		home care	SPC report

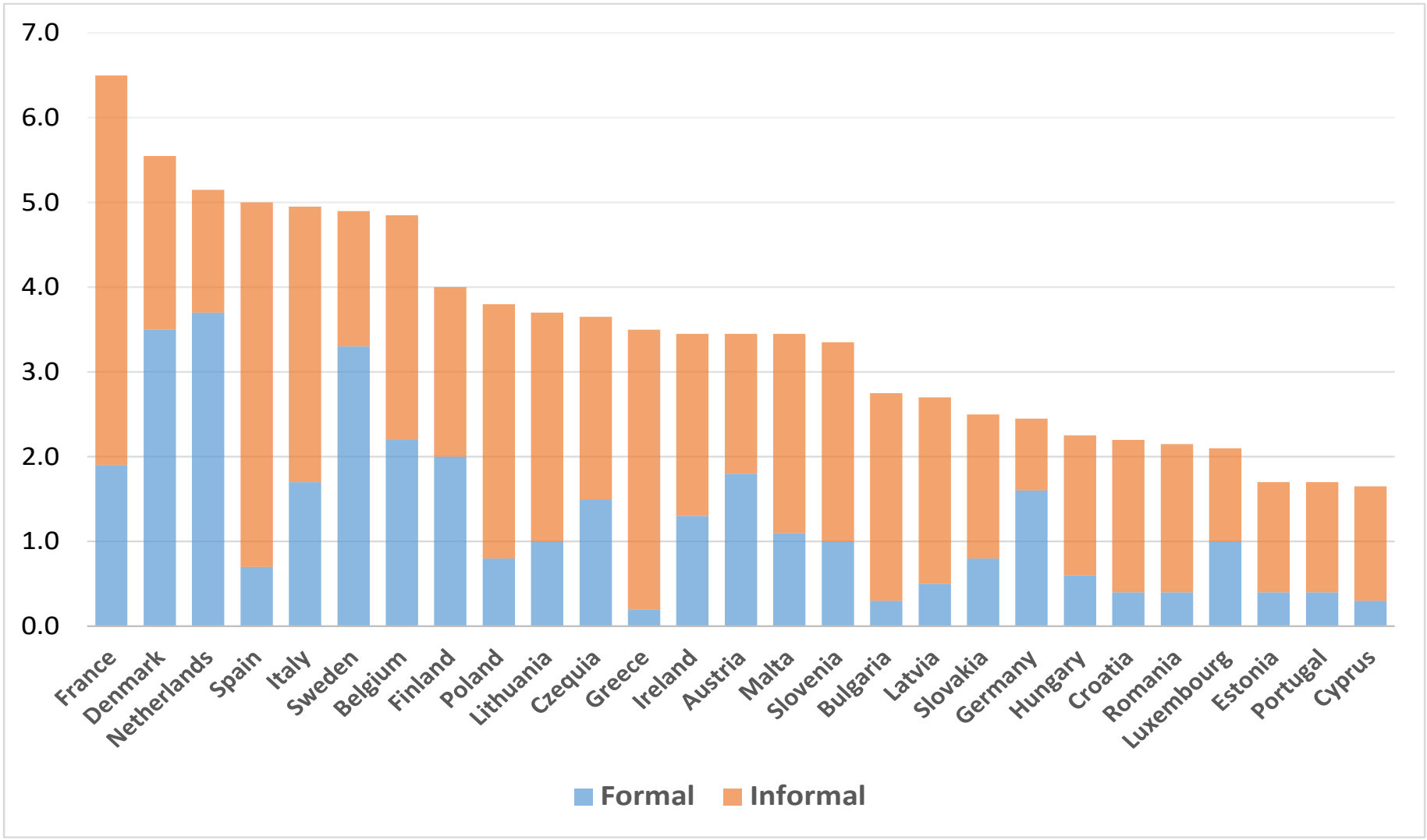
Formal Long-Term care spending in Europe (percentage of GDP)



Formal Long-Term care spending in WELLCARE countries, as a percentage of GDP



Long-Term Care mix (formal/informal) for ages 65+ in the European Union, 2018 (% of GDP)



Source: elaborated from Eurostat, SHA; AWG, the 2021 Ageing Report; and the SPC, 2021 Long-Term Care report.

Note: Informal is an average of “proxy good” and “opportunity cost” methods.

3.2 Visualizing and quantifying the size of the care economy: Micro data available to improve projections

<table>
<tr><th></th><th></th><th>Children</th><th colspan="2">65+</th></tr>
<tr><td>Care needs</td><td>Care services</td><td>All</td><td colspan="2">EHIS care needs (demand)</td></tr>
<tr><td rowspan="5">Care Utilitzation</td><td rowspan="2">Informal (home care*)</td><td rowspan="2">HETUS (supply in hours)</td><td rowspan="2">SILC (2016 module) supply & hour intervals / EHIS (supply and hours) / HETUS (Supply)</td><td rowspan="4">SHARE home care mix (demand formal/informal) by different providers (no hours, only frequency)</td></tr>
<tr></tr>
<tr><td rowspan="2">Formal market</td><td>SILC Childcare cost</td><td rowspan="3">SILC 2016 extra module (demand of professional home care (market&public)</td></tr>
<tr><td>SILC Private education</td></tr>
<tr><td rowspan="2">Formal public</td><td>NTA profile public education expenditure</td></tr>
<tr><td>Cash benefits (SILC)</td><td colspan="2">Cash benefits (SILC not isolated => EUROMOD)</td></tr>
<tr><td colspan="2"></td><td colspan="2">Institutionalized only age and gender (CENSUS)</td></tr>
</table>

* Informal care can be inside or outside the household

Care to …	Spain (N=17,209) n	Spain (N=17,209) %	Austria (N=7,631) n	Austria (N=7,631) %	UK (N=6,759) n	UK (N=6,759) %
children inside the household	3,605	20.9%	1,439	18.9%	1,564	23.1%
children outside the household	746	4.3%	326	4.3%	358	5.3%
adults inside the household	1,619	9.4%	470	6.2%	610	9.0%
adults outside the household	450	2.6%	36	0.5%	69	1.0%
both children and adults (sandwich)	412	2.4%	111	1.5%	165	2.2%
children or adults (total)	5,846	34.0%	2,117	27.7%	2,287	33.8%

Distribution of adult caregivers by type of care and country (HETUS 2010)

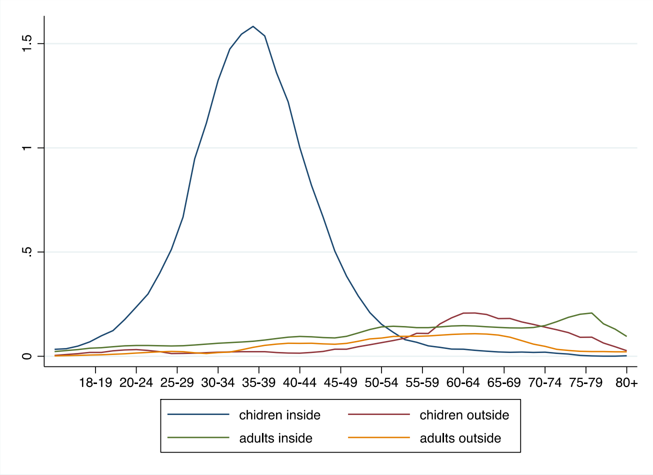
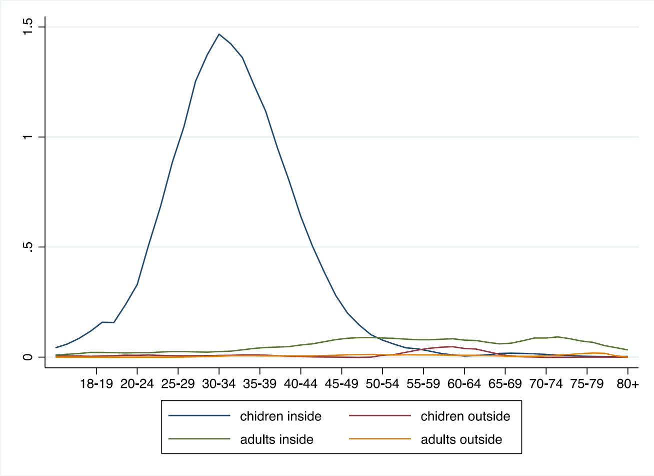
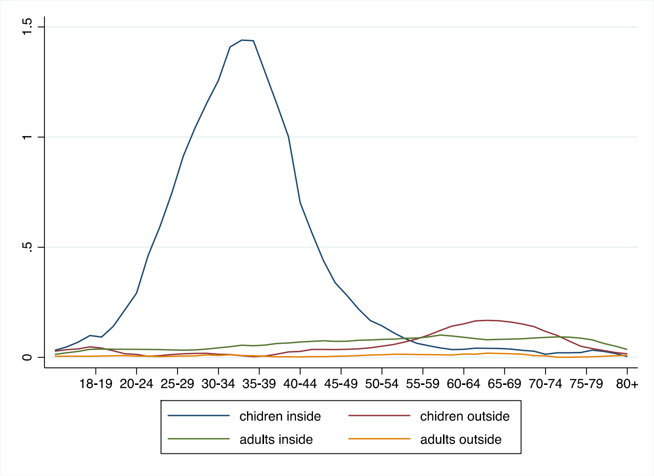
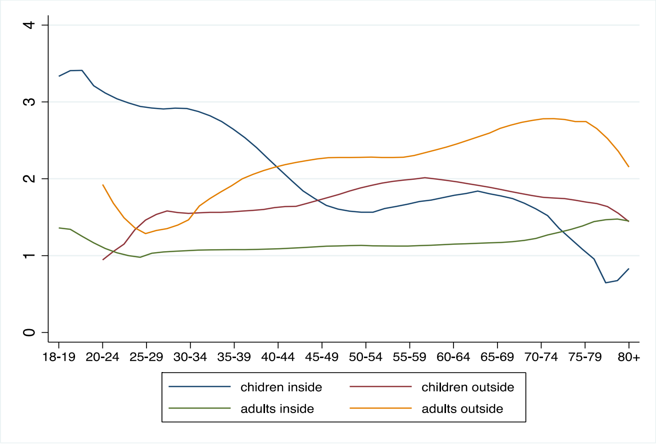
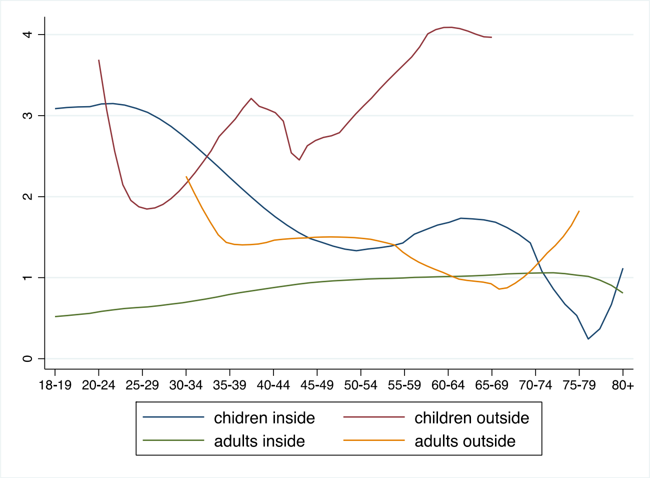
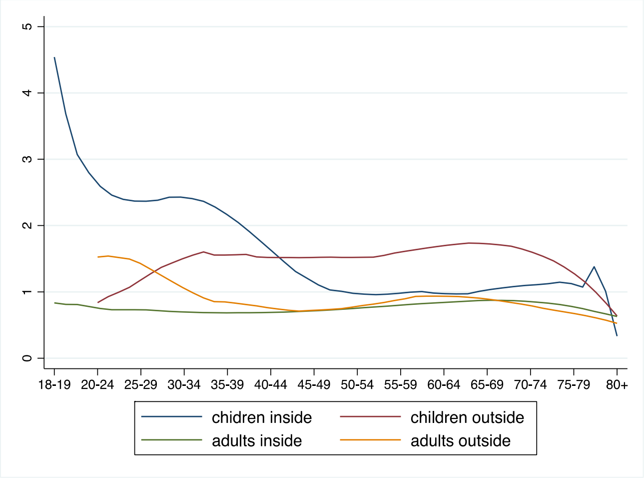
Around 1/3 of population take care of people: children inside (around 20%), adults inside (9 to 6%) and others. Around 2% are “sandwich” caregivers

Type of care	Country	Mean	Std. Dev.	Min	Max
Childcare inside	AT	2.27	1.82	0.25	10.50
	ES	2.39	1.95	0.17	11.83
	UK	1.90	1.76	0.17	13.5
Childcare outside	AT	3.26	2.30	0.25	10
	ES	1.82	1.54	0.17	8.83
	UK	1.58	1.37	0.17	7.17
Adult care inside	AT	0.92	0.90	0.25	5.75
	ES	1.16	1.55	0.17	14.67
	UK	0.76	0.88	0.17	10.83
Adult care outside	AT	1.32	0.98	0.25	4.25
	ES	2.24	2.33	0.17	14
	UK	0.85	1.01	0.17	7.17

Daily hours devoted to different types of care in Austria, Spain and the UK (HETUS 2010)

Hours of care inside underestimated (omission of secondary activity)?

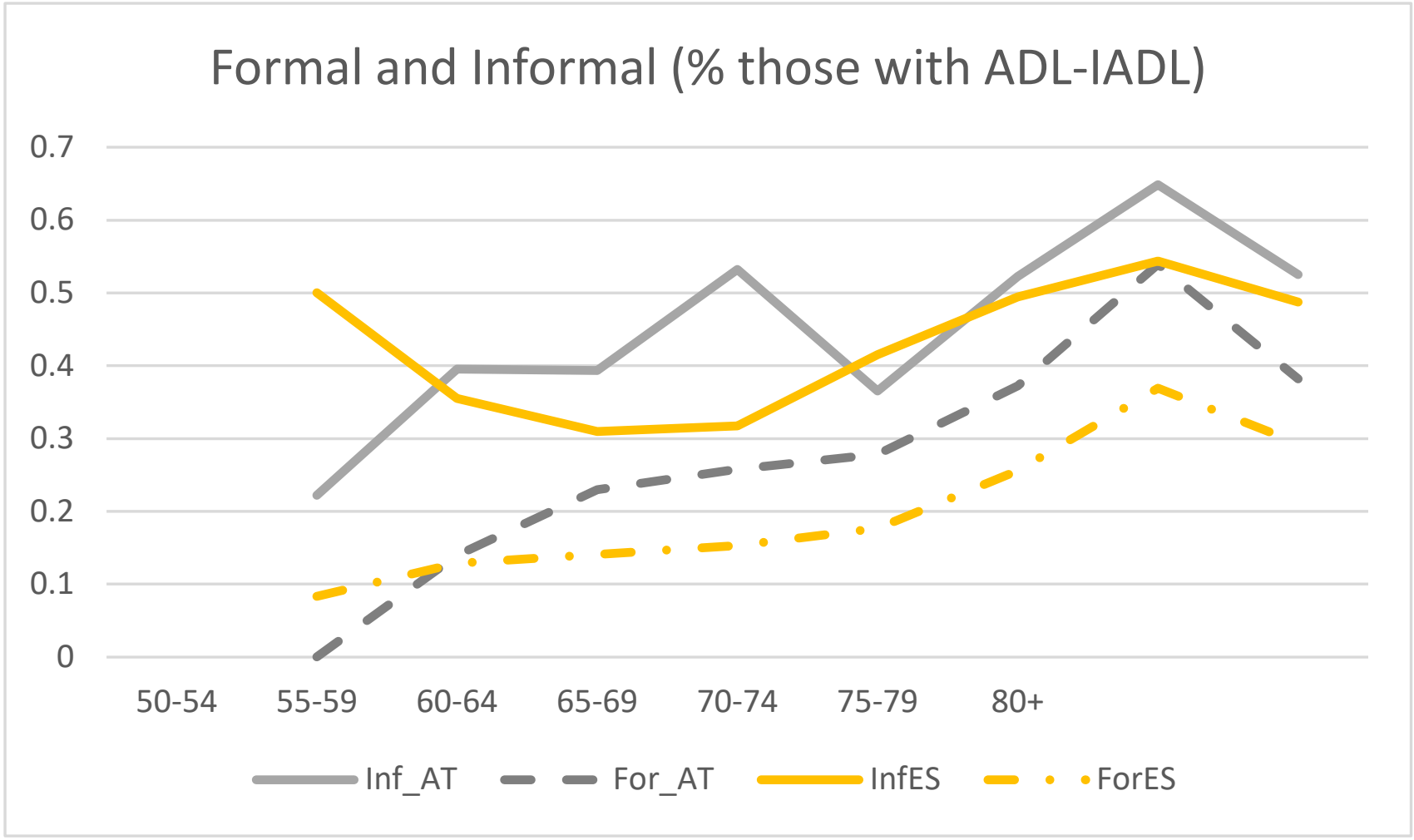
Age profiles of care given (average daily hours), HETUS 2010

	ES	AT	UK
(a) whole population			
(b) caregivers of each type			

	AT	ES	UK
Care needs / use / unmet needs - EHIS			
Care needs (PC+HA)	35.96%	38.21%	28.95%
Care use (PC+HA)	34.79%	34.98%	26.45%
Unmet needs (PC+HA)	10.98%	13.71%	9.52%
PC needs	16.97%	17.41%	11.50%
PC use	16.14%	15.88%	10.10%
PC unmet needs	6.00%	6.33%	3.86%
Informal care use – SHARE			
care use (PC + HA) (at least weekly)	21.16%	18%	21.18%
PC use (at least weekly)	9.69%	12.09%	11.78%
Formal care - SILC (ad hoc module 2016)			
Received professional care (PC + HA)	6.45%	4.80%	4.23%
number of hours			
<10	60.19%	33.50%	62.76%
10 to 20	11.19%	24.88%	18.17%
20+	28.62%	41.62%	19.07%

Descriptive statistics from unmet needs to service utilization, across countries and data sources (% of individuals aged 65 and above)

The care mix (formal – informal) received by 65+ reporting ADL-IADL (SHARE 2015)



* Informal care can be inside or outside the household, by spouse, children and other

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- SUSTAINWELL Project continues improving estimation of economic variables and adds Wealth Accounts

Main objective: Need for policies protecting the "Sandwich" generation in face of the ageing process

Thank you!

UK Research and Innovation

The project receives funding from the European Union's Horizon Europe Research and Innovation Programme under Grant Agreement number 101095175 and the UK Government.

sustainwell

Rethinking the roles of **family**, **market** & **state**

WellCARE
Caring Over the Lifecycle

JPI MORE YEARS BETTER LIVES