Long-Term Care Coverage in Europe:
How do Legislations Affect Inequality in Access?

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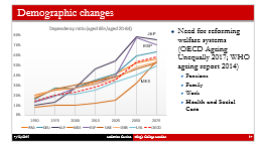
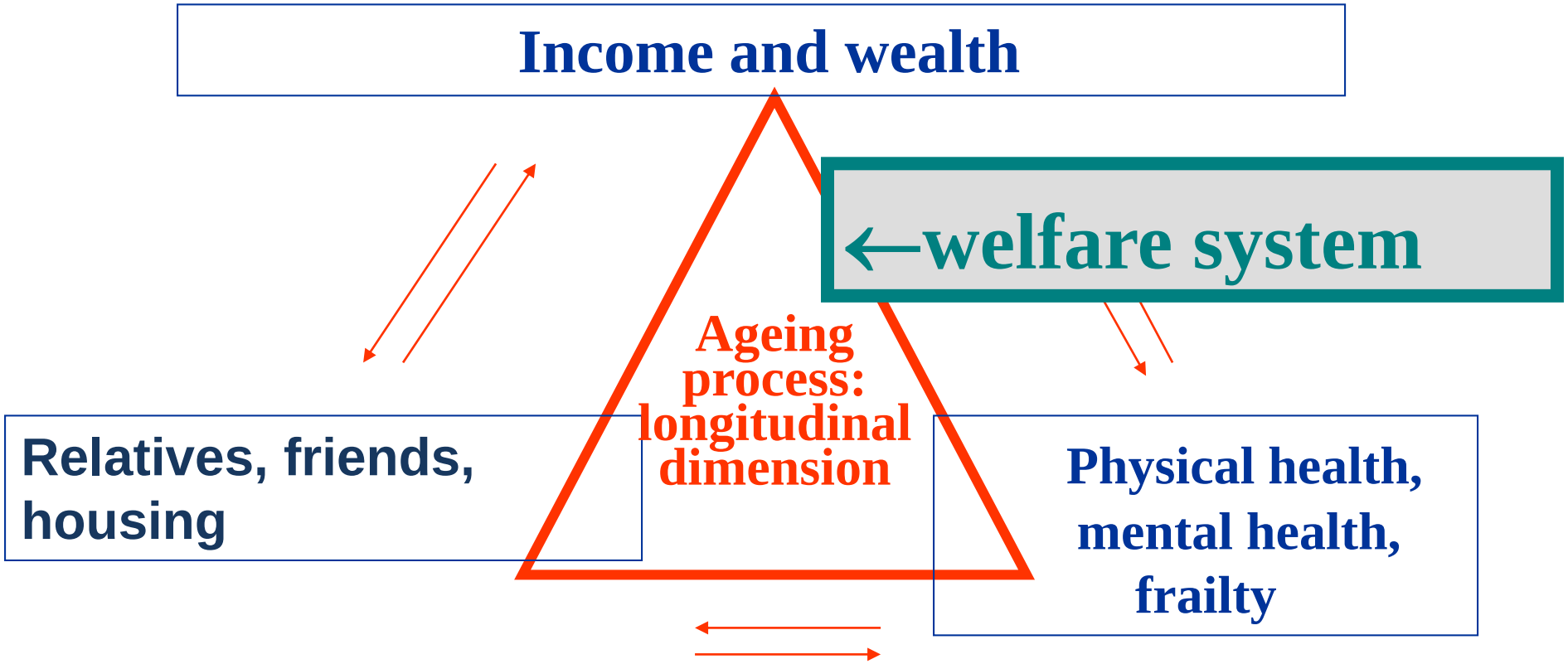
Long-Term Care

- Assistance for persons with reduced functional or cognitive capacity
  - Domiciliary vs Residential, Nursing care vs Domestic help, Formal vs informal
- Heterogeneity in use/spending data across countries (OECD 2016)
  - OECD average use: 13% in 2015. More than 50% are aged 80+
  - Average spending (1.5% GDP) will double by 2060
- Pressure from social, economic and demographic change
  - Healthy Ageing in-place (WHO 2015)
  - Dementia (OECD 2015)
  - Inequalities in LTC access: risk for Social Exclusion (OECD 2017)



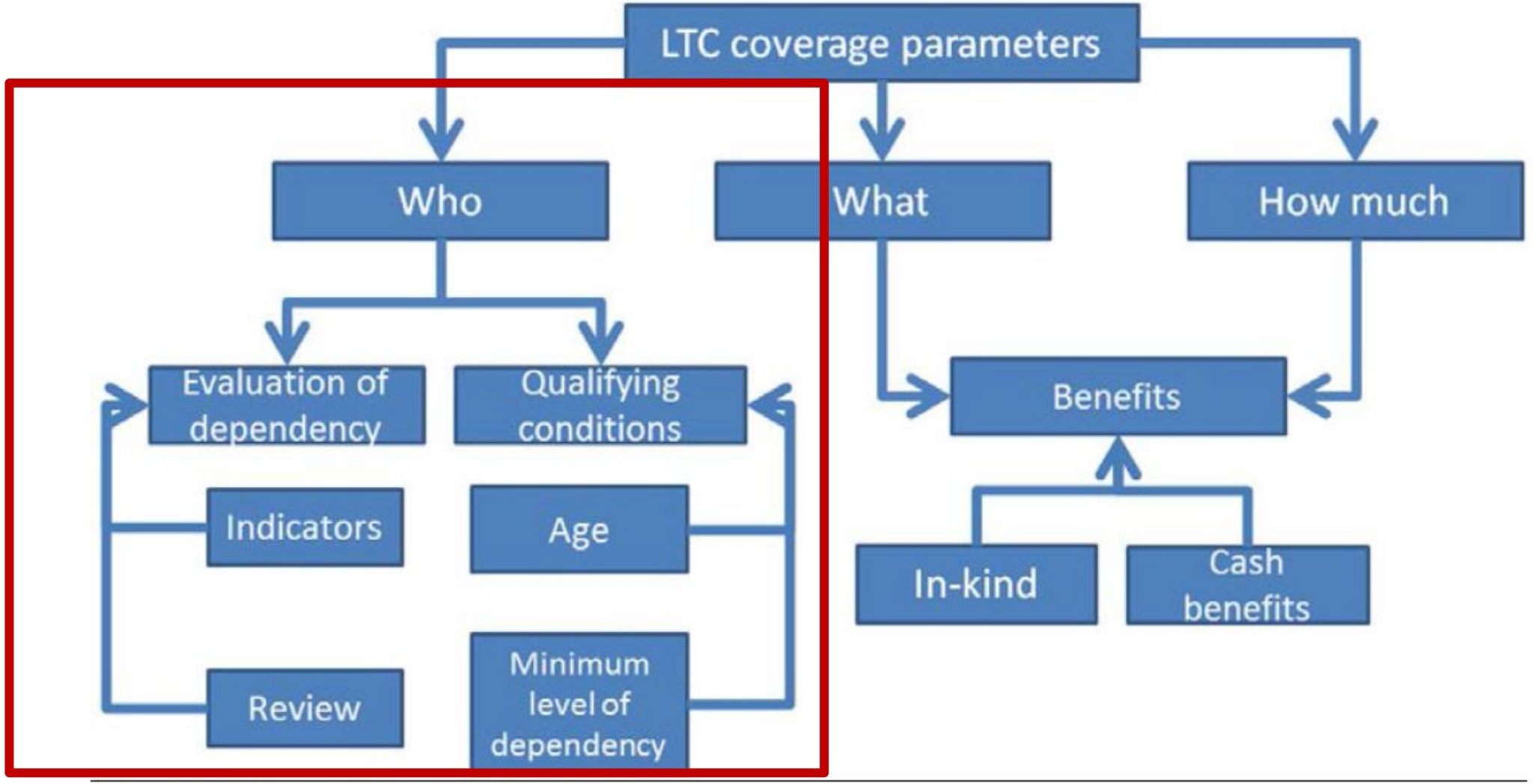
An economics framework



- Health is a stock that needs preserving through (costly) investment
- Individual insurance against loss of autonomy

Eligibility rules: a regulatory definition of care-need

- Need-of-care (rather than ageing) important driver of LTC demand…
  - What is "need"? E.g., 1+ ADL limitation (EU Ageing Report 2015).
- … but LTC legislations specifically define a «target» population:
  - *Assessment of needs → eligibility rules*
  - a minimum condition of «objective vulnerability», to receive the benefit
- **RQ1: How is "objective vulnerability" operationalised?**
  - Lack of unique clinical definition. E.g., frailty as a "Holy Grail" (Conroy 2009)



Source: Commission services (DG ECFIN).

EU commission, Joint Report on Health Care and Long-Term Care Systems & Fiscal Sustainability, 2016

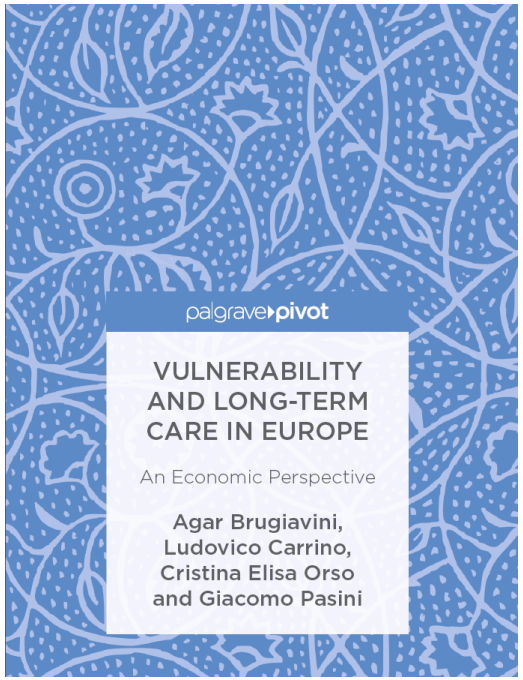
Review of European LTC legislations

We review national programmes (including reforms) in:

- Austria, Belgium, France, Germany, Czech Republic, England & Wales, Spain

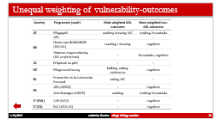
Regional programmes

- Belgium, Italy



- **Brugiavini, Carrino, Orso & Pasini (2017)**
- **Carrino, Orso & Pasini (2018)**

How is vulnerability assessed?



- Large differences with the clinical perspective
- Number of criteria: some regulations have few, others more than 30
- Focus: ADL, iADL, cognitive/behavioural difficulties
- Weights assigned to specific deficits
- Availability of informal-care (ignored/beneficial/detrimental)
- Means-testing
- **RQ2: How can such differences affect LTC coverage?**
  - Horizontal vs Vertical equity
  - Lack of evidence in current literature
  - crucial for reforms and costs control

SHARE/ELSA data and LTC eligibility rules

- European microdata: SHARE and ELSA 2015 surveys, representative of population aged 65+ (Austria, Belgium, Czech Republic, England, France, Germany Italy and Spain).

ADL	iADL	others
Bathing & hygiene ✓	Communication ✓	Behavioural/Cognitive impairment ✓
Dressing ✓	Shopping for groceries/medicines ✓	Other mobility limitations ✓
Using the toilet ✓	Cooking ✓	Informal-care utilisation ✓
Transferring ✓	Housekeeping ✓	Marital status/living arrangement ✓
Continence ✓	Doing laundry	Advanced medications related to post-surgical conditions ✗
Feeding ✓	Moving outdoor	Visual/hearing impairment ✓
Moving indoor ✓	Responsibility for own medications ✓	

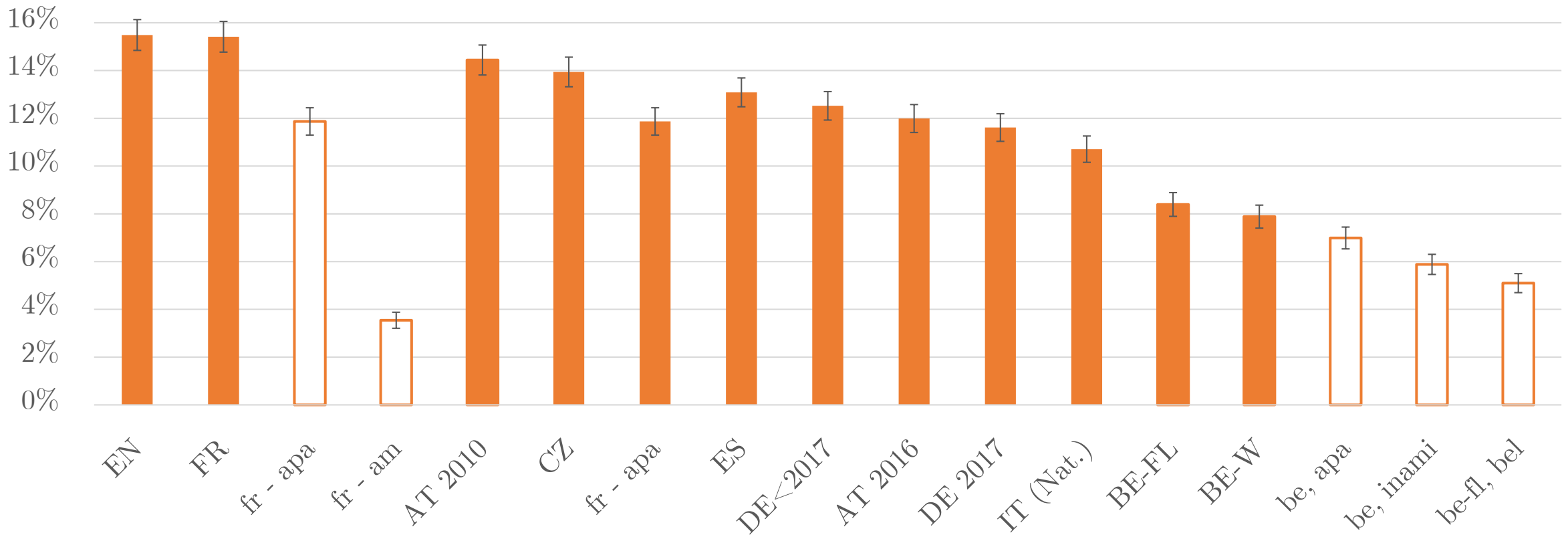
Geriatricians involved for a prudent and accurate correspondence between microdata information and actual LTC legislations.

Building the coverage index

- We compare respondents' clinical profiles to each LTC rule:
  - We determine respondents' eligibility status with respect to each LTC programme
- A directly-adjusted coverage index, by LTC programme:
  - % of our European sample that would be eligible under the programme's rules
- Limitations:
  - Community-level programmes are not reviewed
  - Local authorities' potential subjectivity and flexibility in applying the scales
  - Means testing not yet implemented
  - Extensive margin only, no info on intensity of support

Adjusted index of LTC coverage, by programme (2015)

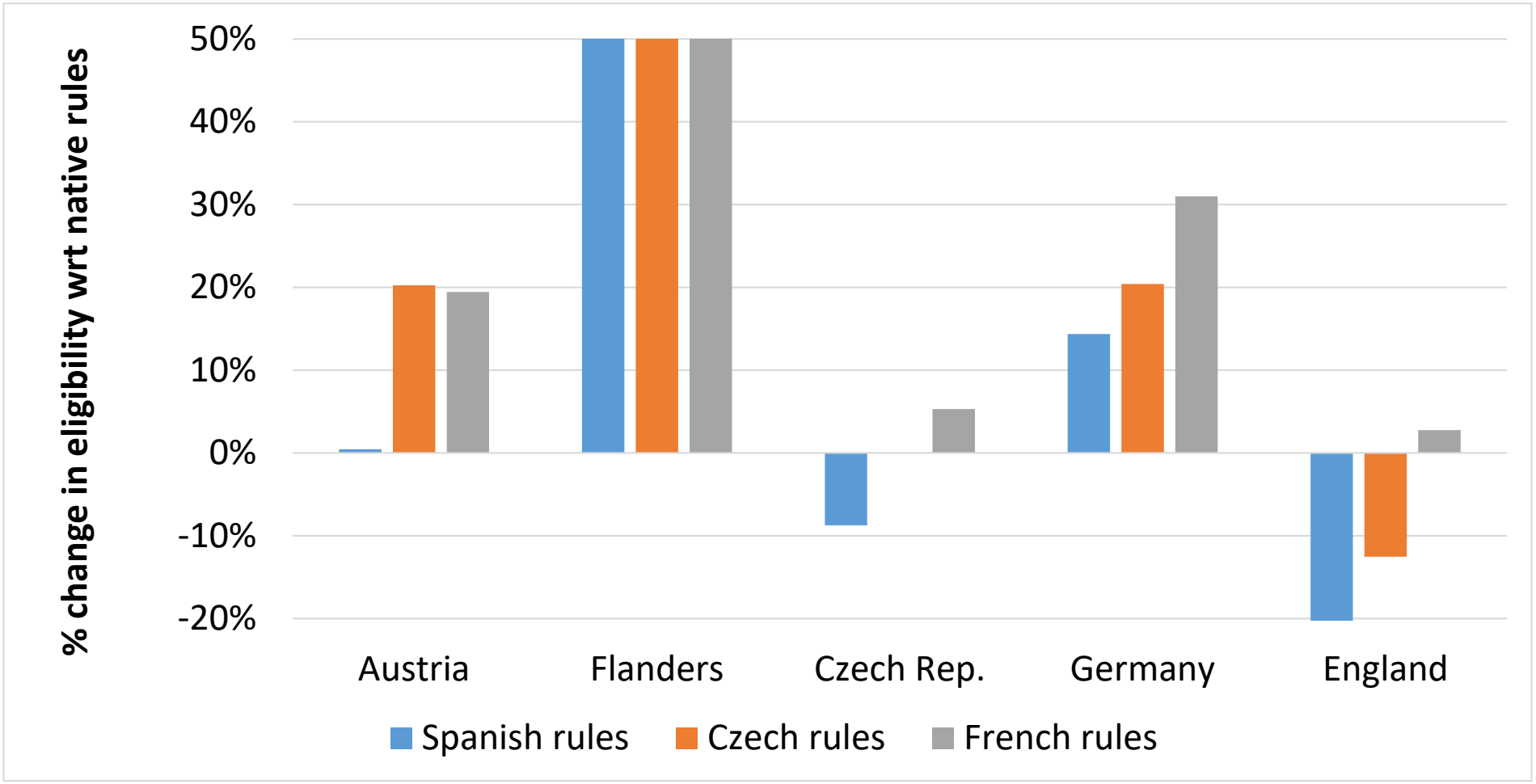
- % of European population that would be eligible to X-axis rules



- These adjusted coverage rates differ only due to eligibility rules


Counterfactual analysis

- How would LTC coverage change in 7 countries, if they applied Czech, Spanish or French definitions of eligibility? (with respect to native rule's coverage)



- Follow up:  Microsimulation (Atella et al 2017)

Determinants of care-use among eligible population

- Eligibility ≠ actual utilisation
  - Availability, accessibility, affordability of care-use
- Policy relevant: individuals eligible to local LTC, who do not receive it
  - Advantage of survey data: you can see people who *did not* apply for care, albeit potentially qualifying for it.
- Let's look at eligibility and care-use in SHARE wave 5

(% of total population)		Receiving formal home-care	
		No	**Yes**
Eligible	**No**	**86.7 %**	**3.2 %** *(ii)*
	Yes	**5.5 %** *(i)*	**4.6 %**

Source: Authors' elaboration from SHARE data

Carrino & Orso 2015

- Run simple probit model, among the sample of people eligible to LTC
  - Dependent variable: care-utilisation (yes/no)
  - Indep. variables: socio-demographic, health status
- Among eligible, probability of care use is determined by
  - Age (1 year → +1.2% probability)
  - # children (+1 child → +1.8%)
  - **Education (+ 1 year → +1%)**
  - ADL, iADL, fractures
- See Carrino, Orso & Pasini 2018, Carrino & Orso 2015

Conclusions

- Vulnerability particularly relevant for loss of autonomy among older people
- Vulnerability is undesirable, yet not directly observable: no simple diagnosis.
- Lack of a common threshold of vulnerability for access to public LTC
- Eligibility rules determine legislation-based inequality in care-access
- Mechanisms driving lack of care-access can be further analysed by accounting for eligibility status

References to our work

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