

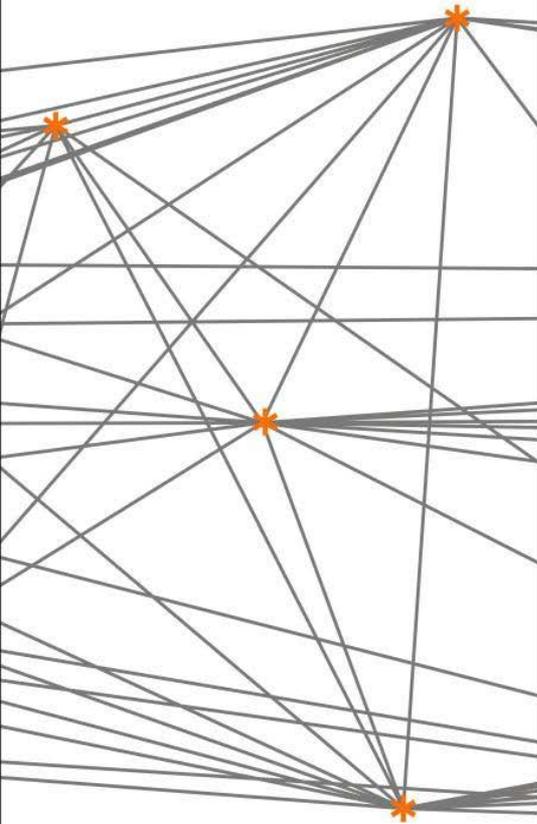


# The recent economic crisis and old-age health in Europe

**Tabea Bucher-Koenen (MEA)**

Joint work with

**Fabrizio Mazzonna (USI, MEA)**



- ▶ The 2007/2008 financial and economic crisis was a major macroeconomic shock in European countries.
- ▶ Private households were affected in many ways, e.g., by unemployment, loss of income, drops in wealth etc.
- ▶ Recent sovereign debt crisis will have additional consequences for European economies due to major cuts in government expenditure, which might also affect health budgets.
- ▶ **Central Question:** How do the recent macroeconomic turbulences affect public health?

## Potential Channels:

- ▶ Unemployment and financial hardship increase stress, adoption of unhealthy life-style, and depression
- ▶ Reduction in income and wealth lowers investment in health
- ▶ Reduction of public expenditure on health services due to tight budgets
- ▶ On the other hand: Less economic activity reduces job related health problems (stress, accidents), more time for healthy life-style (lower opportunity cost of time), and less smoking and drinking

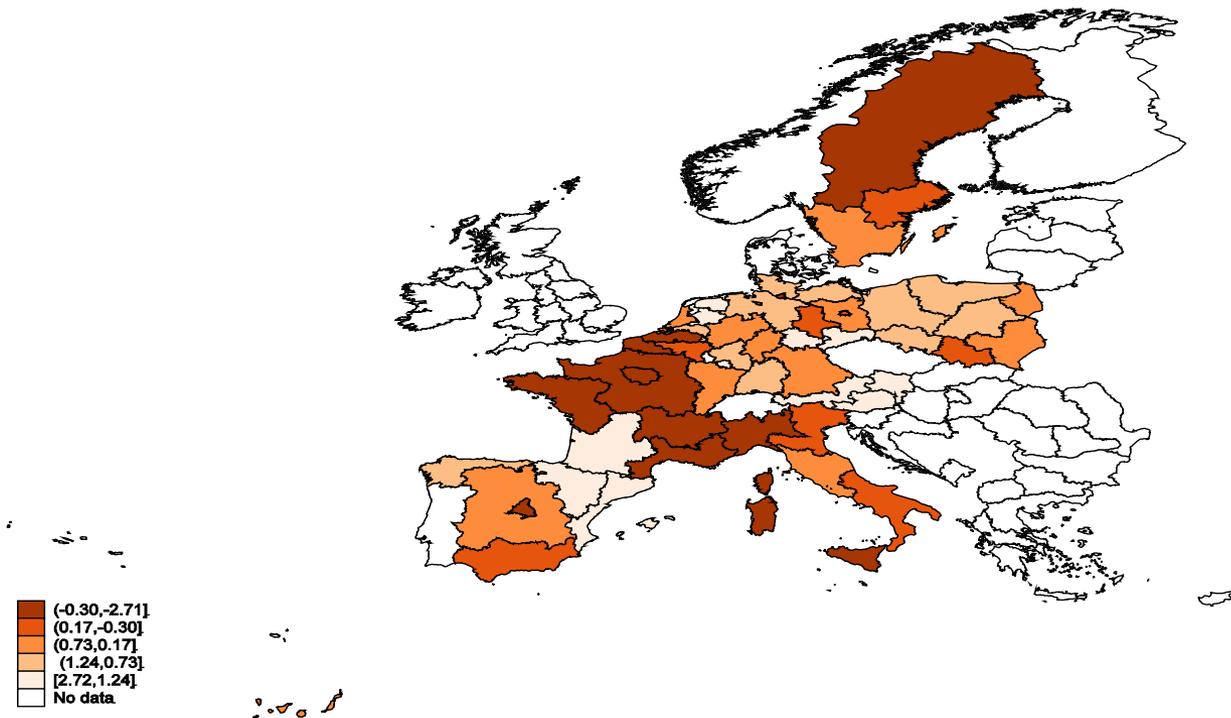
- ▶ We examine effects of the recent crisis on health of older Europeans.
  - ▶ might be more affected due to fragile health
  - ▶ might be less affected due to weak link to labor markets
- ▶ We use SHARE individual-level data on health in combination with regional data on employment rates from Eurostat at NUTS 1 level.
- ▶ We examine regional variation in the intensity of the crisis within countries.

# Measuring changes in health

- ▶ Respondents from SHARE wave 2 (2006, pre-crisis) and SHARE wave 4 (2010, post-crisis)
- ▶ Countries included: Sweden, Germany, Netherlands, Belgium, France, Austria, Spain, Italy, Poland
- ▶ **Self-reported health (SRH):**  
*Would you say your health is 1–excellent, 2–very good, 3–good, 4–fair, 5–poor.*  
Focus: **Change in health** between 2006 and 2010. It can take values from -4 to 4, where negative values mean worse health compared to two years before.
- ▶ Controls: gender, age, employment status, education

# Regional variation in economic crises

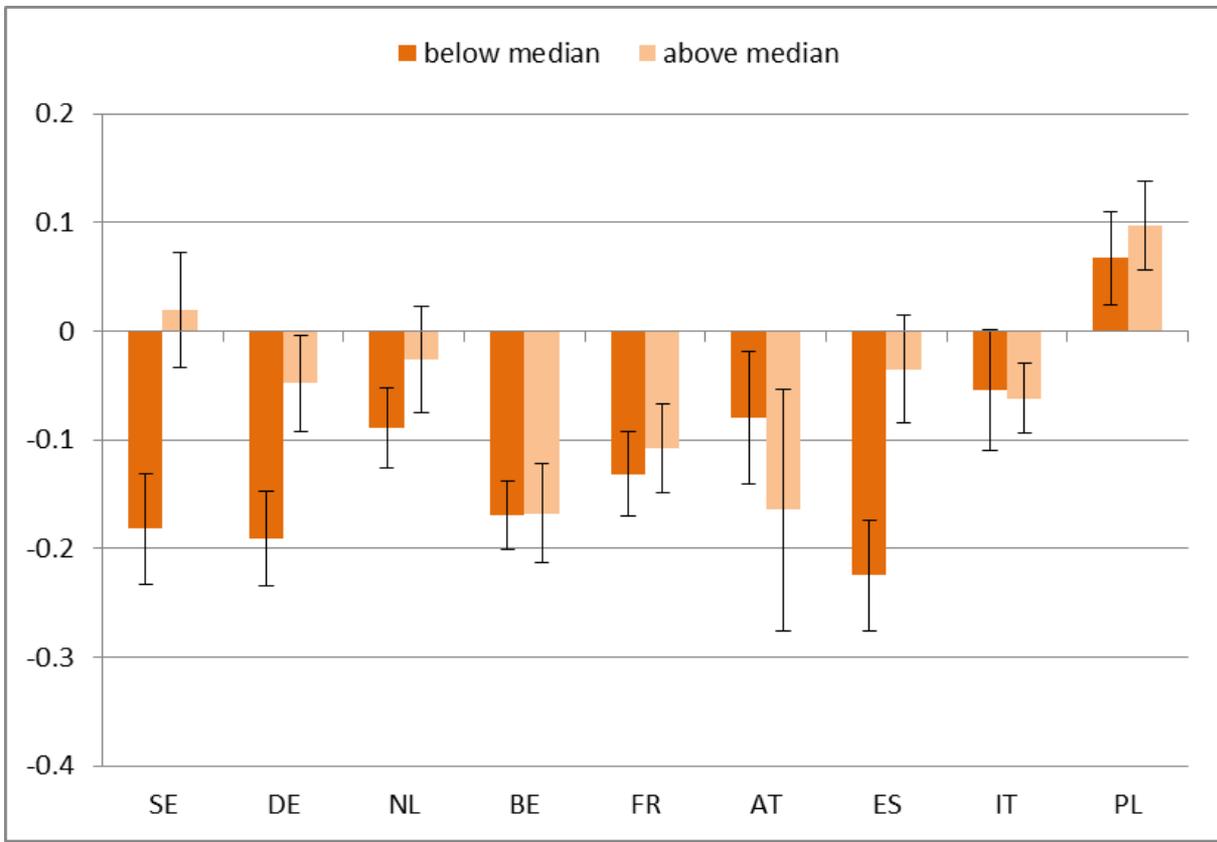
**Figure 1:** Map of the changes in employment rates for the population 55-64 in 2008 by NUTS 1 regions in Europe



Source: Eurostat [http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)  
Trend and cycle decomposition of the time series of age-specific employment rates from 1999 to 2010 using a Hodrick-Prescott filter with smoothing parameter of 10.

# The European crisis and SRH

**Figure 2:** Regional changes in self-reported health by country among Europeans between age 50-70.



Source: Eurostat data on regional employment and SHARE Waves 2 and 4

# The European crisis and SRH

**Table 1:** Linear regression: The effect of employment rate on changes in self-reported health

<b>Age specific employment rates</b>						
Sample:	Full sample		Age restricted		Employed W2	
beta	0.043	***	0.057	***	0.078	***
(s.e.)	(0.012)		(0.015)		(0.023)	
<i>N</i>	14,178		8,289		3,605	

Significance: \*\*\* = 1%; \*\* = 5%; \* = 10%; Notes: Controlled for gender, age and a full set of country dummies.  
Source: SHARE Wave 2 release 2.5.0; Wave 4 release 1

**Table 2:** The effect of employment rate on changes in self-reported health by level of education

<b>Panel A: Age restricted</b>					
	High school dropouts		High school		College
beta	0.052	**	0.052	**	0.102 ***
(s.e.)	(0.025)		(0.026)		(0.032)
<i>N</i>	3,336		2,995		1,852

<b>Panel B: Age restricted &amp; Employed</b>					
	High school dropouts		High school		College
beta	0.103	**	0.054		0.099 **
(s.e.)	(0.044)		(0.037)		(0.040)
<i>N</i>	1,033		1,382		1,141

Significance: \*\*\* = 1%; \*\* = 5%; \* = 10%; Notes: Controlled for gender, age and a full set of country dummies.

Source: SHARE Wave 2 release 2.5.0; Wave 4 release 1

**Table 3:** The effect of employment rate on changes in self-reported health by macro-region of residence

<b>Panel A: Age restricted</b>					
	Mediterranean		Central		Northern
beta	0.037		0.041	*	0.14
(s.e.)	(0.025)		(0.022)		(0.042)
<i>N</i>	1,838		3,496		1,949

<b>Panel B: Age restricted &amp; Employed</b>					
	Mediterranean		Central		Northern
beta	0.083	*	0.057	*	0.118
(s.e.)	(0.046)		(0.030)		(0.059)
<i>N</i>	623		1,585		1,114

Significance: \*\*\* = 1%; \*\* = 5%; \* = 10%; Notes: Controlled for gender, age and a full set of country dummies.

Source: SHARE Wave 2 release 2.5.0; Wave 4 release 1

- ▶ The current crisis had a negative effect on old-age health: 1 pp lower employment rate has a negative effect on health equivalent to more than one additional year of age.
- ▶ Effects are stronger
  - ... for individuals who are still in the labour force.
  - ... in the Northern countries due to the high labour force participation of the older population.

## Policy conclusion

- ▶ Consider health consequences when designing policies to overcome (the current) crisis.
- ▶ Consider side effects when increasing labor market participation of older Europeans.  
=> More research necessary to understand underlying mechanisms.