

Economics of Ageing

Agar Brugiavini

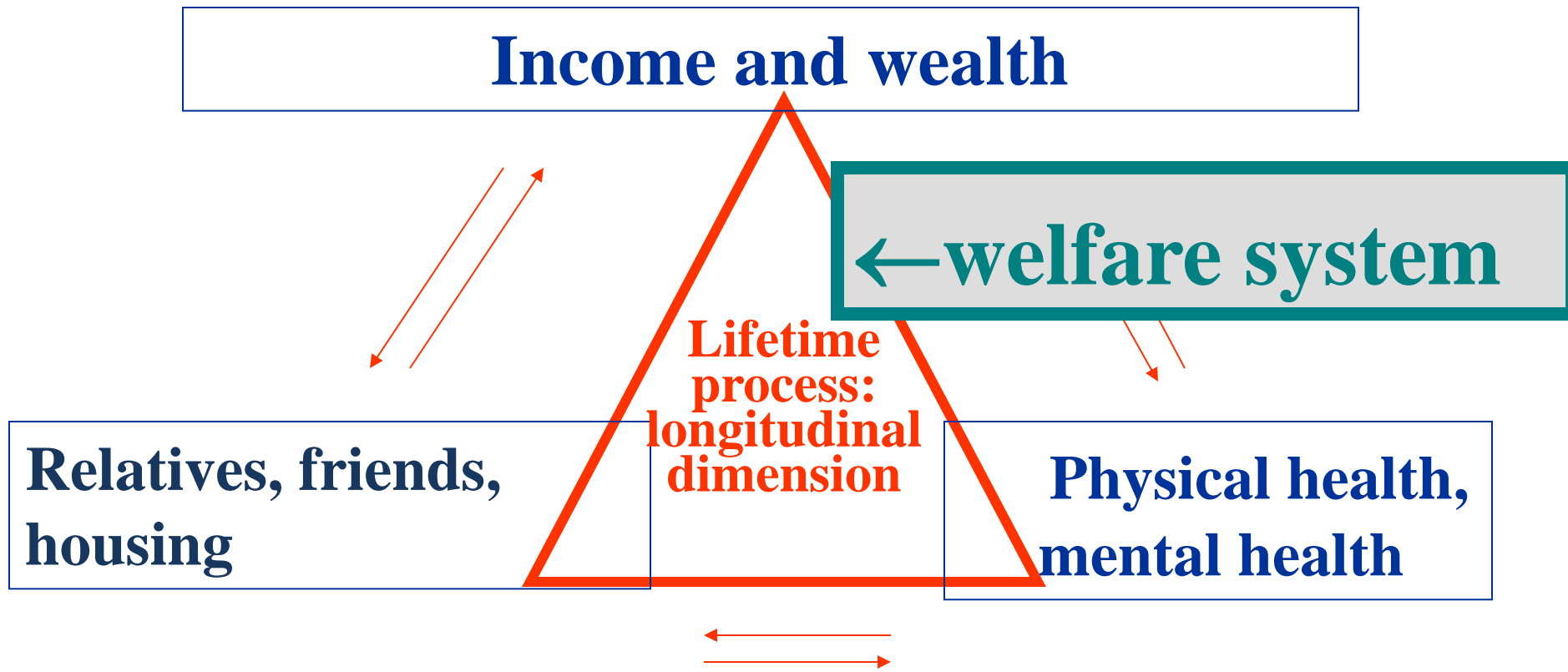
***Ca' Foscari University of Venice,
VIU-Venice International University***

The Future of Science- Secrets of Longevity
19-21 September, 2013 – Fondazione Giorgio Cini

Ageing: a challenge

- **Longevity** is “good news” but poses important challenges to society and policy makers.
- **The Economics of Ageing** explains the behaviour of markets and of economic agents: we need to understand the impact of ageing on these aspects.
- Hence we need to understand the ageing **process**, affecting different **dimensions** of life.

The Dimensions of Ageing: feedbacks



The Ageing Process

- The way people age can vary a lot, depending on their health, economic resources, social networks etc. **Active ageing** is a keyword.
- For example: why and how do people retire from work? Is it good or bad for the individual? What are the implications to society?
- There could be **cumulative** effects which began much earlier in life (even before birth).

Economic Implications of the Ageing Process (and Feedbacks): an Example

Retirement

Twice as much husband. Half as much money.

www.cafepress.com/GeezerShop



Economic Implications of the Ageing Process (and Feedbacks): an Example

- Early exits have implications for pension spending (pension reforms)
- They may have effects on health (depression and loss of cognitive abilities) which in turn increase health expenditures
- But also, individuals could find themselves in a retirement “trap”.

First Problem: Need **GOOD DATA !!**

SHARE (Survey of Health Ageing and Retirement in Europe) is an interdisciplinary survey on ageing collecting a representative *panel* sample of the individuals aged 50 or over and their spouses in Europe (16 countries plus Israel)



Cross-National Analysis



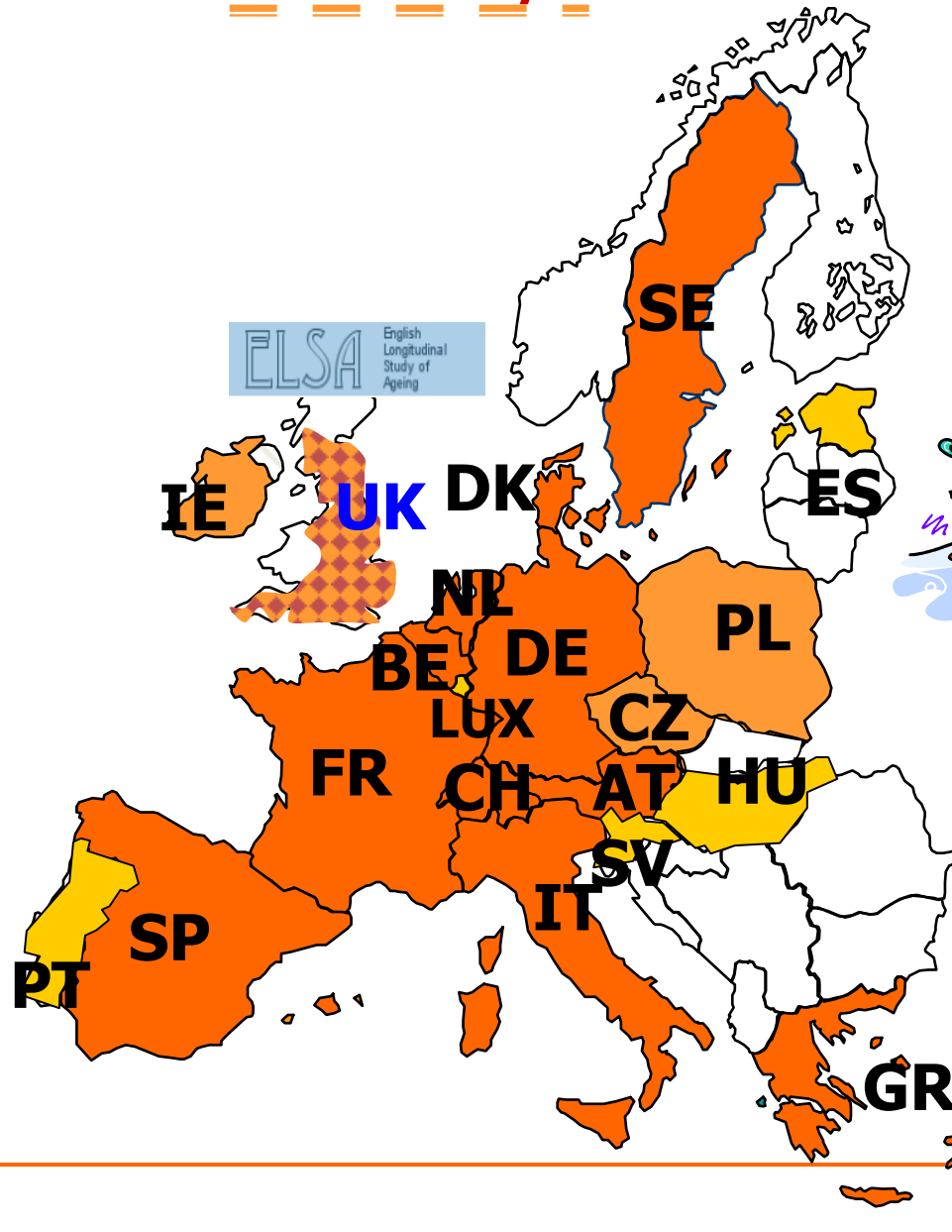
ELSA English
Longitudinal
Study of
Ageing

Wave 3: 2008/09

Life histories

**Wave 4:
2010/11:**

16 countries



**Korea
Japan
China**



India

IL



Multidisciplinary approach

1. Health-psychological variables:

- *self-reported health,*
- *physical functioning (ADLs, IADLs, walking speed/ chair stand, grip strength, peak flow, dry blood spots),*
- *mental health and cognition (depression scales), health behaviour and health service utilization,*

Multidisciplinary approach

2. *Economic variables:*

- Current work activity and job characteristics (job demands, flexibility, hours worked, opportunities to work post-retirement age),
- employment history, pension rights,
- sources and composition of current income, wealth and consumption.

- **3. Family and Social Network:**

- Family structure, assistance within families, intergenerational transfers of assets, money and time, social networks, proximity to relatives and activities (shopping, amusement), time use after retirement, volunteer activities
- Quality of work

- **4. Psychological data:** Expectations, preferences, risk aversion, time horizonmaybe the „big five“ personality traits

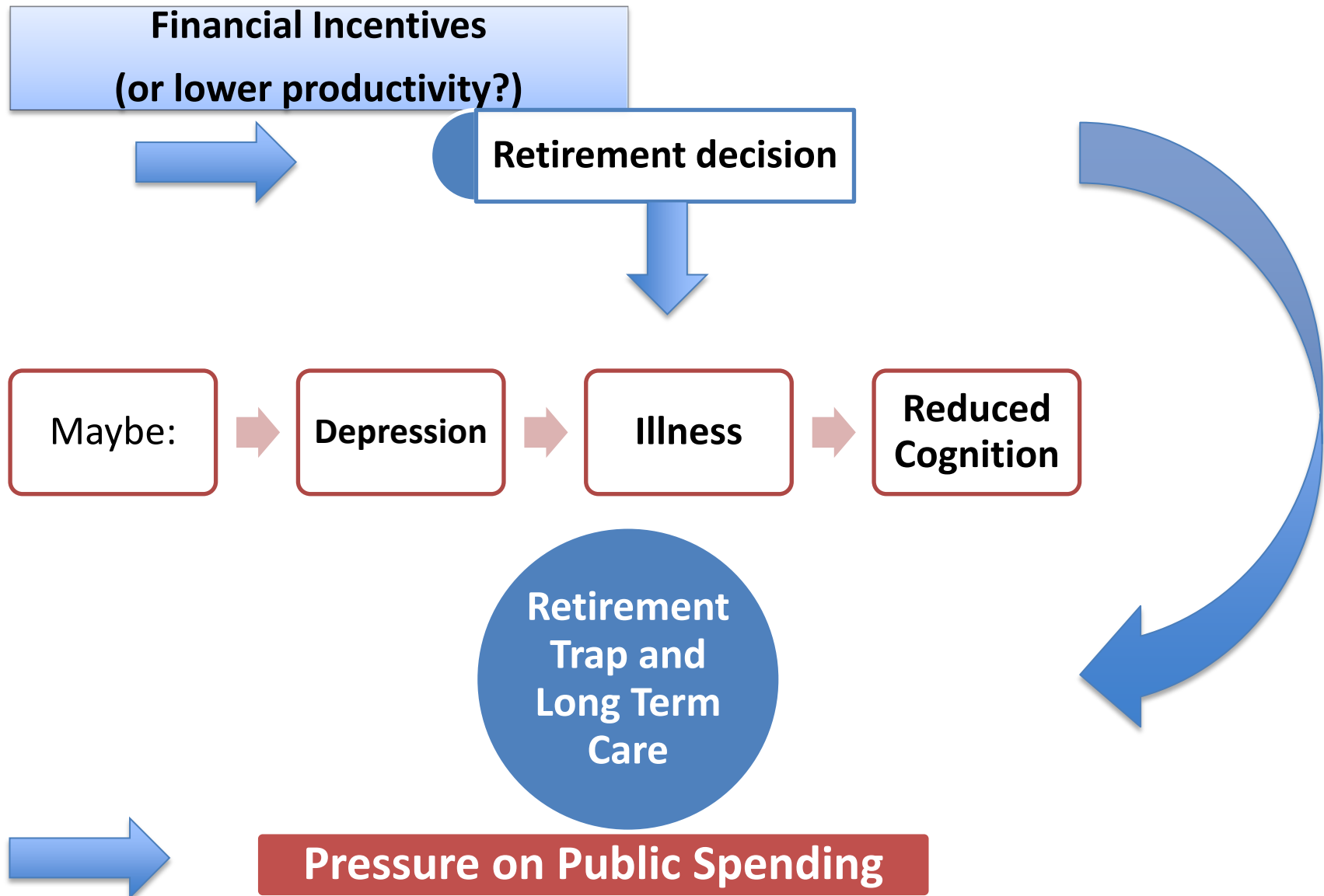
- **5. Demographic data:** age, gender, marital status..., housing, education....

Example: unused labour capacity – the retirement trap

Workers retire for a combination of reasons:
enjoy leisure, poor health, low work quality,
financial incentives, necessity to look after
parents or grandchildren, **loss of skills**

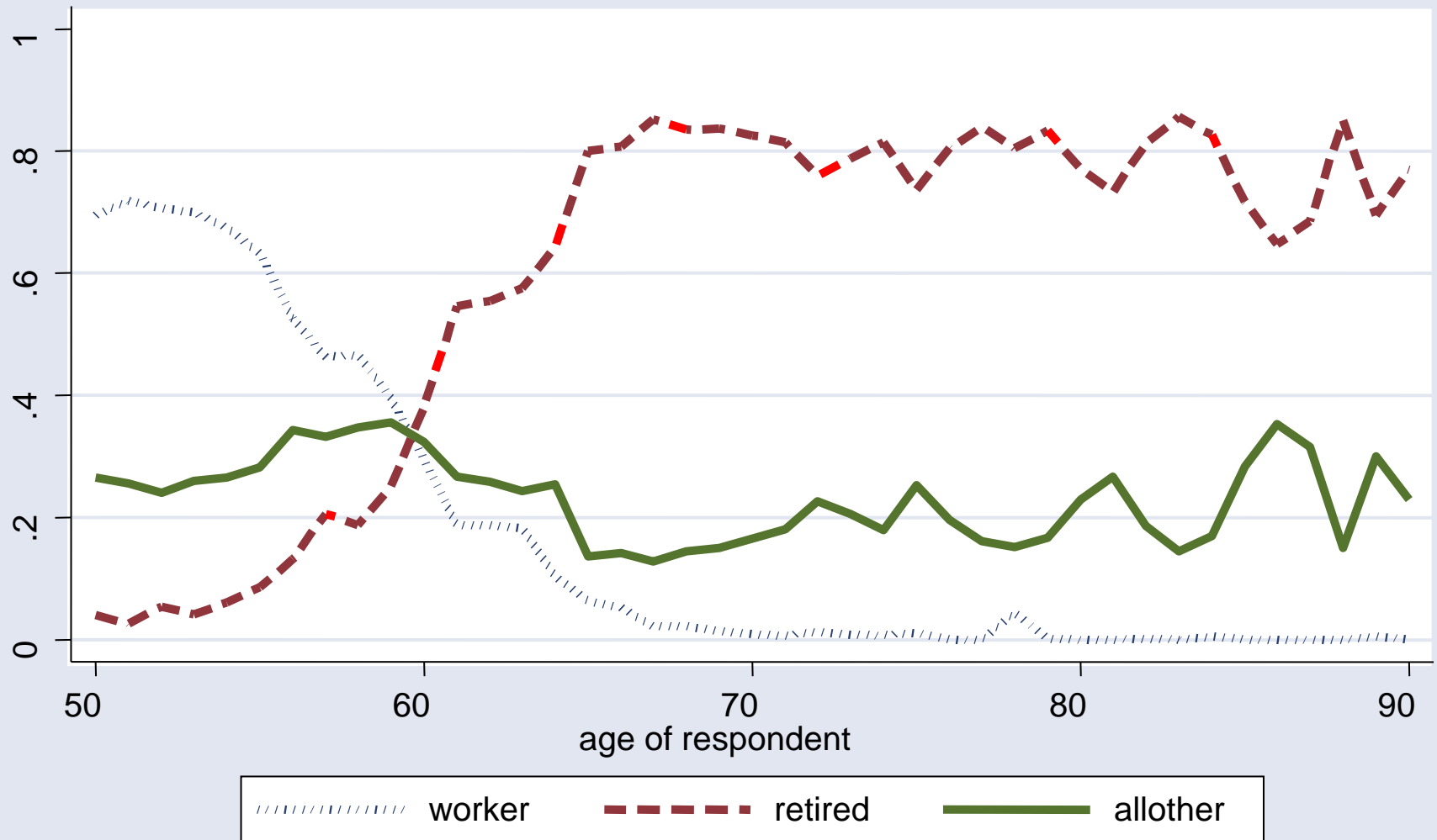
**Note: in most countries retirement is not
compulsory!!**

A toy model



Employed vs. retired – SHARE sample

Figure 1 All
Self-Reported Economic Activity by Age

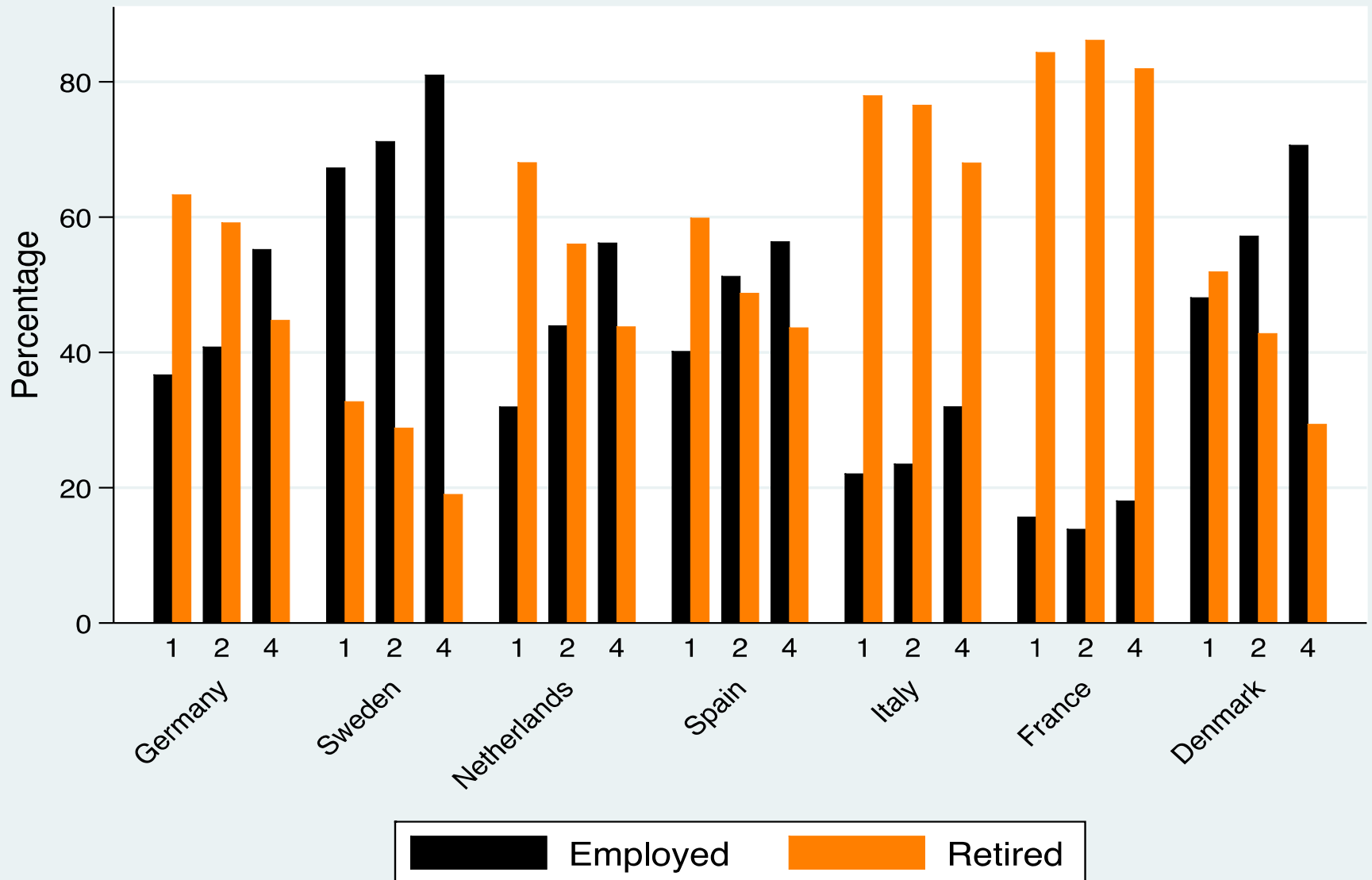


Why do people retire early from the labour market?

- financial incentives (regulation)
- low work quality
- poor health
- looking after parents or grandchildren
- loss of skills (loss of productivity)

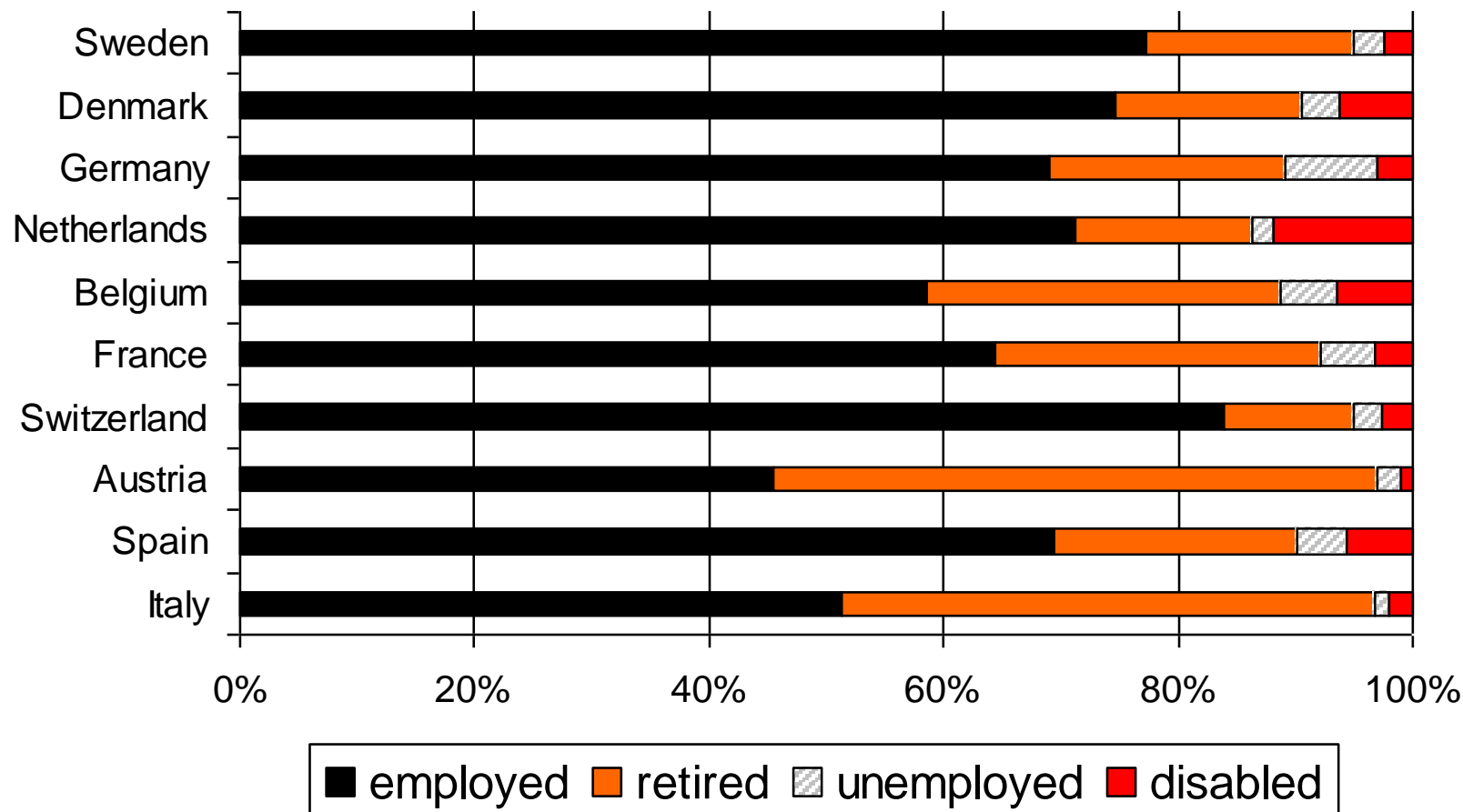
Employed vs. Retired by Wave, Men (the role of financial incentives)

Age group 60-64



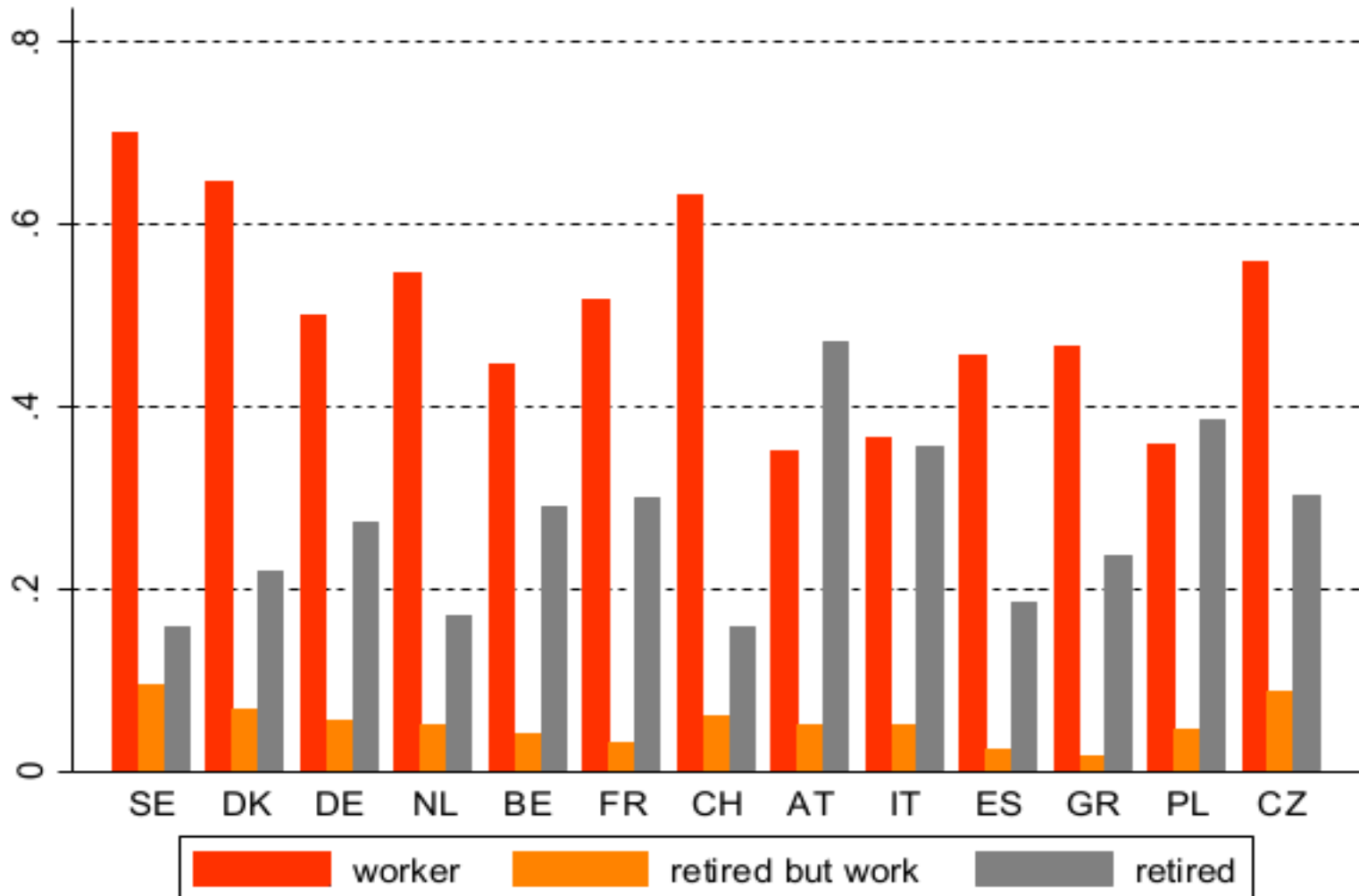
Unused labour capacity

Economic activity - age 50-64



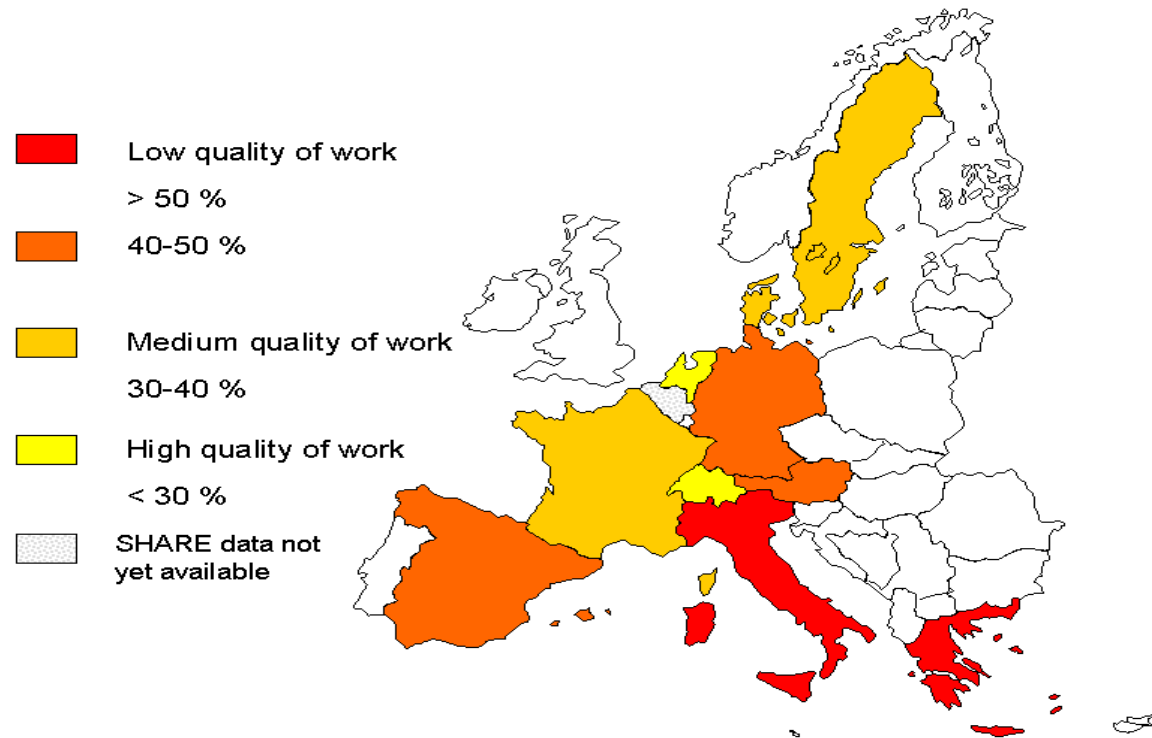
Labour Supply and Health

Distribution of activities for “**healthy**” individuals

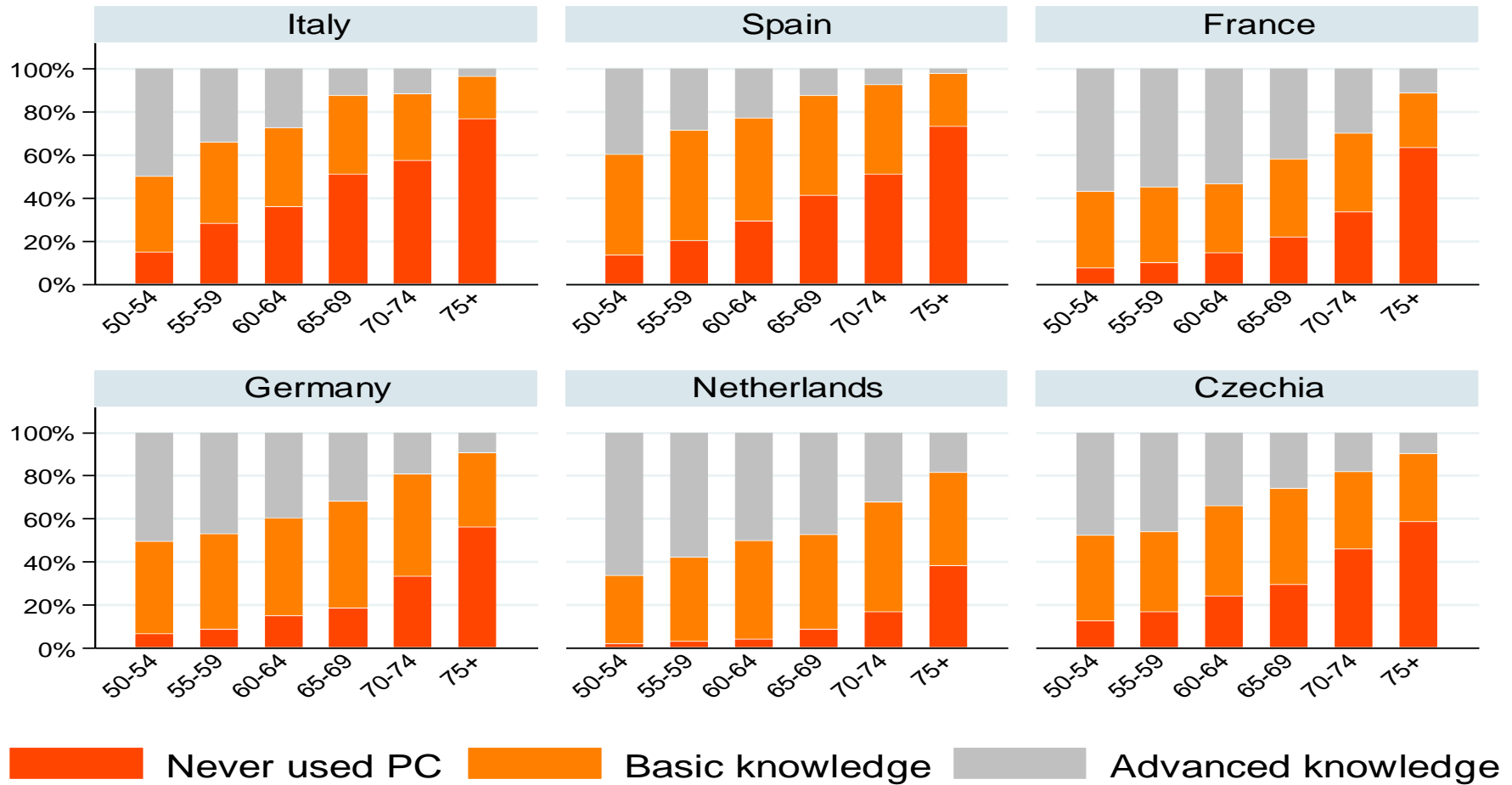


Quality of work could be an explanation

Quality of work for workers 50+ (SHARE sample)
Percentage reporting low quality (effort > reward)



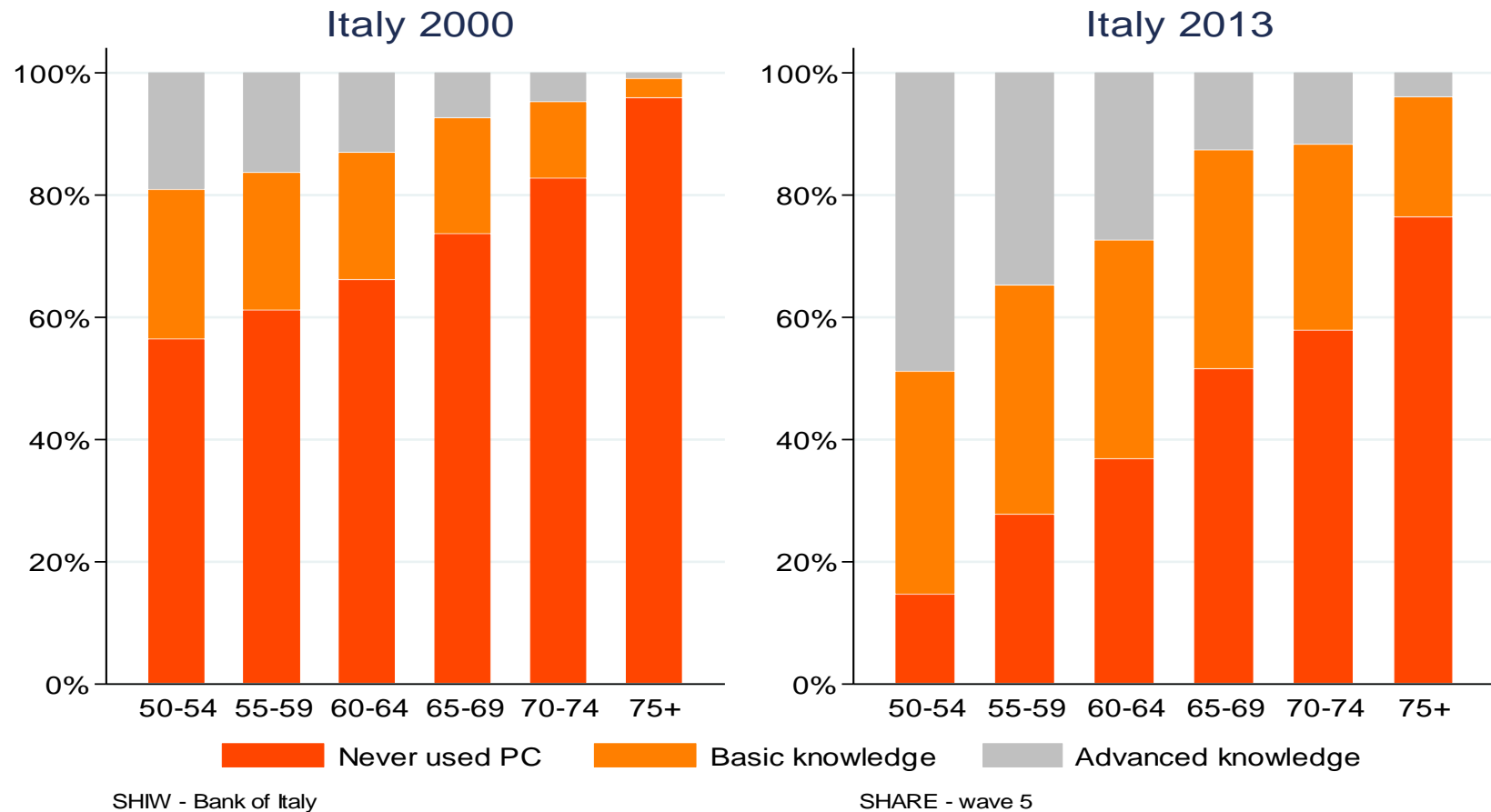
Or reduced productivity: computer abilities by age group, 2013



Graphs by country_order

... and in Italy

PC skills by age group



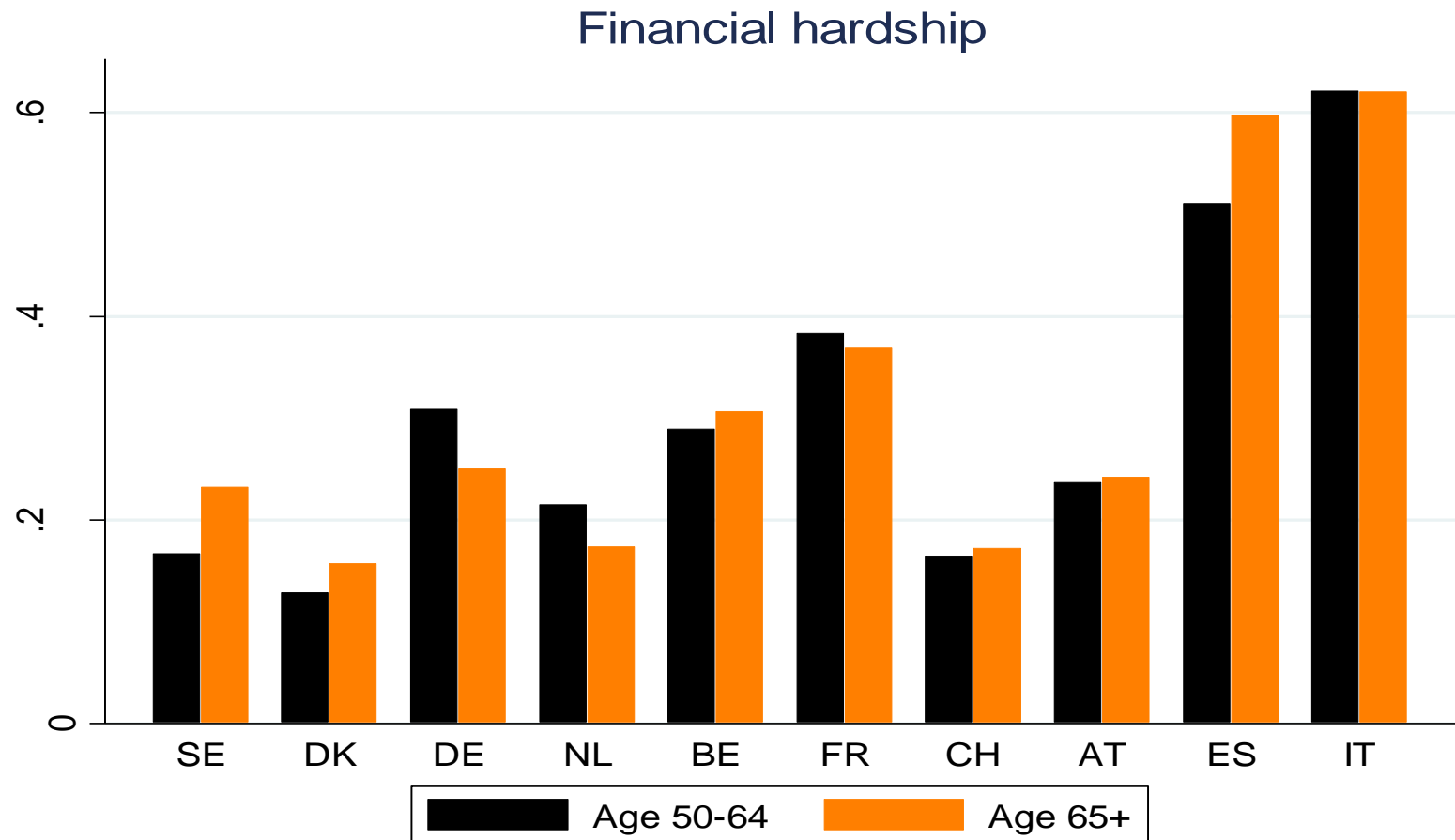
***Prima facie* evidence on early retirement**

- Institutional arrangements seem very relevant in explaining differences between countries (and across individuals) in labour supply and participation at older ages.
- Health “on its own” does not explain labour market decisions
- Job conditions (work quality) seem relevant as well
- Further research is needed of actual measures of productivity

The evidence on the early retirement trap

In countries with generous early retirement incentives and poor financial markets the longer people have been retired the higher their probability of being in financial hardship (Angelini, Brugiavini, Weber, 2009).

... financial hardship



... financial hardship

Be nice to your kids.
**They will choose your
Nursing Home.**

www.cafePress.com/GeezerShop



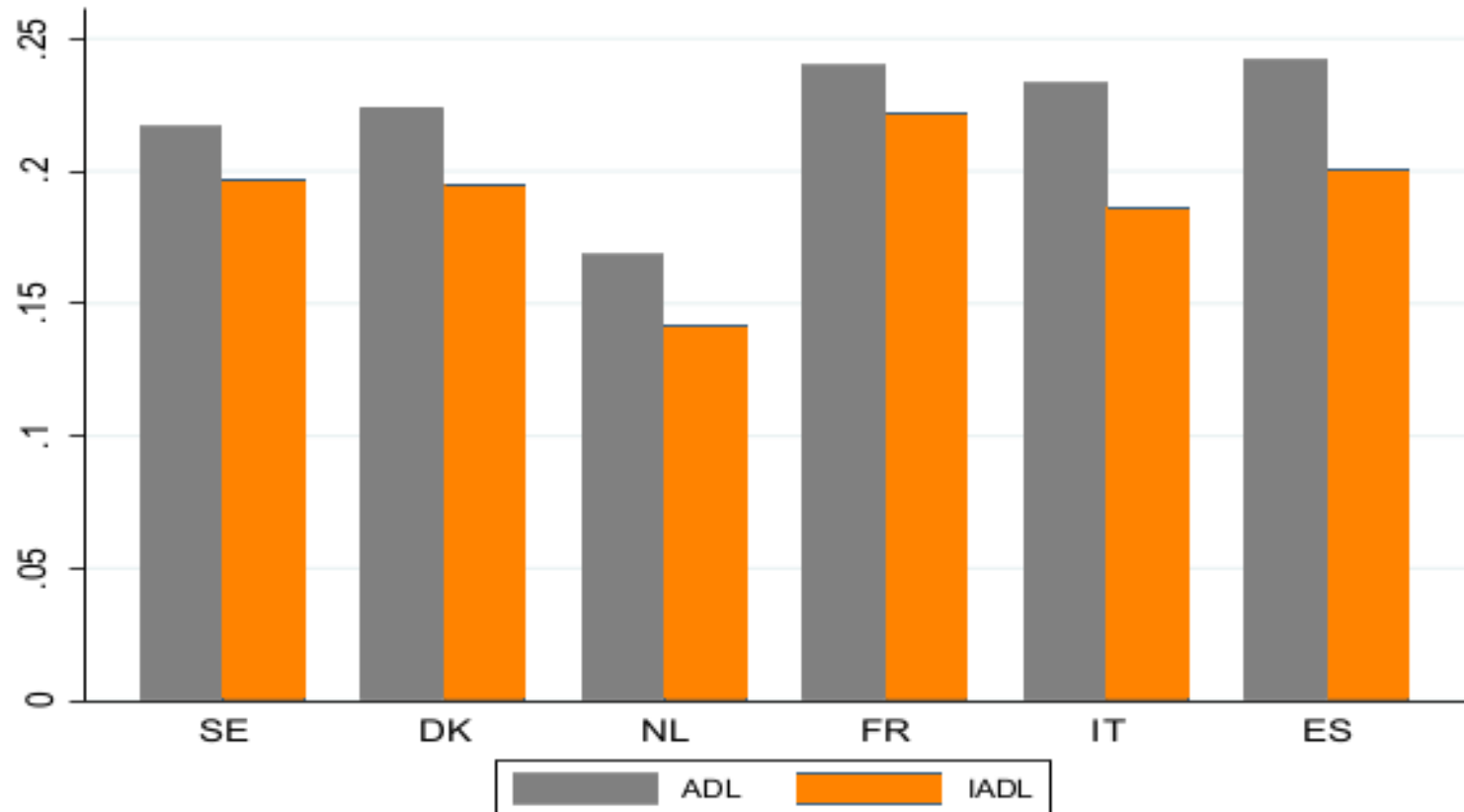
Effects on Long-term Care (LTC)

- The increase in the life expectancy augments the risks of illnesses later in life.
- The number of individuals that need social and health care will increase (even in the case in which “morbidity” will not).
- The baby boomers (born between 1945-1965) are currently exiting the labour market and in 2030 will be 80 years old.
- The LTC expense was in 2008 of about 1.2% of the GDP in USA and growing fast - while in Europe it varied between 0.16%-2.74% depending on the country

Ageing and Long-term care

- We expect an increase of the demand for LTC at a time when public spending is retrenching.
- The insurance market covers only part of these risks, which are supported mainly by the State
- The equilibrium between financial sustainability and increasing demand may require extensive “informal care” by family members.

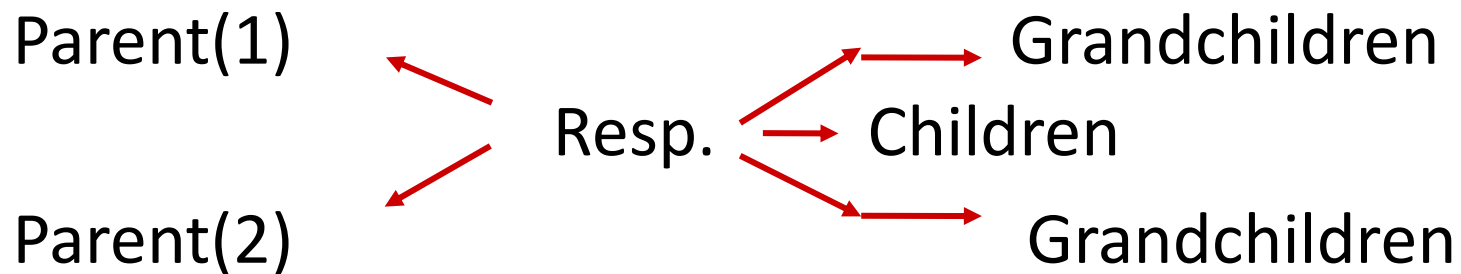
ADL and IADL



- Percentage of 50+ population which reports at least one ADL or IADL limitation as a measure of the potential demand for LTC services

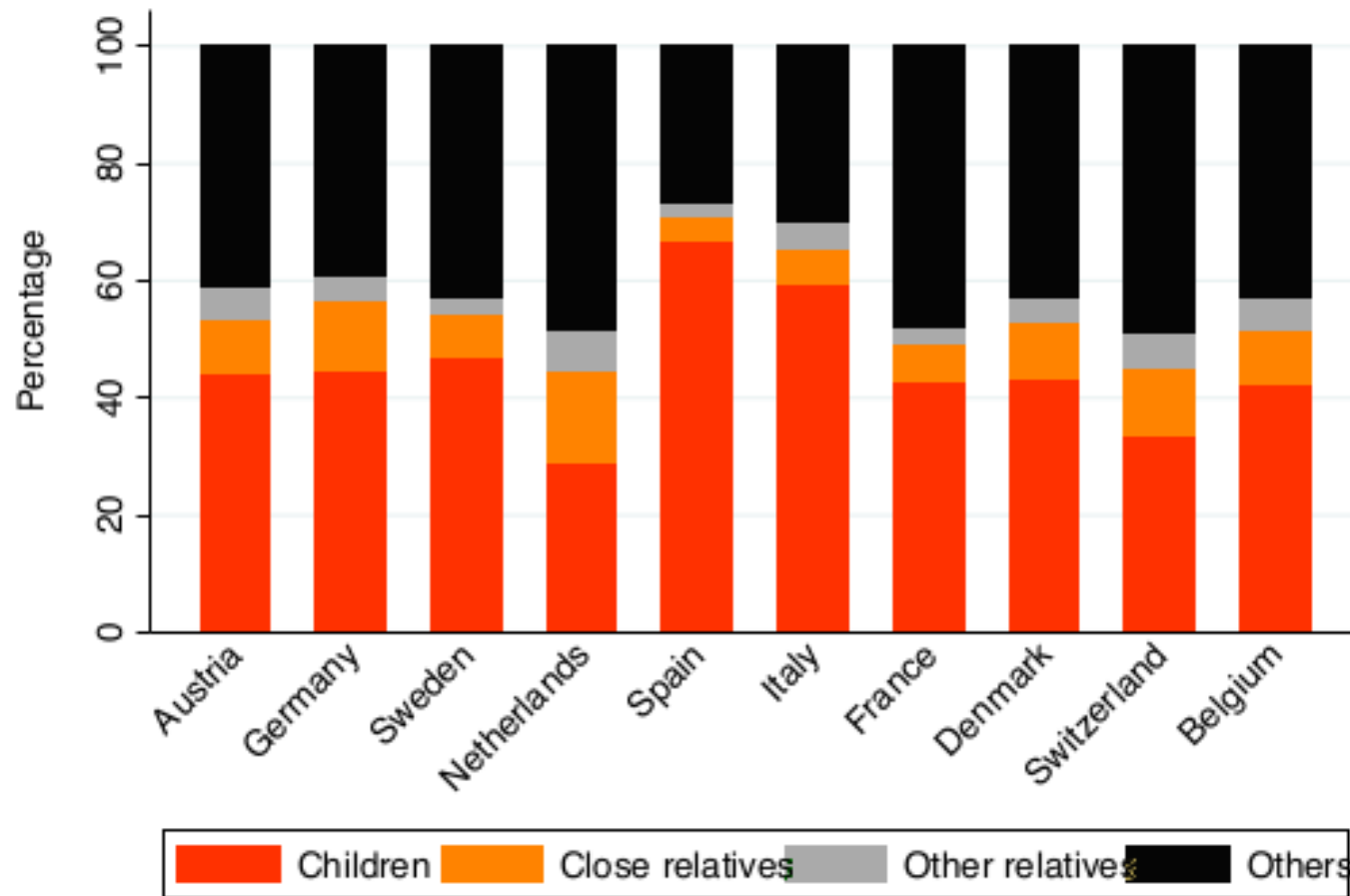
Data on informal care

- We can use **SHARE** to check whether retirement has an impact on the amount of care that can be provided.
- *Inter vivos* transfers (money and services) potentially on four generations

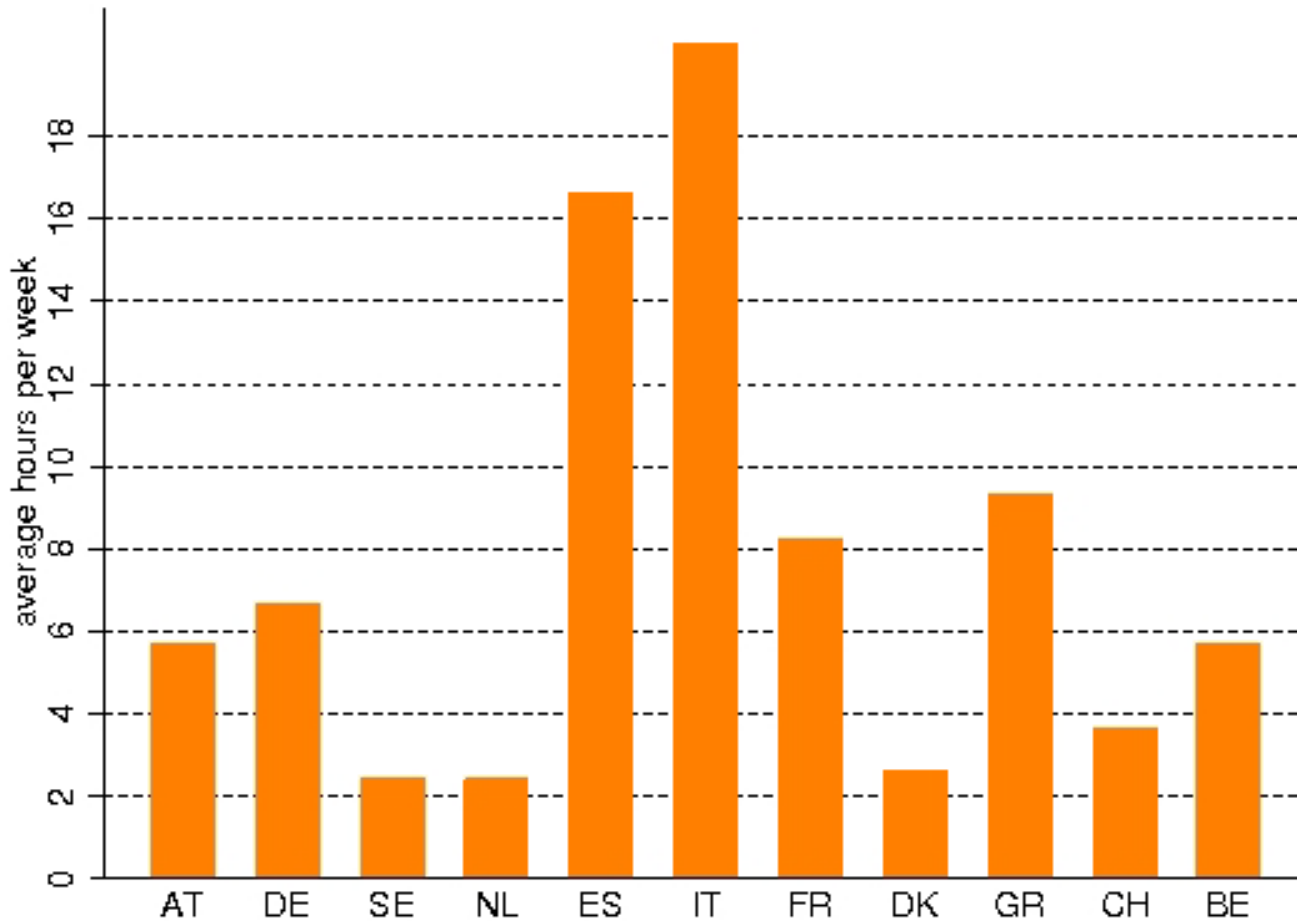


Who gives informal care ?

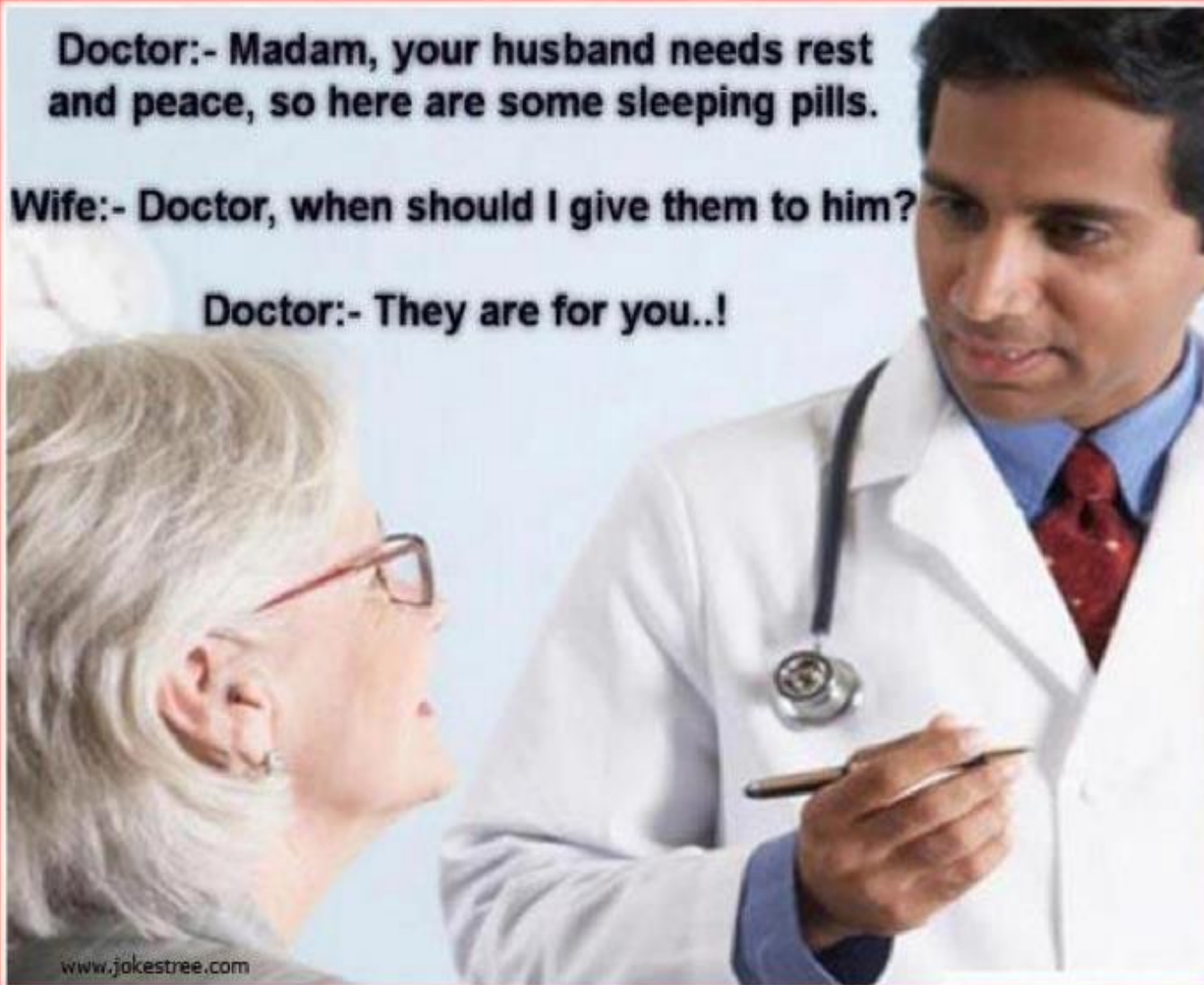
Respondents with at least one child



How much care ?



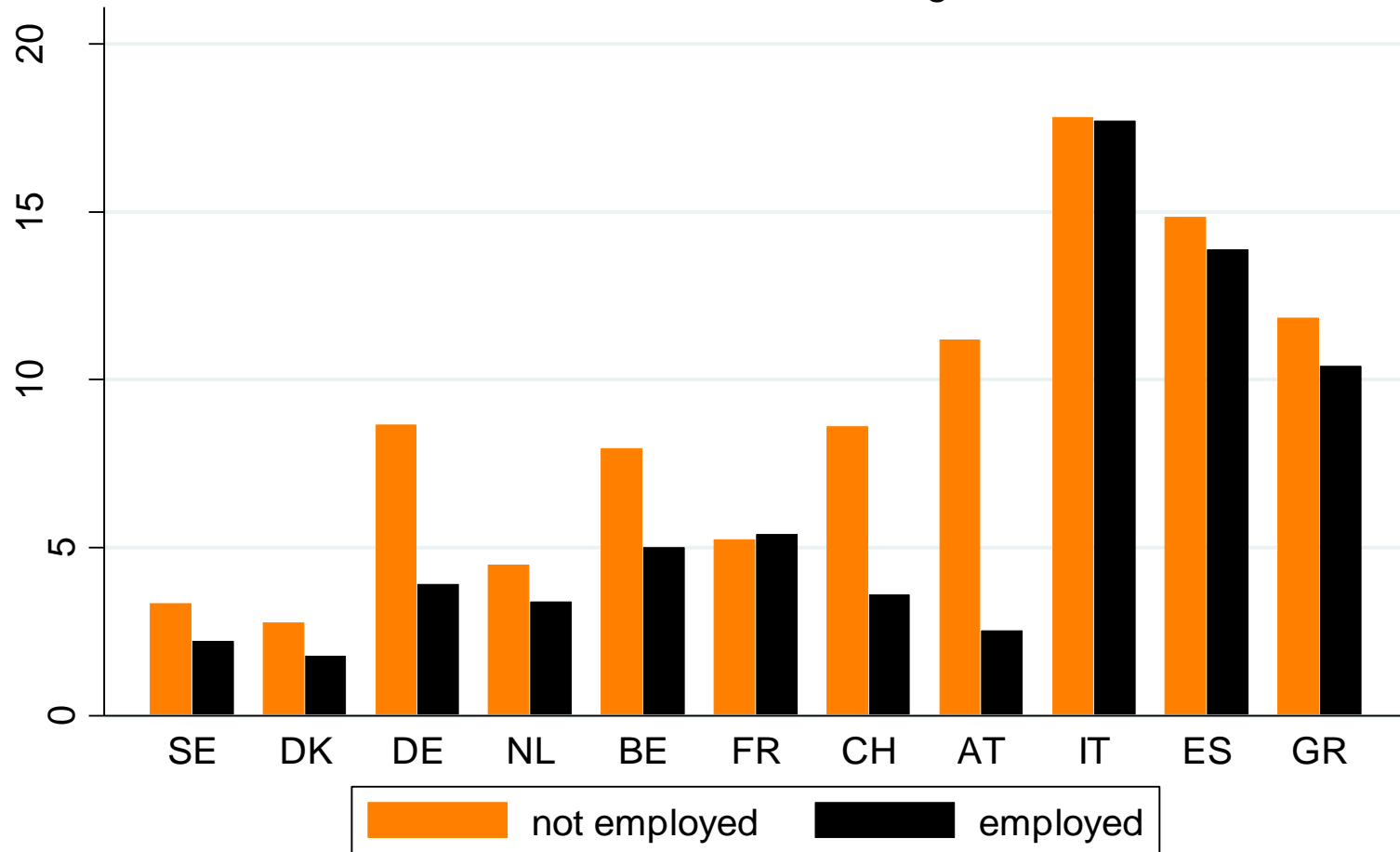
Who provides informal assistance?



For some economists the informal and the public assistance are “substitutes” for others they are “complement”

Reciprocity: care by the elderly

Days per month in care for grandchildren
Conditional on caring



Reciprocity: care by the elderly



Conclusions

- Economic decisions and economic policies cannot be studied in isolation from other ageing dimensions
- One needs the “ideal data” to answer relevant questions on a **process**
- Policy implications and policy prescriptions may be more complex than anticipated and there could be “side effects” (early retirement trap)
- A timely analysis is needed to face potentially very large expenses (including the “non market” expenses)