

DEPARTMENT OF SOCIOLOGY



# Does austerity harm health?



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February 25, 2014

# Thanks to...



Sanjay Basu  
Stanford



Martin McKee  
LSHTM



David Stuckler  
Oxford

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## Girl, 13, dies from inhaling stove fumes at home in Thessaloniki



File photo

A 13-year-old girl has died in Thessaloniki after inhaling fumes from a makeshift stove in her house, which did not have electricity.

Authorities said they were called to a home in the Xirokrini neighborhood of the northern city at around 11 p.m. on Sunday. They found that the teenager was already dead. Her 54-year-old mother is thought to have lost consciousness before regaining her senses long enough to call for help.

The brazier was the apartment's only form of heating and it is thought the girl died from carbon monoxide poisoning. Star TV reported that the apartment's electricity had been cut off due to unpaid bills totaling around 1,000 euros.

25, 2014



The TV station also reported that the girl's mother was unemployed. The 13-year-old was of Serbian







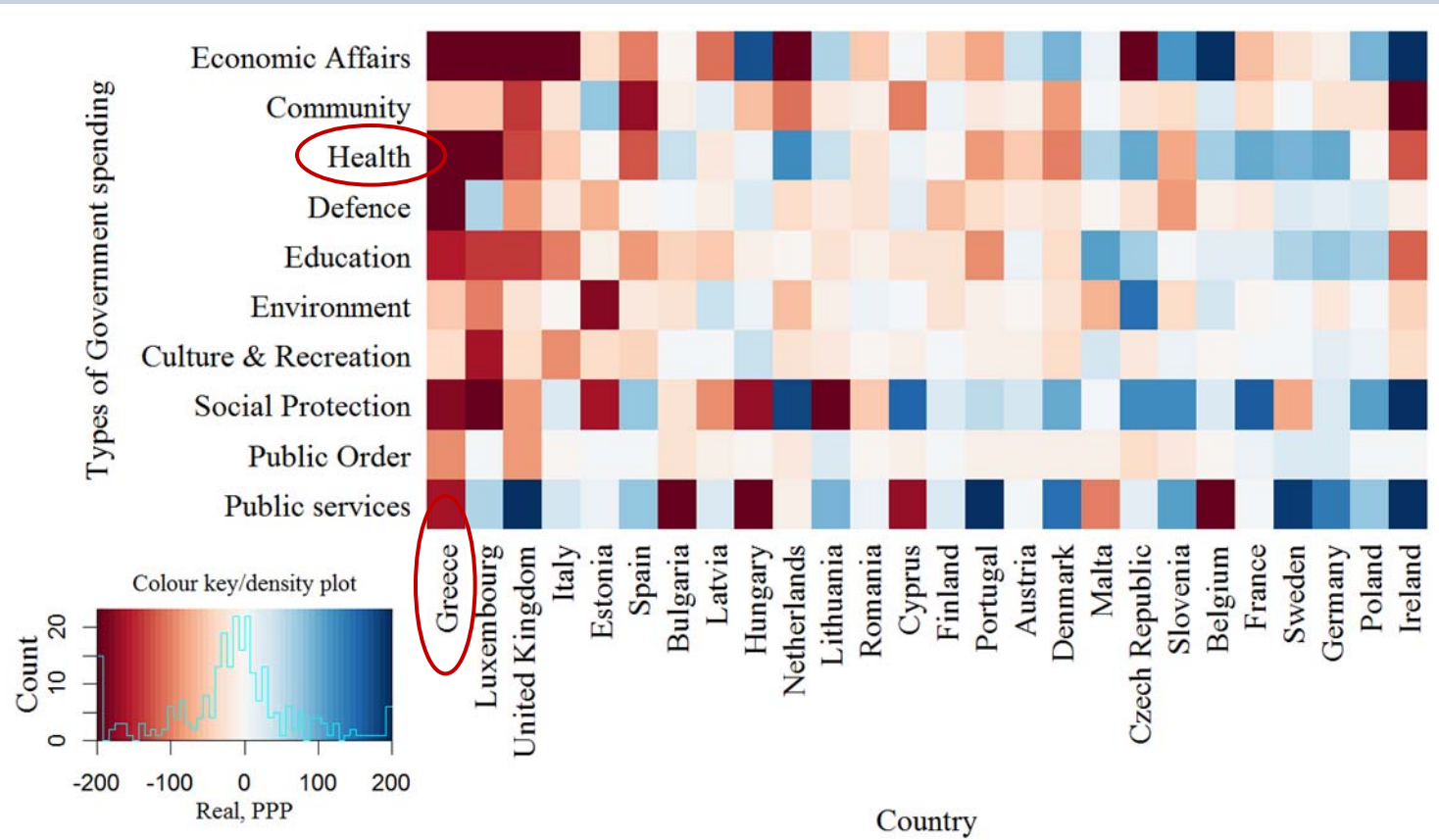
# Three key questions

1. What changes have there been to health and social protection spending?
2. Has the economic crisis harmed health?
3. Drawing lessons from this recession on how to protect health systems and also people's health

# PATTERNS OF AUSTERITY AND STIMULUS

# Patterns of austerity: 2009-2011

(Red = reduced spending: Blue = increased spending)



Reeves A, Basu S, McKee M, Marmot M, Stuckler D. Austerity or not? UK coalition government budgets and health inequalities. Journal of the Royal Society of Medicine. 2013.



# HEALTHCARE AUSTERITY

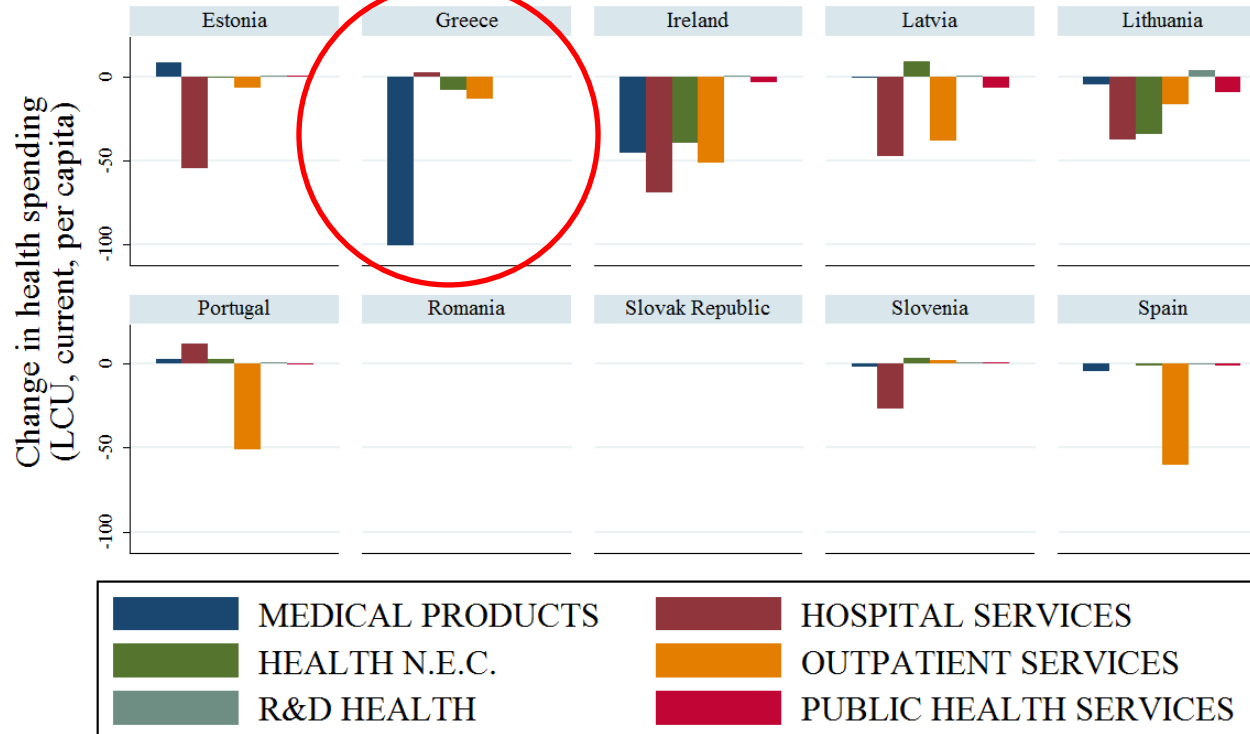
# What about Greece?

- 'The savings will mainly come from:
  1. Reduced public spending on drugs,
  2. Decreases in workforce
  3. Changes to purchasing of health services.'

(Karanikolos et al., **Financial crisis, austerity, and health in Europe**, The Lancet, 2013).

# Healthcare austerity: Greece

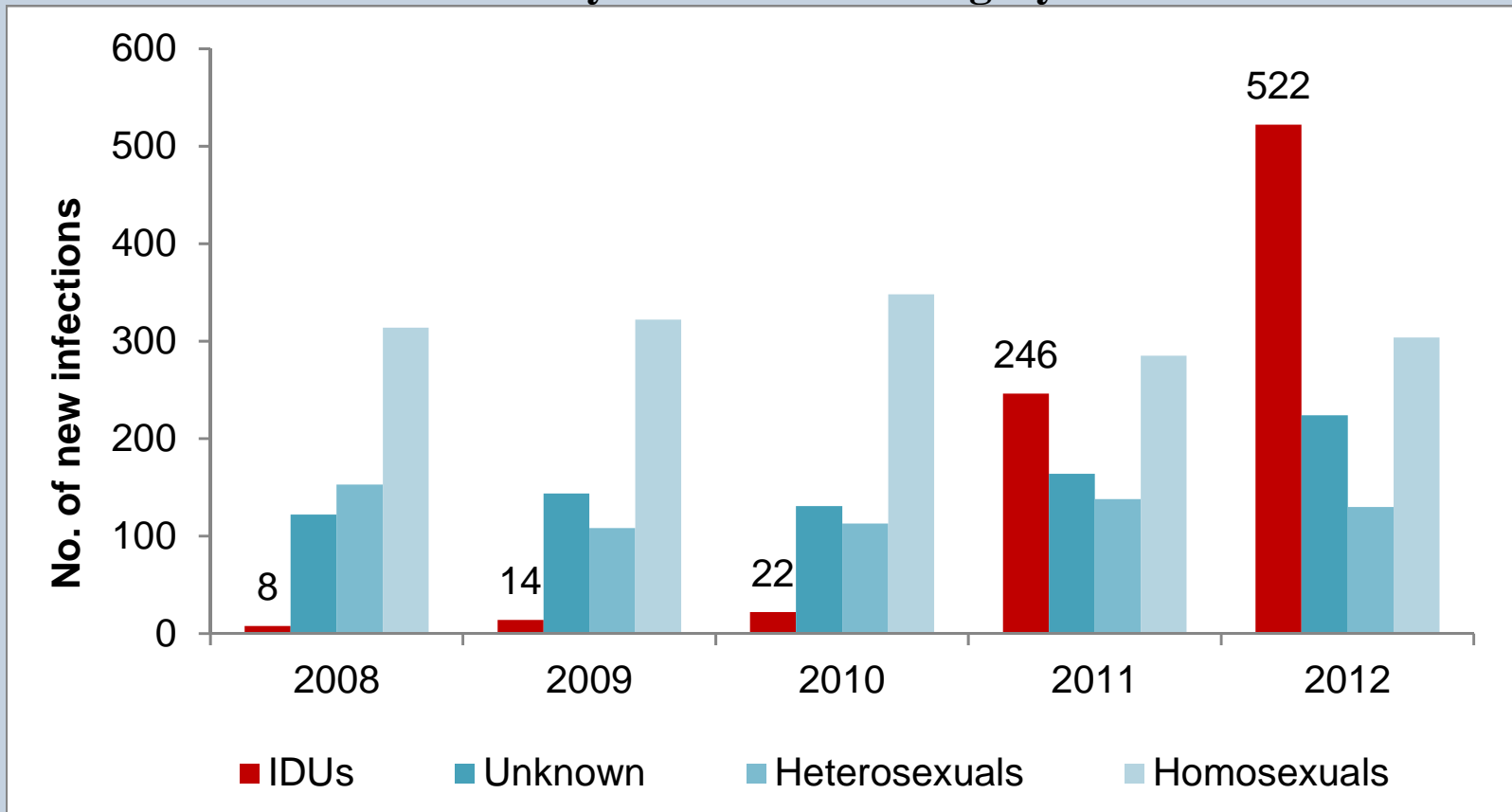
Sector-specific changes to government health spending across austerity period



Units =  
per capita  
spending

# Healthcare austerity: Greece

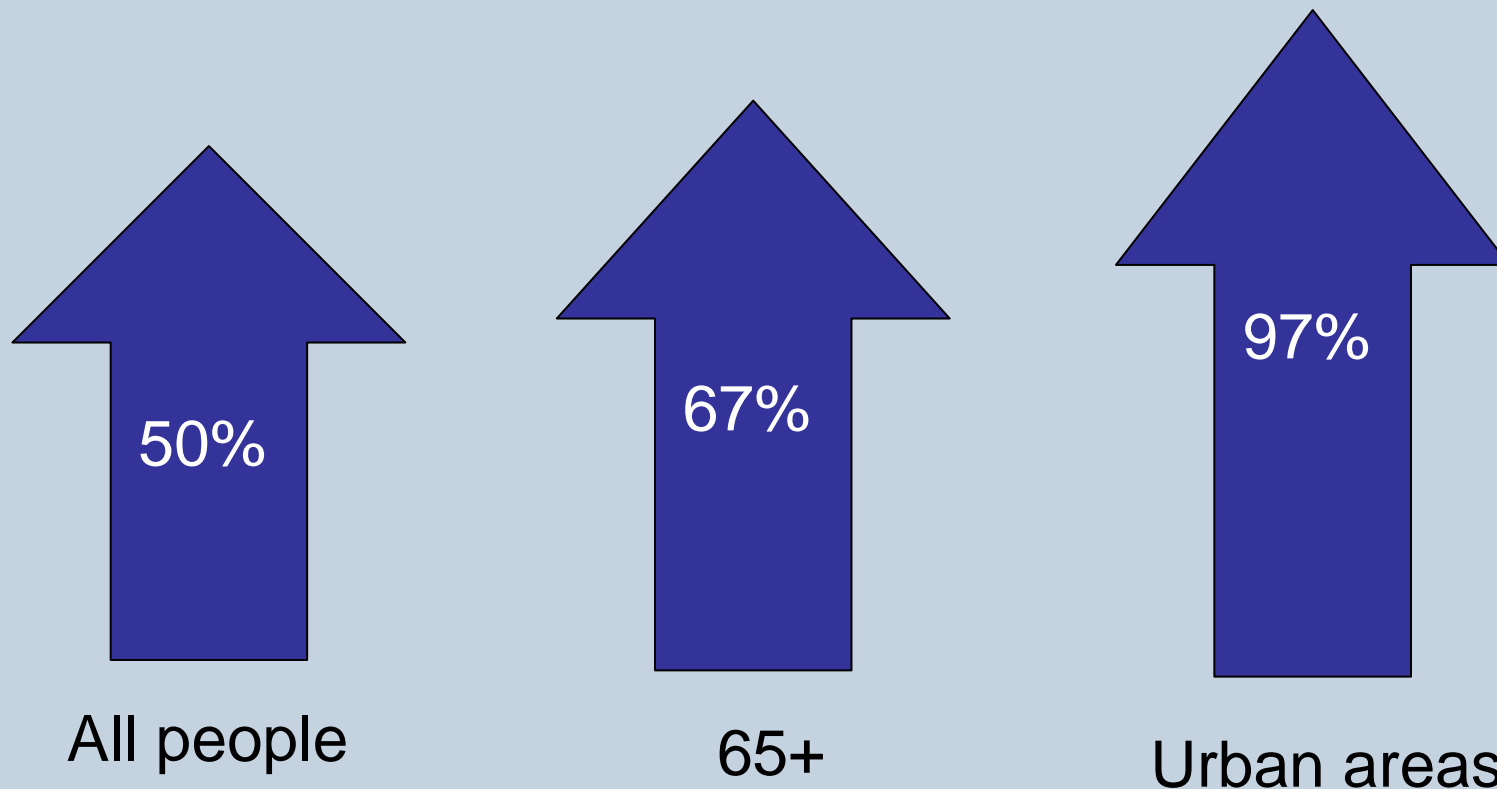
## Instances of HIV infections by transmission category



Source: KEELPNO, 2013; ECDC, 2012.

Kentikelenis et al., forthcoming, **Greece's health crisis: from austerity to denialism**, *Lancet*.

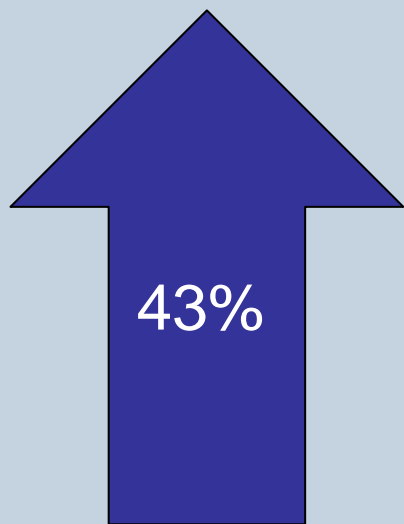
# Healthcare austerity: Unmet need 2007-2011



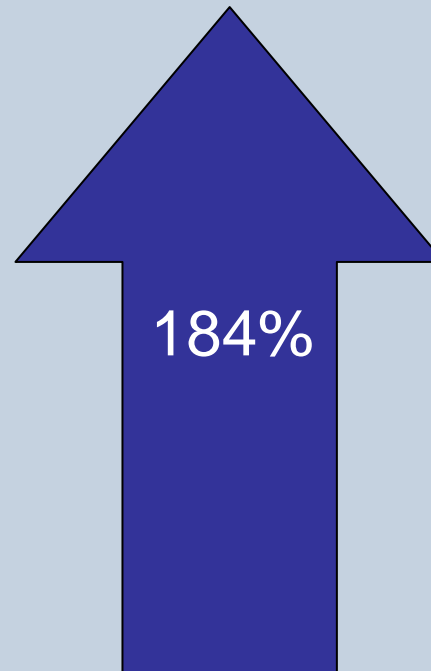
Kentikelenis et al., forthcoming, **Greece's health crisis: from austerity to denialism**, *Lancet*.



# Healthcare austerity: Why needs unmet? 2007-2011



Could not  
afford



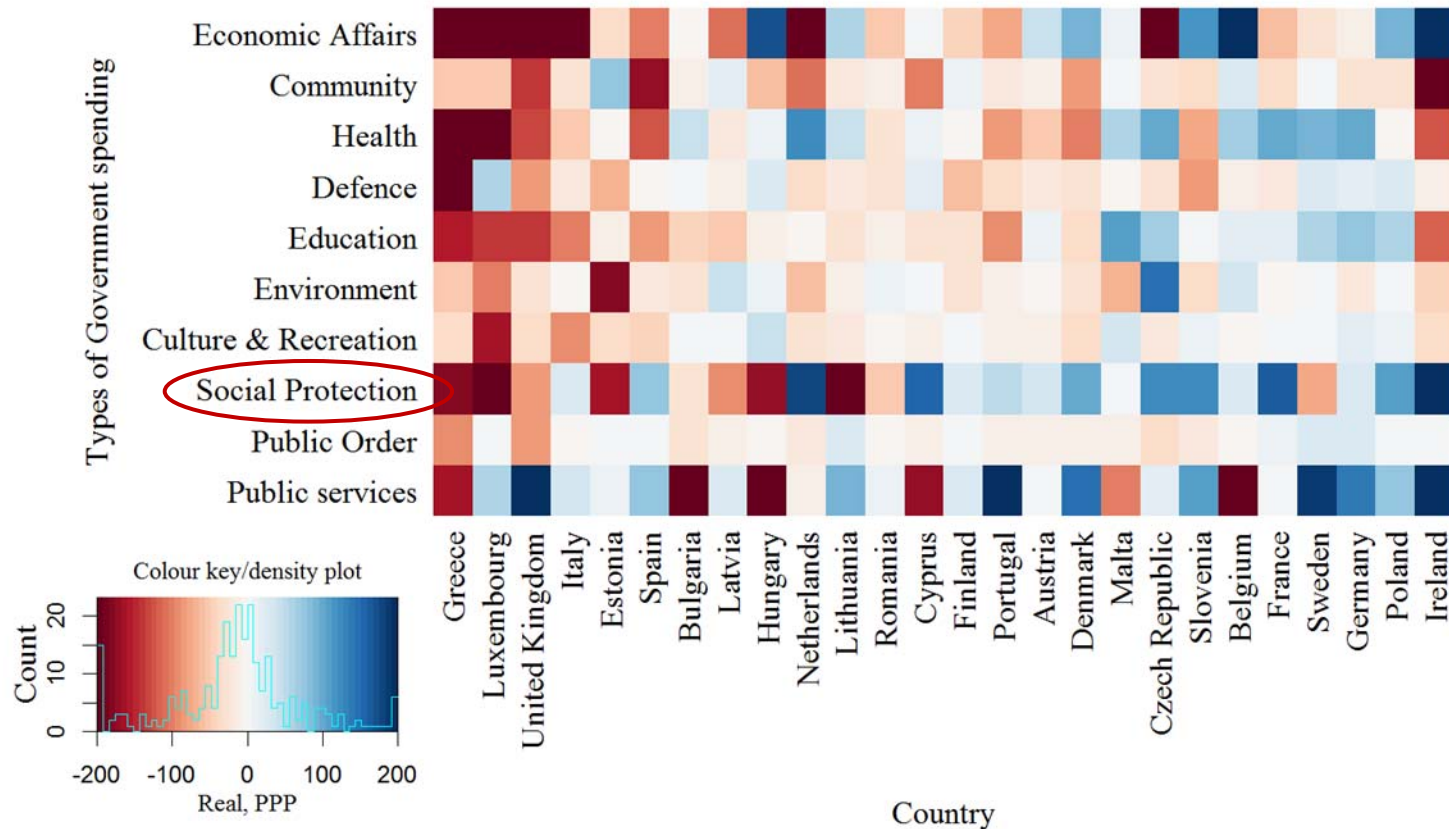
Too far to  
travel

Kentikelenis et al., forthcoming, **Greece's health crisis: from austerity to denialism**, *Lancet*.

# SOCIAL PROTECTION AUSTERITY

# Social Protection austerity: 2009-2011

(Red = reduced spending: Blue = increased spending)



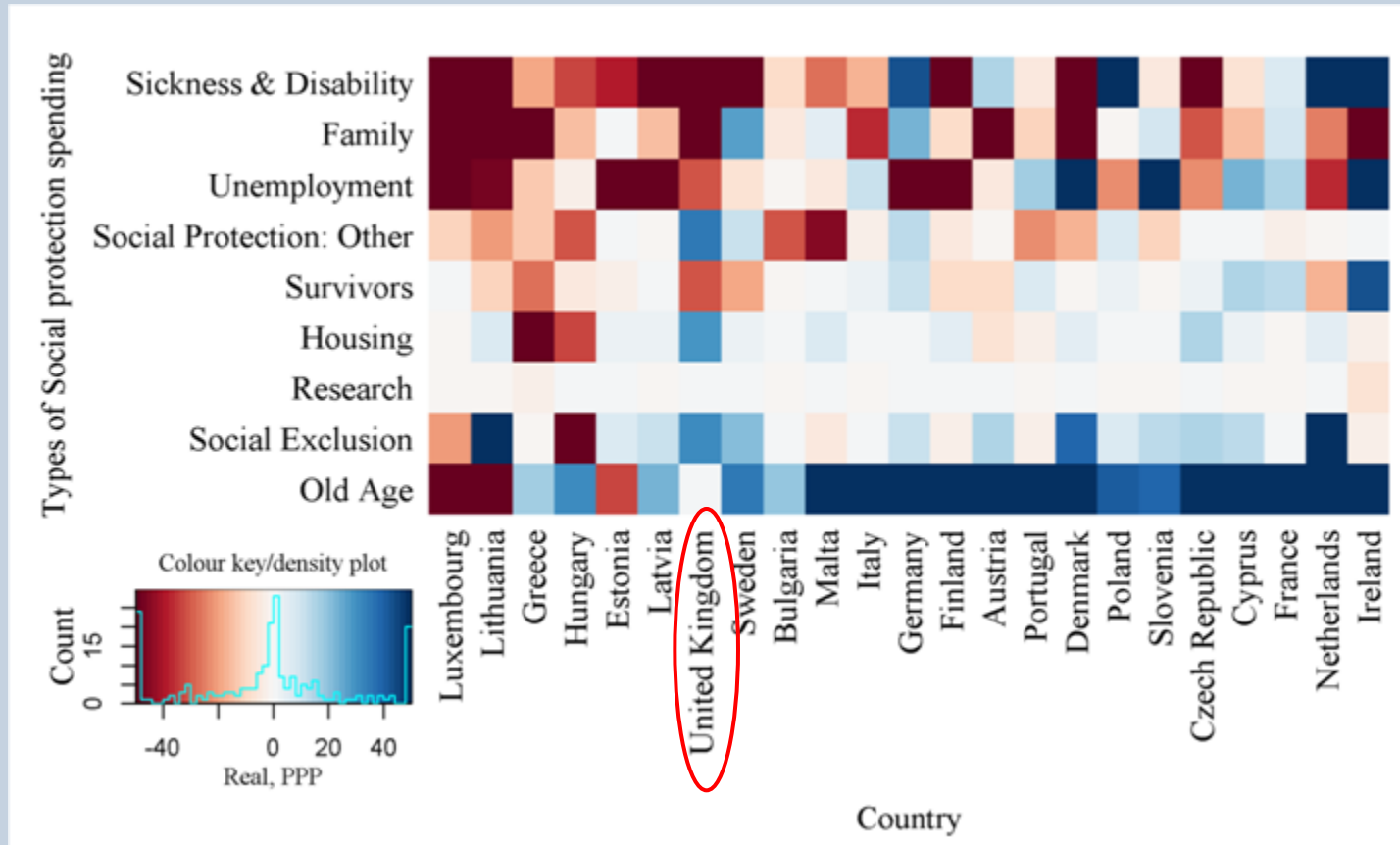
Units =  
per capita  
spending

Count =  
No. of  
observations

Reeves A, Basu S, McKee M, Marmot M, Stuckler D. Austerity or not? UK coalition government budgets and health inequalities. Journal of the Royal Society of Medicine. 2013.

# Social protection austerity: 2009-2011

(Red = reduced spending: Blue = increased spending)

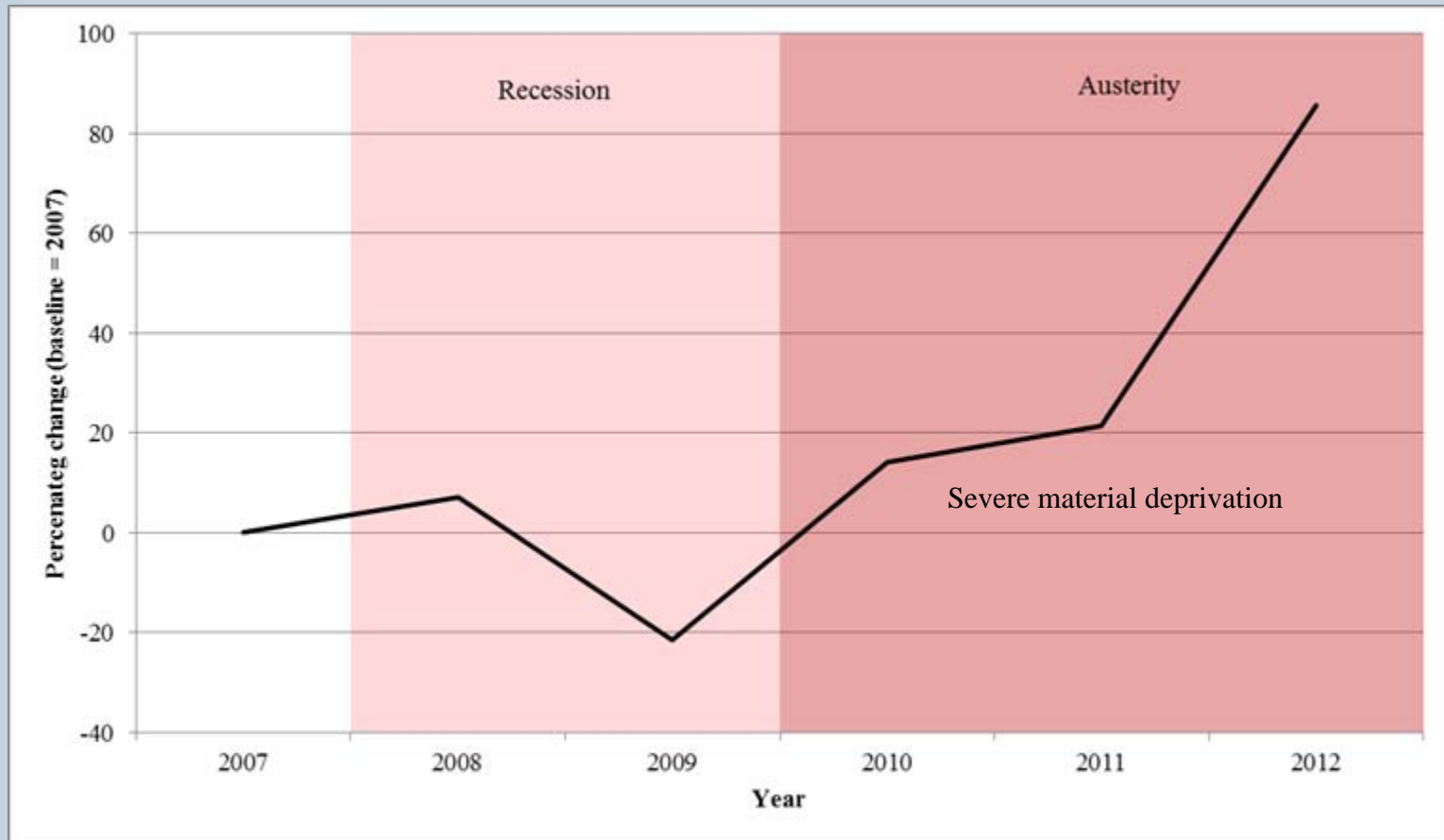


Units = per capita spending

Count = No. of observations

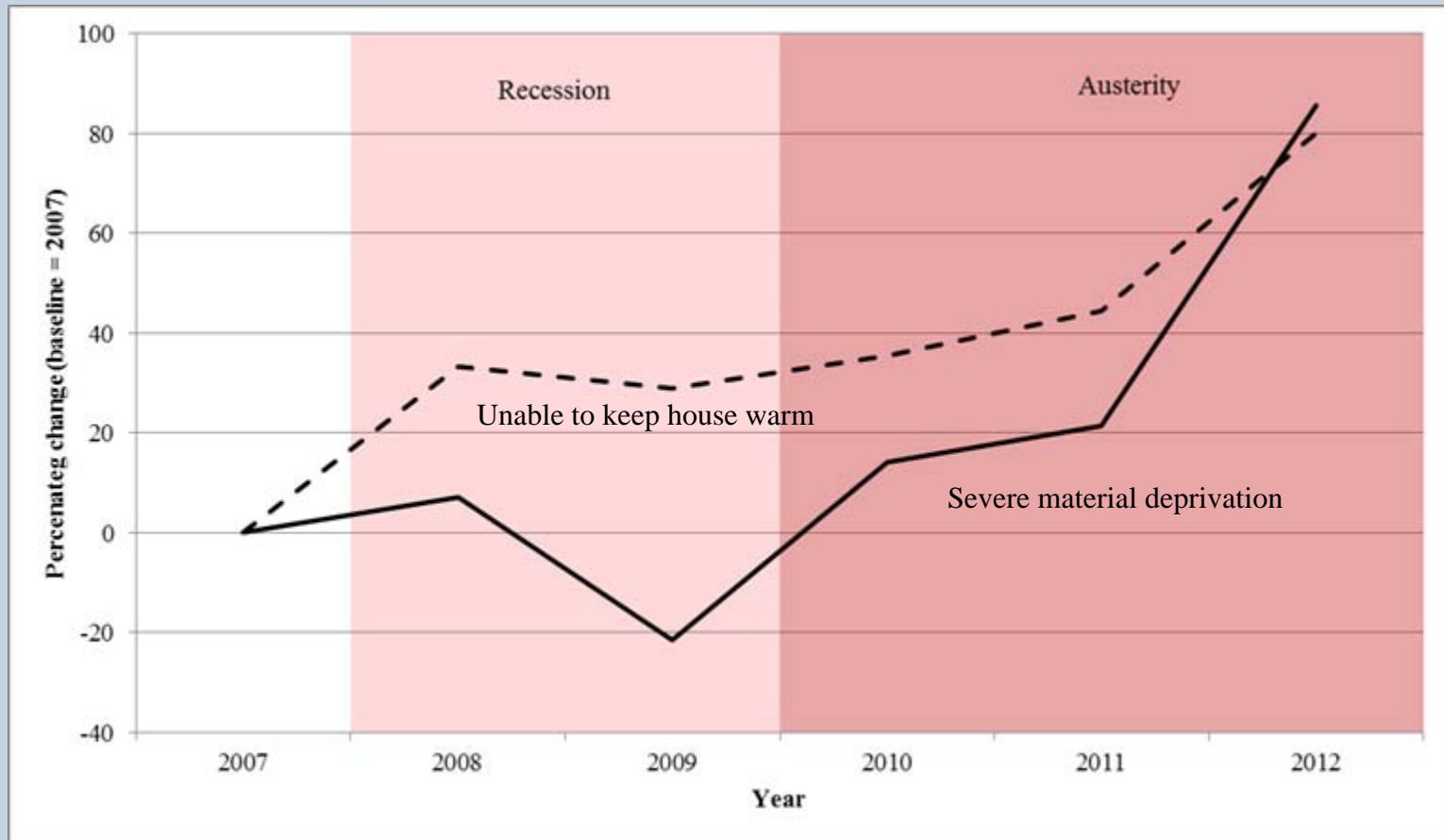
Reeves A, Basu S, McKee M, Marmot M, Stuckler D. Austere or not? UK coalition government budgets and health inequalities. Journal of the Royal Society of Medicine. 2013.

# UK: Rising severe material deprivation

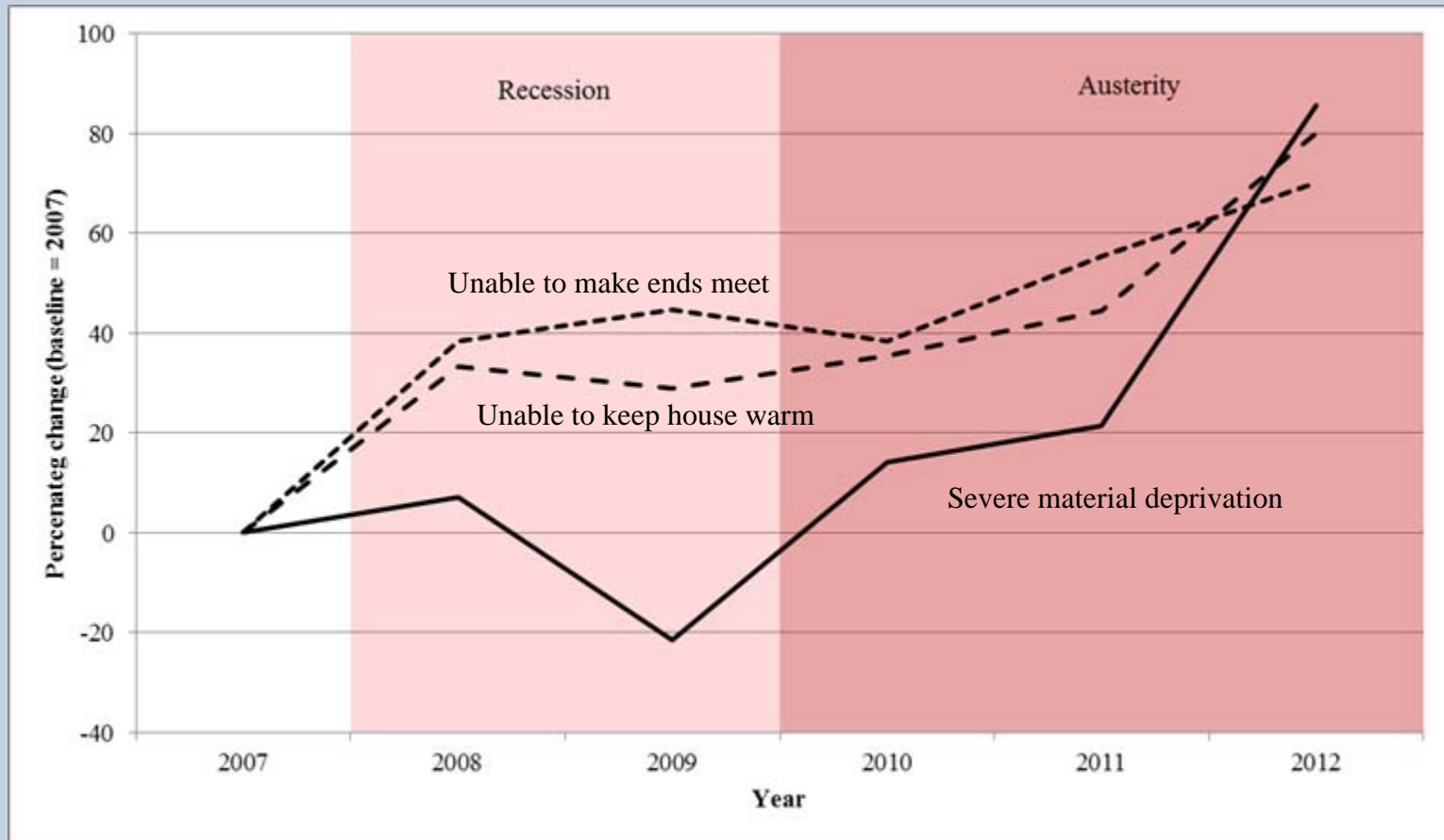




# UK: Inability to keep house warm

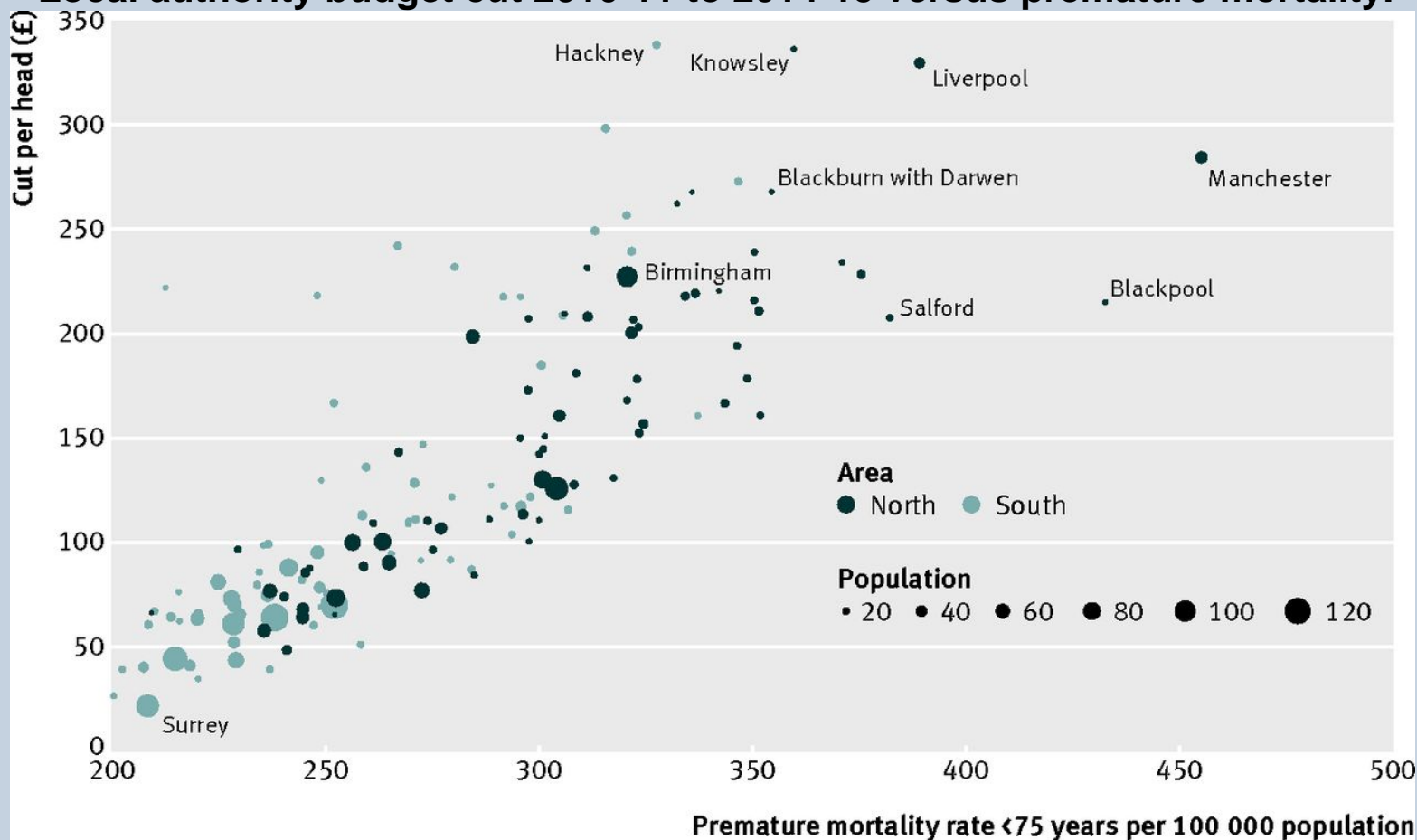


# UK: Cannot make ends meet



# Social Protection Austerity: England

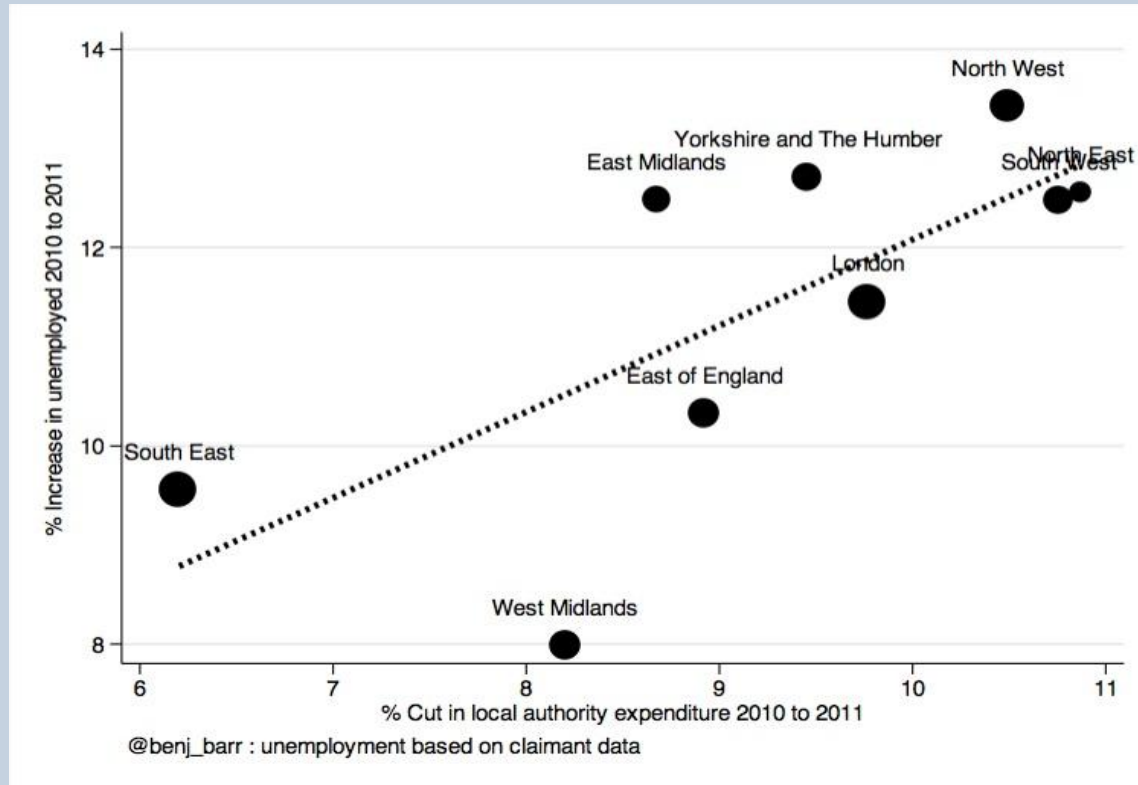
Local authority budget cut 2010-11 to 2014-15 versus premature mortality.



Taylor-Robinson D et al. BMJ 2013;347:bmj.f4208

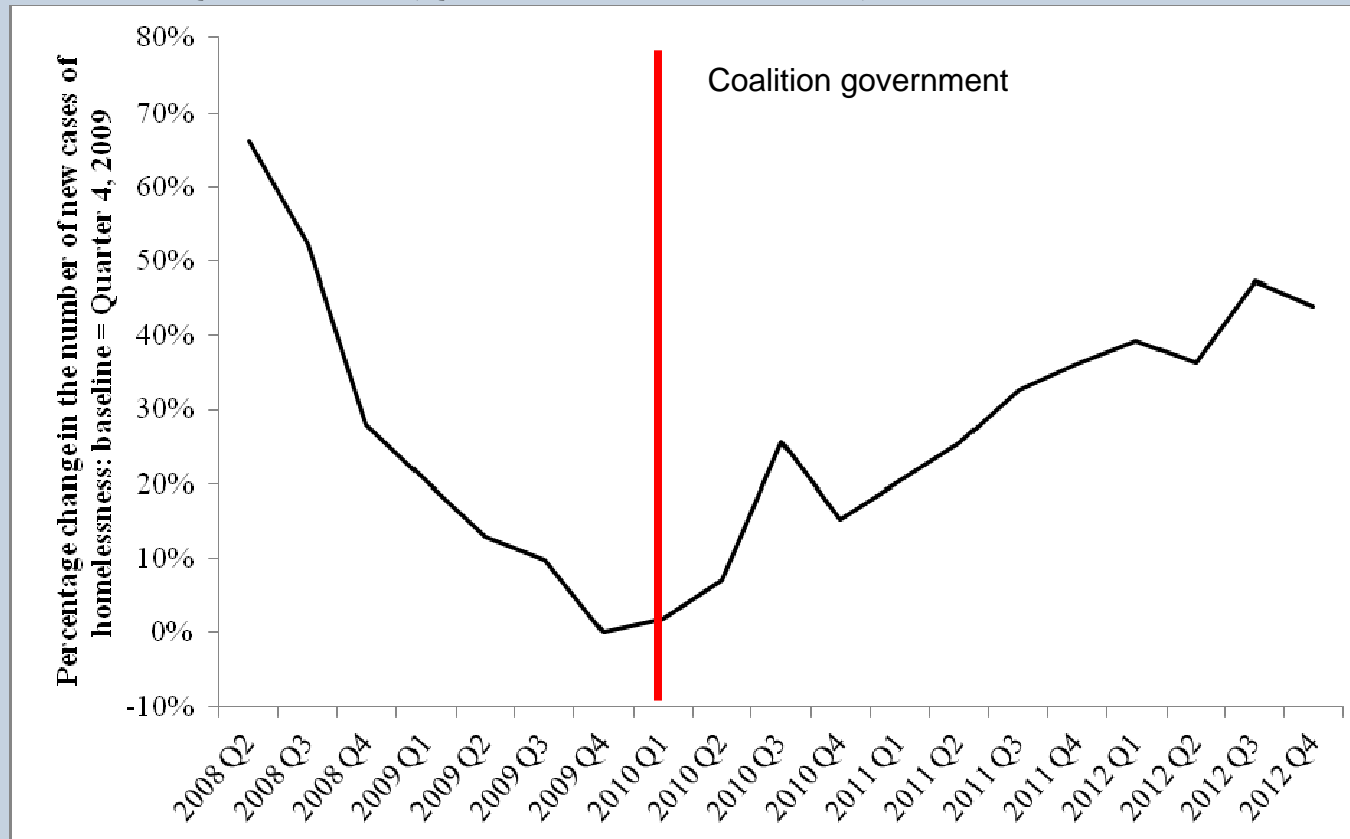
# Social Protection Austerity: England

- 500,000 public sector jobs were lost (June 2010-Sept 2012)
- 35% were in the North
- 20% rise in the suicide rate in the North



# Social Protection Austerity: England

Percentage change in total number of new cases of homelessness in England between Quarter 2 2008 and Quarter 4 2012 (Quarter 4, 2009 is the baseline).



Notes: Government definition of homelessness changed in the fourth quarter of 2010.

Reeves A, Basu S, McKee M, Marmot M, Stuckler D. Austerity or not? UK coalition government budgets and health inequalities. Journal of the Royal Society of Medicine. 2013.



# Social Protection Austerity: UK

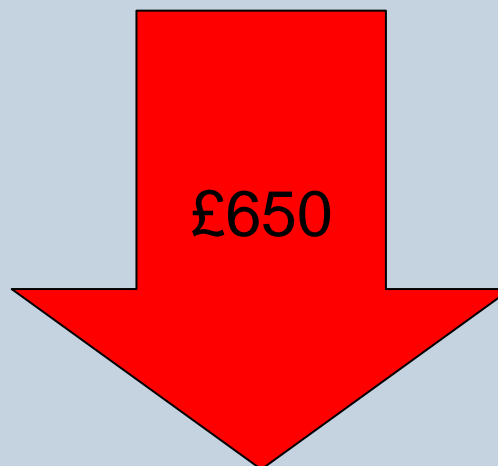
- 280,000 people will experience reduced payments up to £4212 per year
- 150,000 currently live in poverty
- Additional 50,000 people at risk of poverty due to these changes.



# Scotland is no exception

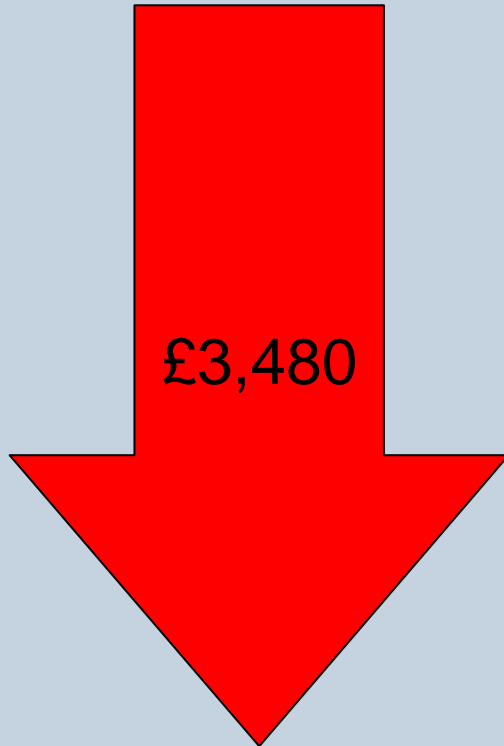
- Most deprived regions received the largest cuts

Glasgow  
(per working adult)

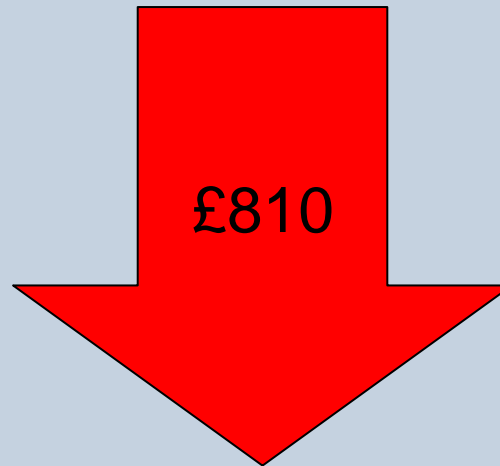


# Scotland is no exception

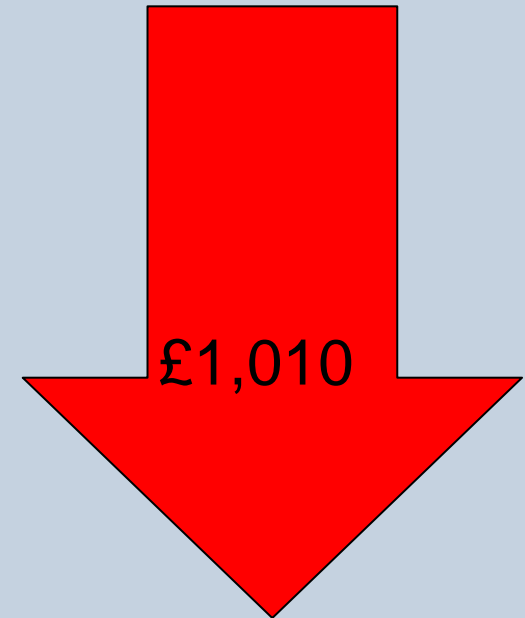
Incapacity benefit  
144,000



Tax credits  
372,000

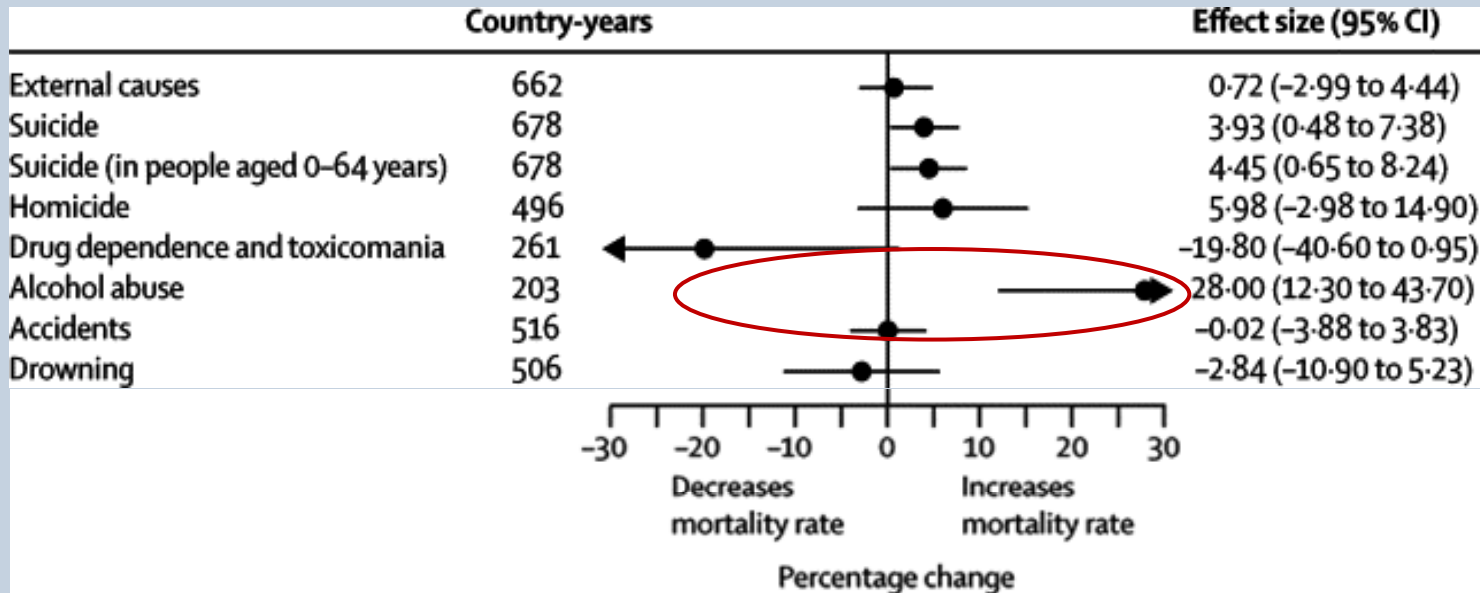


Housing benefit  
80,000



# HOW HAS THE RECESSION IMPACTED HEALTH?

# Economic crisis and alcohol



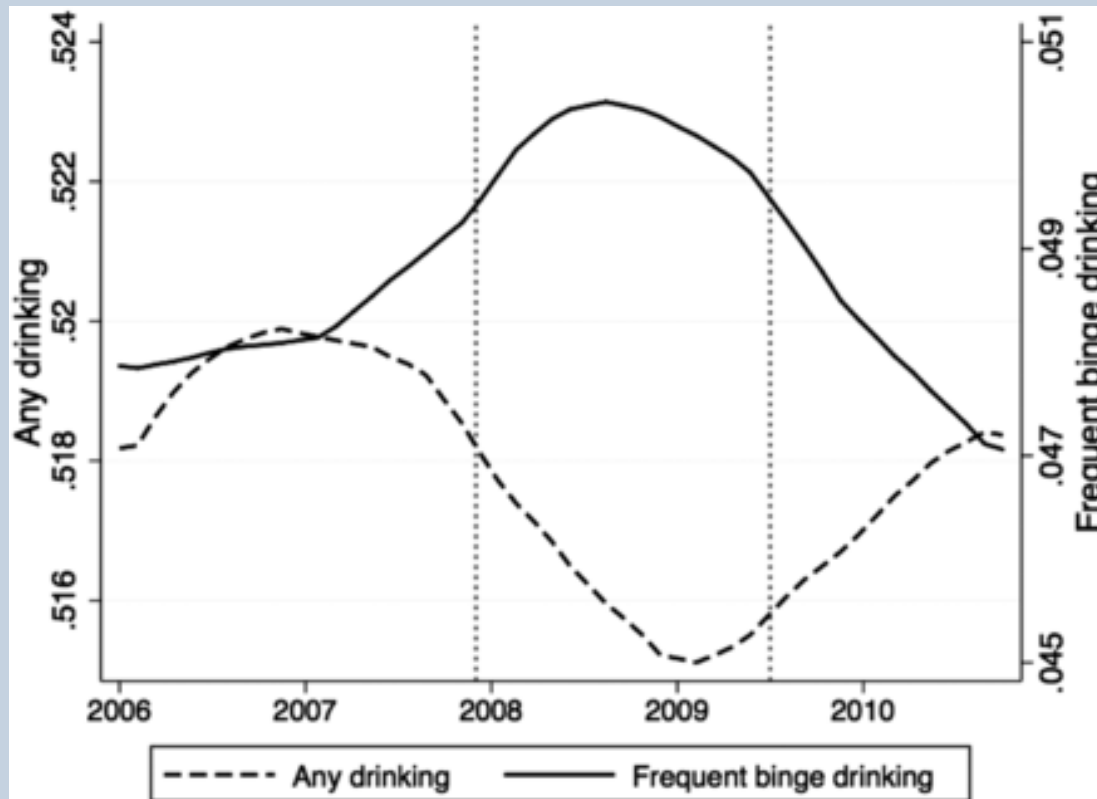
- Associations of a mass rise (>3%) in unemployment with age-standardised mortality rates, by cause of death, in European Union countries, 1970–2007

David Stuckler et al. The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis, *The Lancet*, 374, Issue 9686, Pages 315–323



# Economic crisis and alcohol

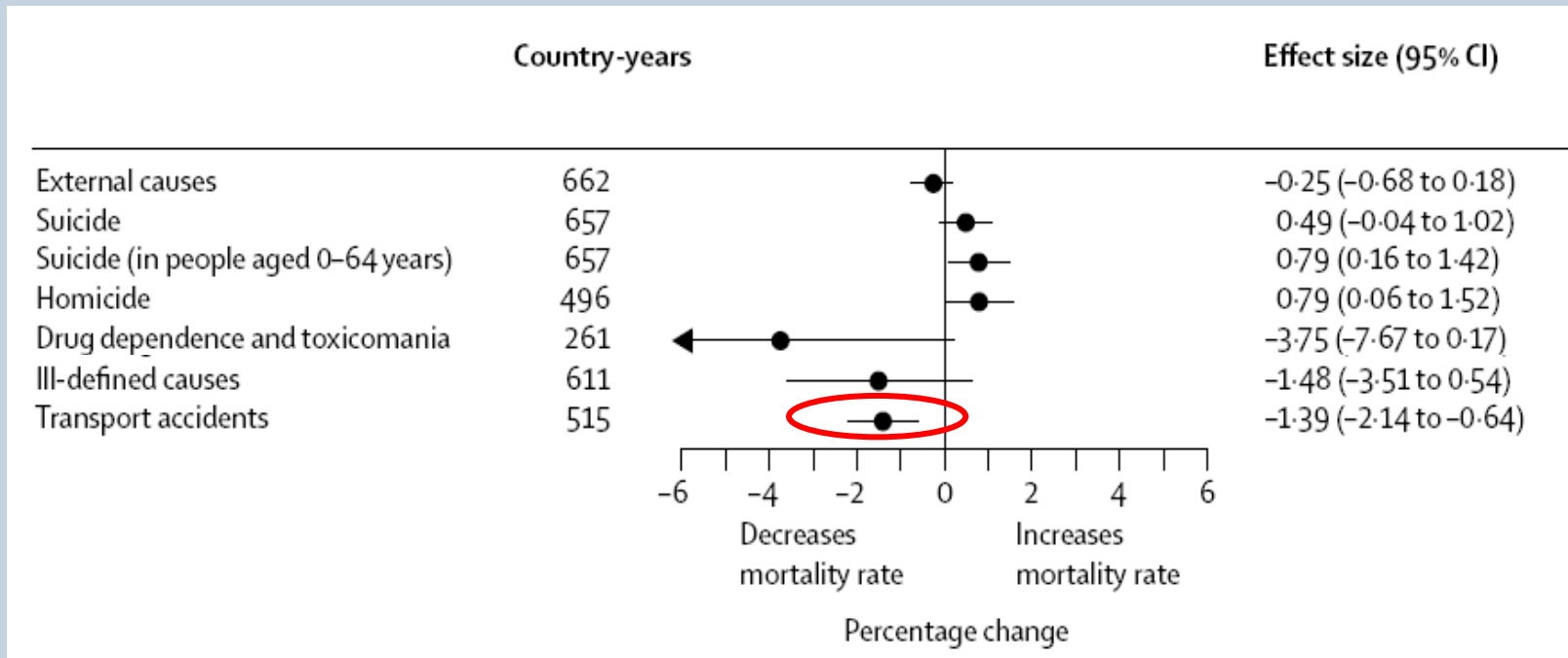
Drinking behaviours in the USA, 2006–2010.



Heavy drinking = >30 drinks per month (women); > 60 drinks per month (men).

Bor J, Basu S, Coutts A, McKee M, Stuckler D. Alcohol Use During the Great Recession of 2008-2009. *Alcohol Alcoholism*. 2013; **48(3)**: 343-8.

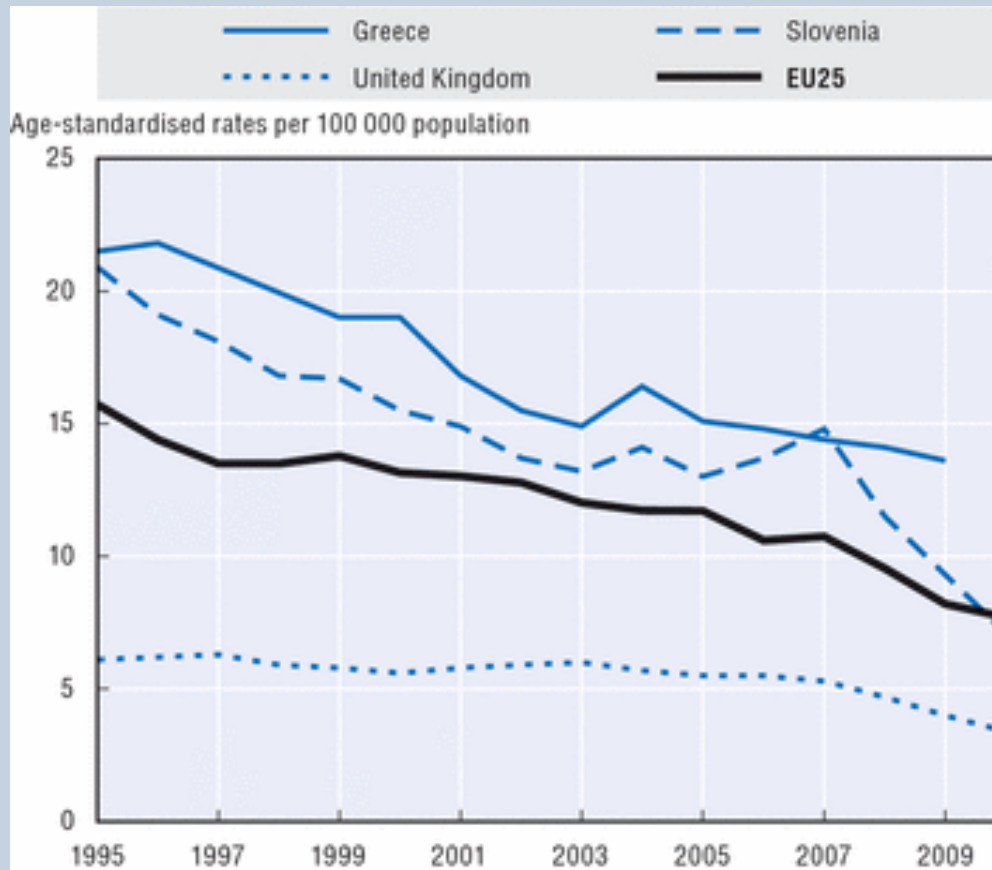
# Economic crisis and traffic accidents



- Associations of a mass rise (>3%) in unemployment with age-standardised mortality rates, by cause of death, in European Union countries, 1970–2007

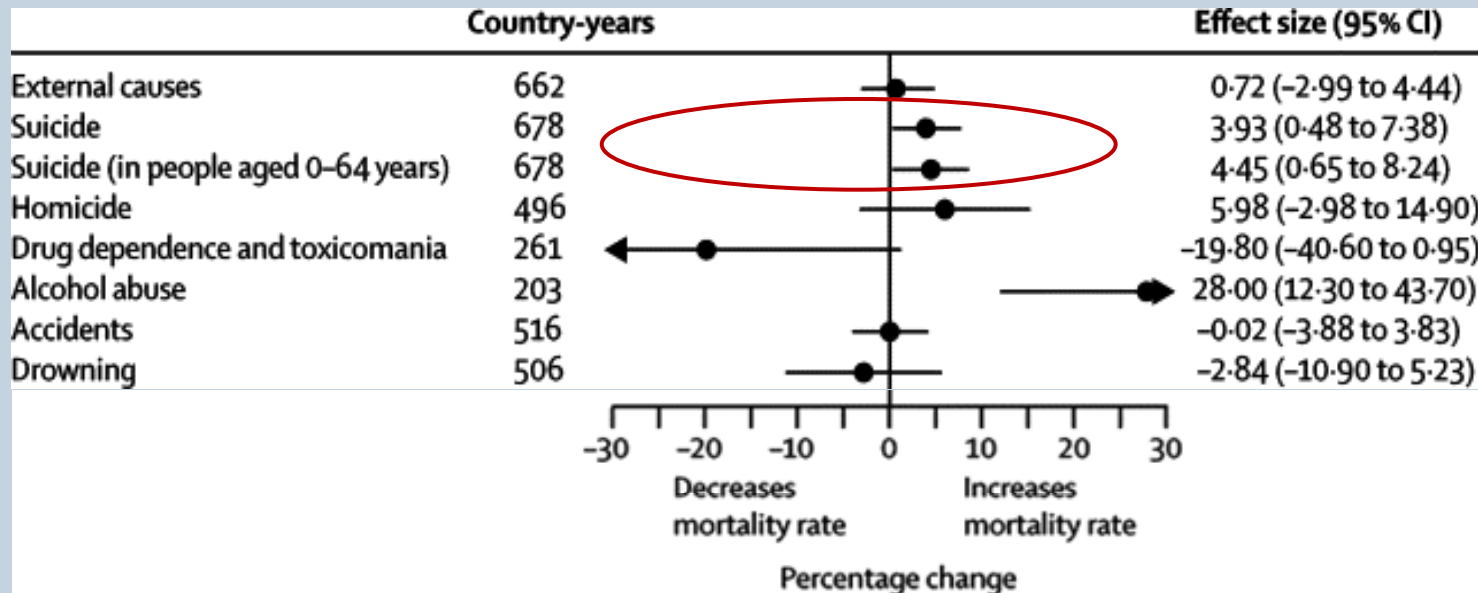
David Stuckler et al. The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis, *The Lancet*, 374, Issue 9686, Pages 315–323

# Economic crisis and traffic accidents



Source: OECD Health at a Glance: Europe 2012

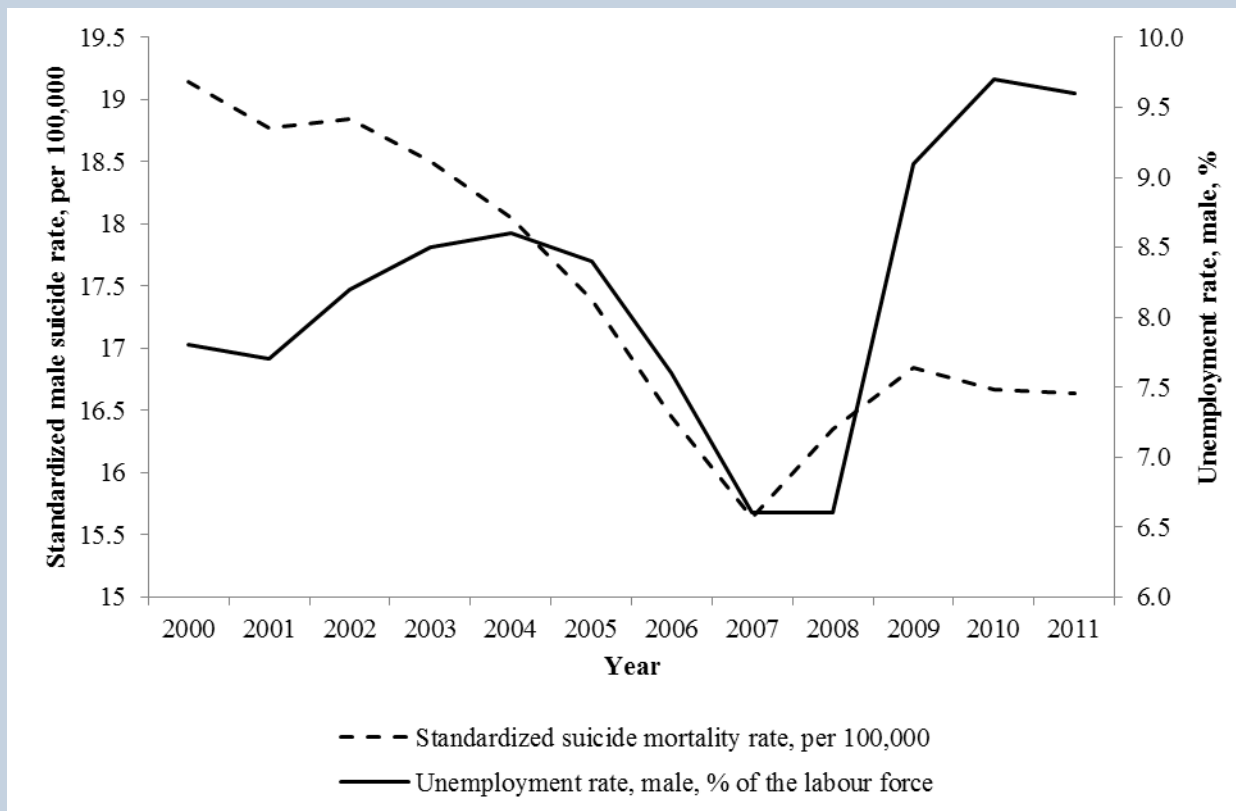
# Economic crisis and suicide



- Associations of a mass rise (>3%) in unemployment with age-standardised mortality rates, by cause of death, in European Union countries, 1970–2007

David Stuckler et al. The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis, *The Lancet*, 374, Issue 9686, Pages 315–323

# Economic crisis and suicide: 24 EU countries



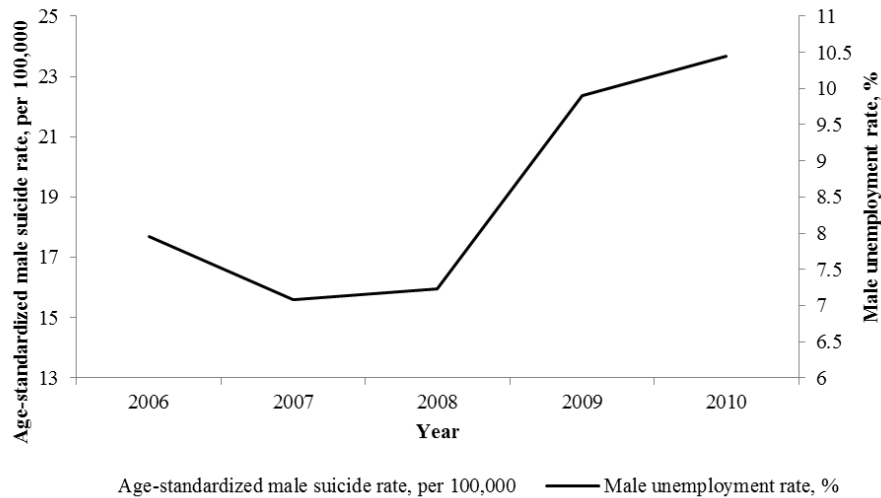
Source: WHO Health for All European Mortality database 2013 edition; EuroStat 2013 edition.

# 8,000 excess suicides

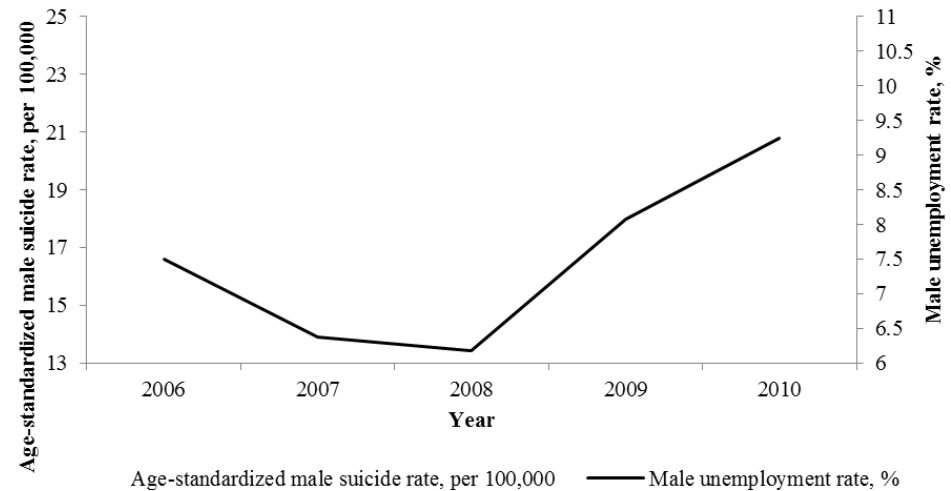
Reeves et al., forthcoming, *Economic Suicides: more than 10,000 Preventable Tragedies in Europe and North America's Great Recessions*, Br J Psy

# Economic crisis and suicide: Modifying effects

## High spending (>USD \$135) on active labour market programmes



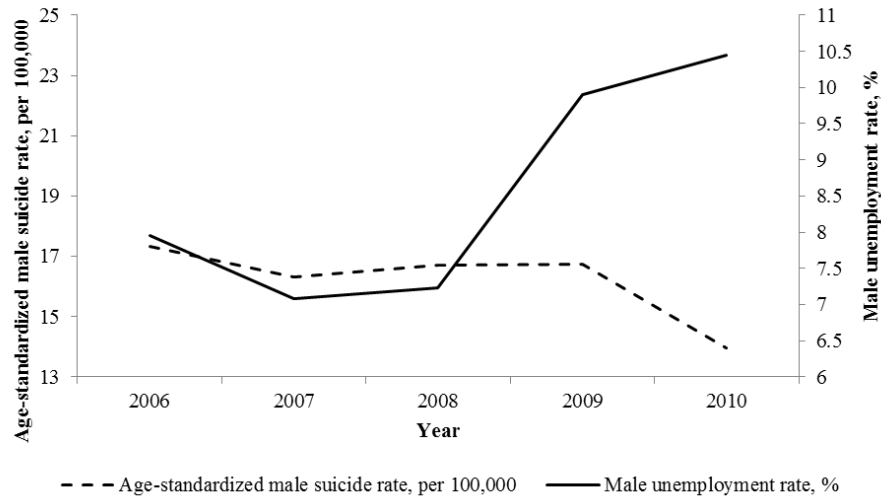
## Low spending (<USD \$ 135) on active labour market programmes



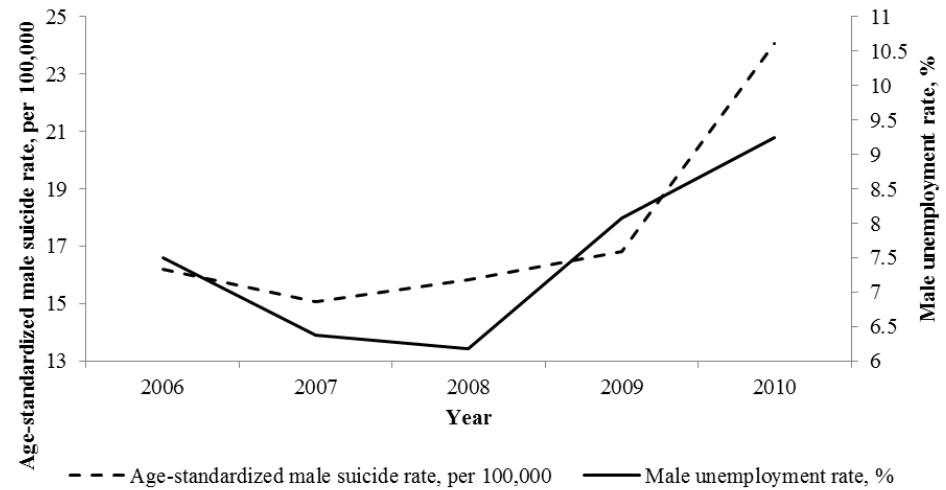


# Economic crisis and suicide: Modifying effects

**High spending (>USD \$135) on active labour market programmes**



**Low spending (<USD \$ 135) on active labour market programmes**



# LESSONS FOR THE FUTURE

# WHY HAVE SOME COUNTRIES CUT THEIR HEALTH BUDGETS?

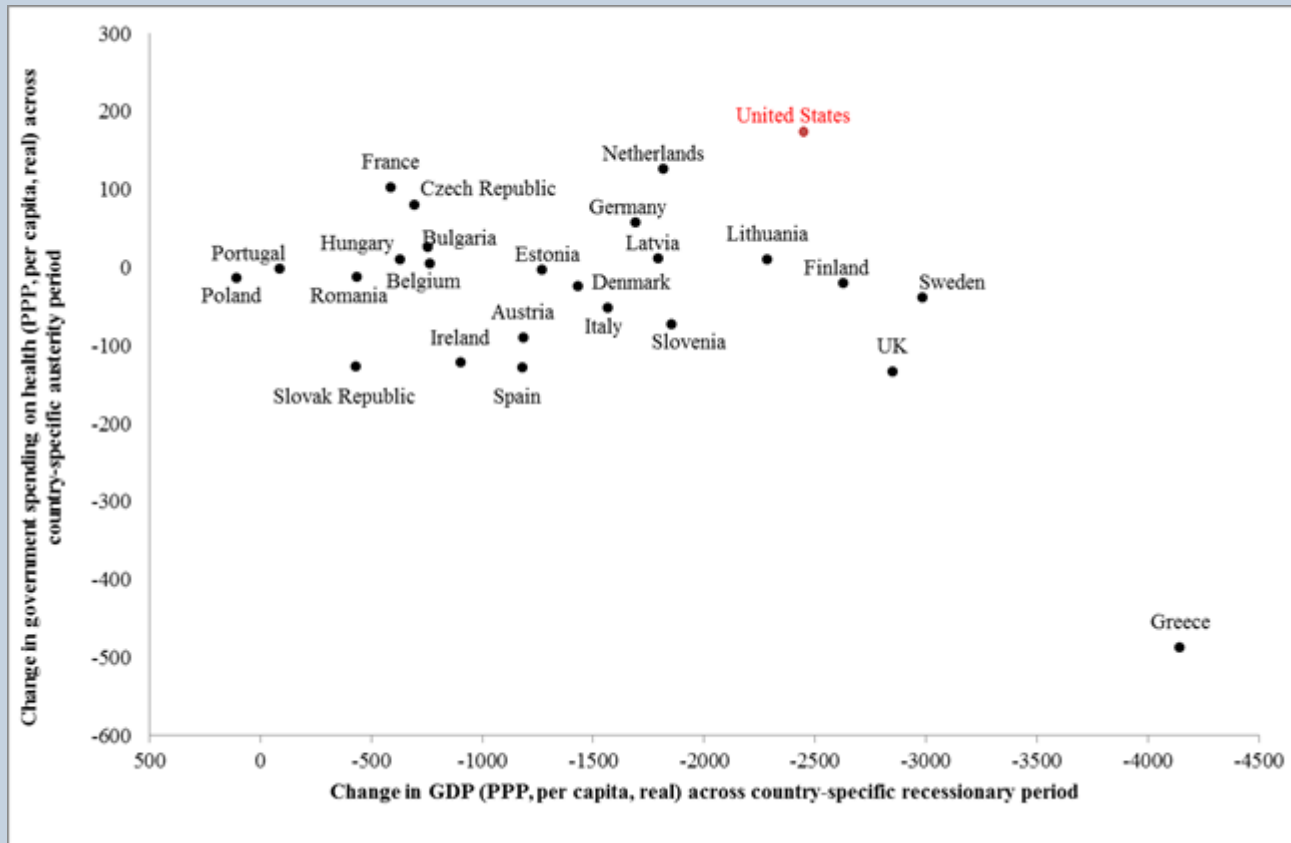
# Explaining healthcare austerity

- Debt crisis:
  - “When public debt levels rise above 90% they tend to have a negative impact on economic dynamism.” (Ollie Rehn, 13<sup>th</sup> Feb 2013)
- Political ideology:
  - “I didn't come into politics to make cuts. We're tackling the deficit because we have to – not out of some ideological zeal. This is a government led by people with a practical desire to sort out this country's problems, not by ideology.” (David Cameron)

# Explaining healthcare austerity

- Depth of the recession:
  - ‘This time its different’ hypothesis
- Visibility hypothesis:
  - “Governments generally found health care to be a cause of political headaches rather than a target for successful retrenchment.” (Paul Pierson)
- International Financial Institutions:
  - IFIs have advocated for ‘structural adjustment programmes’, which include privatization, liberalization, and austerity policies, privileging conditions that facilitate private-sector investment.

# Is healthcare austerity a choice?



Notes: Source: WHO Health expenditure database 2013 edition, EuroStat 2013 edition. Recessionary- and austerity-periods are defined in detail for each country. Recession is defined as declining GDP (adjusted for inflation and purchasing-power) in consecutive years. Austerity is defined as declining government expenditure (adjusted for inflation and purchasing-power) in consecutive years.

Data on Malta, Luxembourg, and Cyprus excluded from the graphic. The US are included in this figure as a comparison but are not included in the other analyses

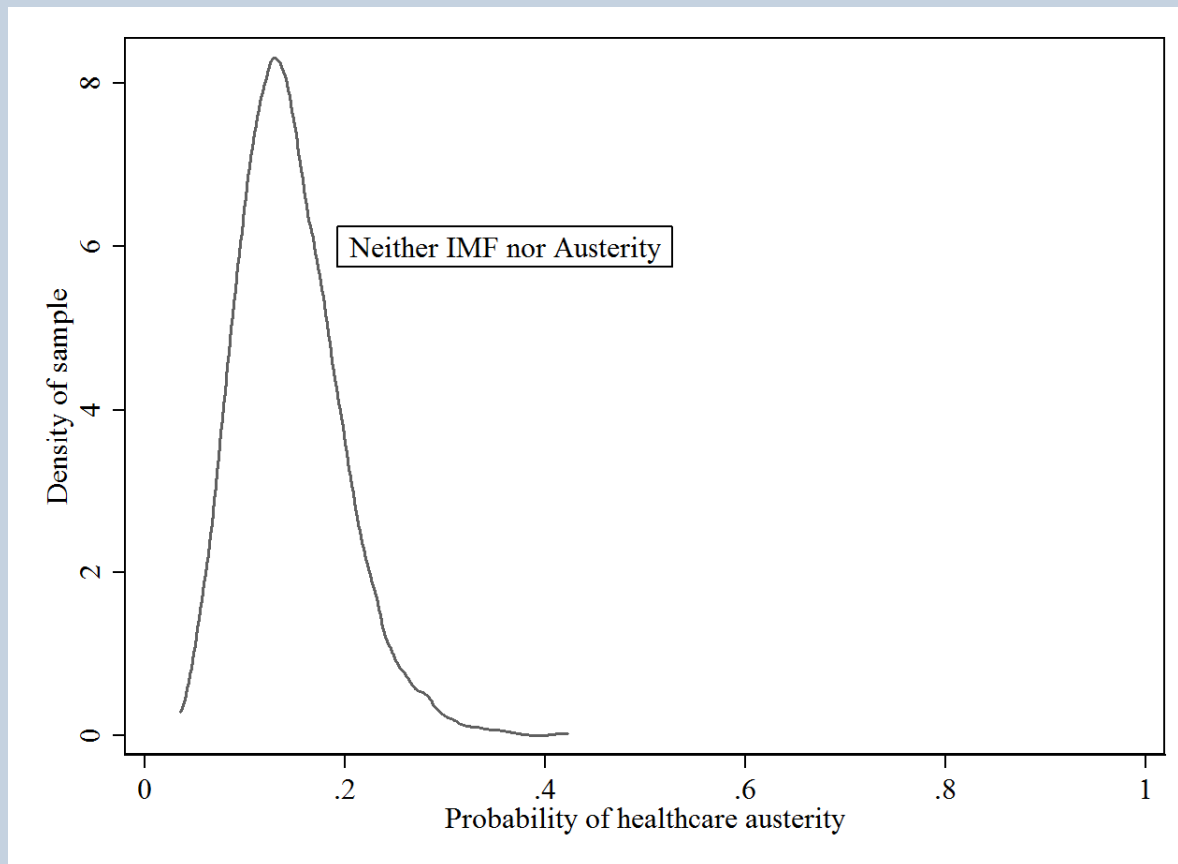
# What did not explain healthcare austerity?

Change in GDP (Depth of recession)

Public debt (Debt crisis hypothesis)

Political ideology of governing parties (Ideology hypothesis)

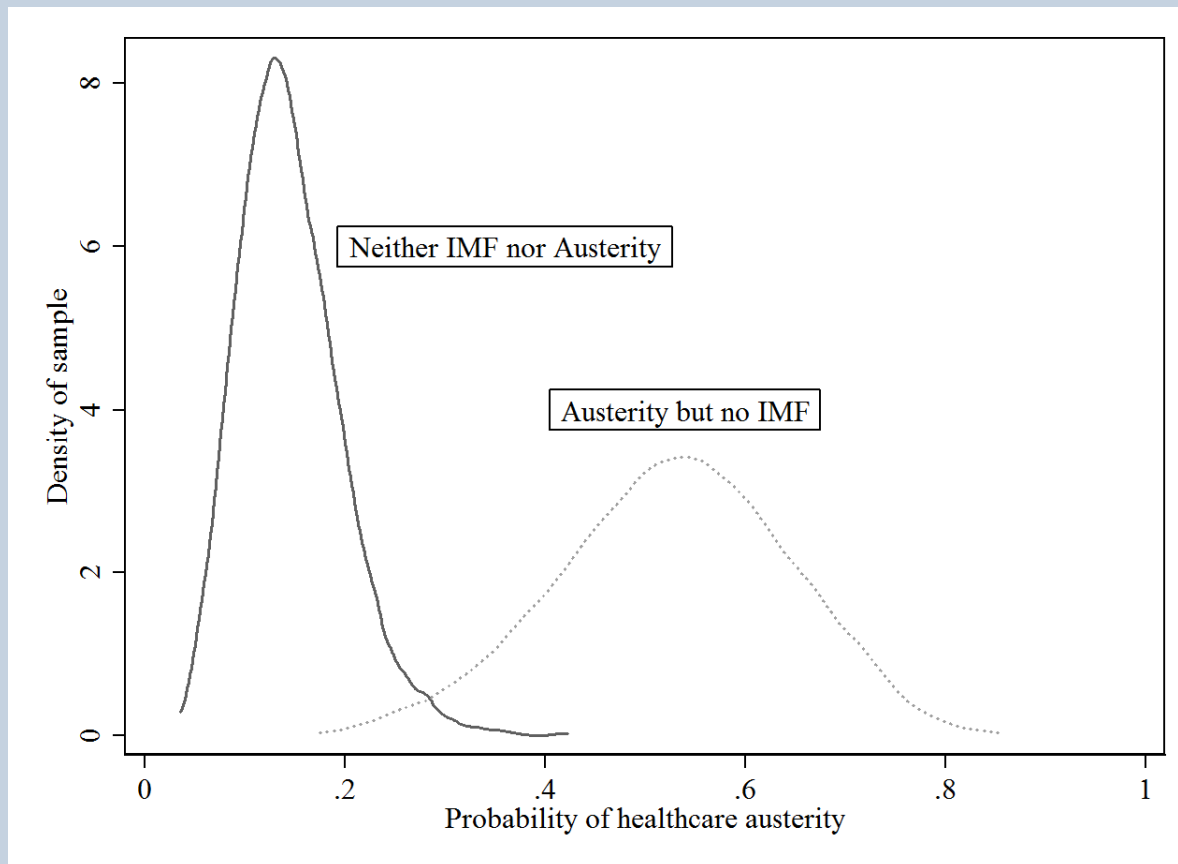
# What does explain healthcare austerity?



Reeves Aaron, Basu S., McKee M., Stuckler D., 2013, The political economy of austerity and healthcare, Health Policy

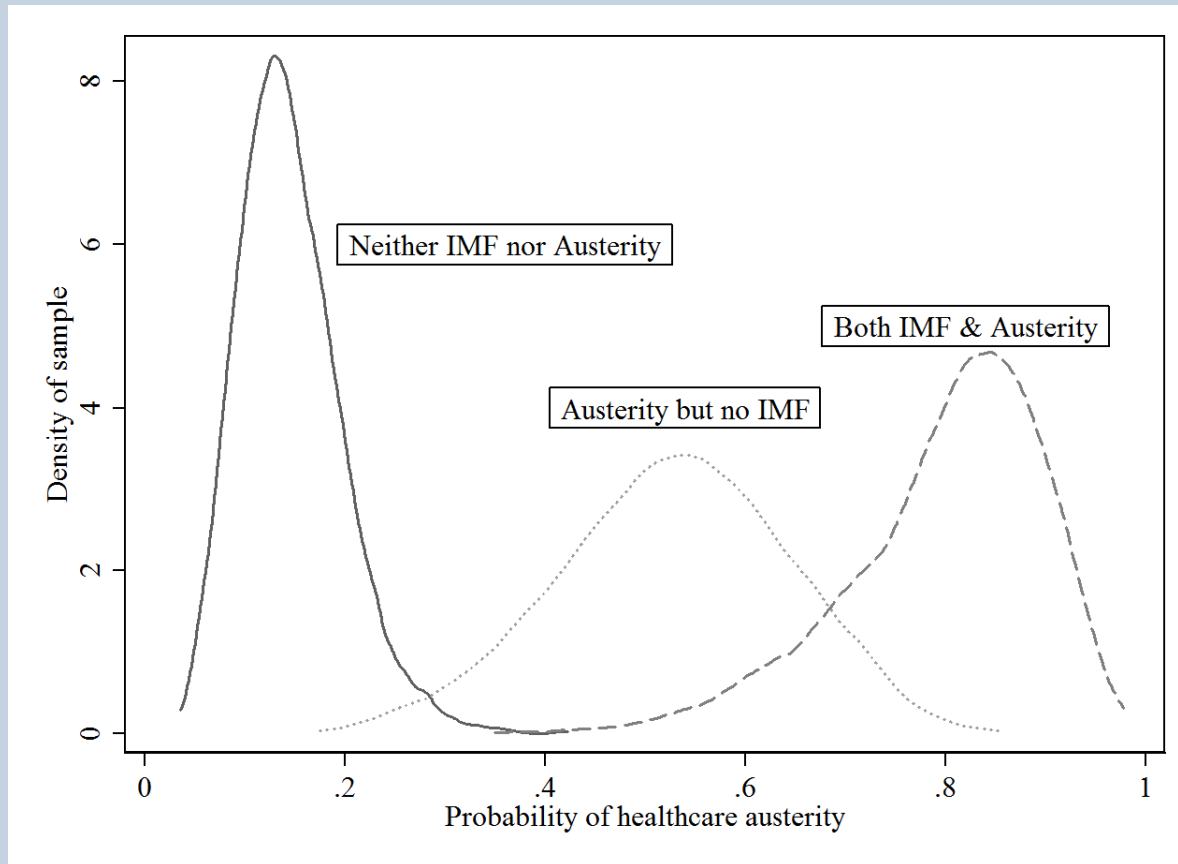


# What does explain healthcare austerity?



Reeves Aaron, Basu S., McKee M., Stuckler D., 2013, The political economy of austerity and healthcare, Health Policy

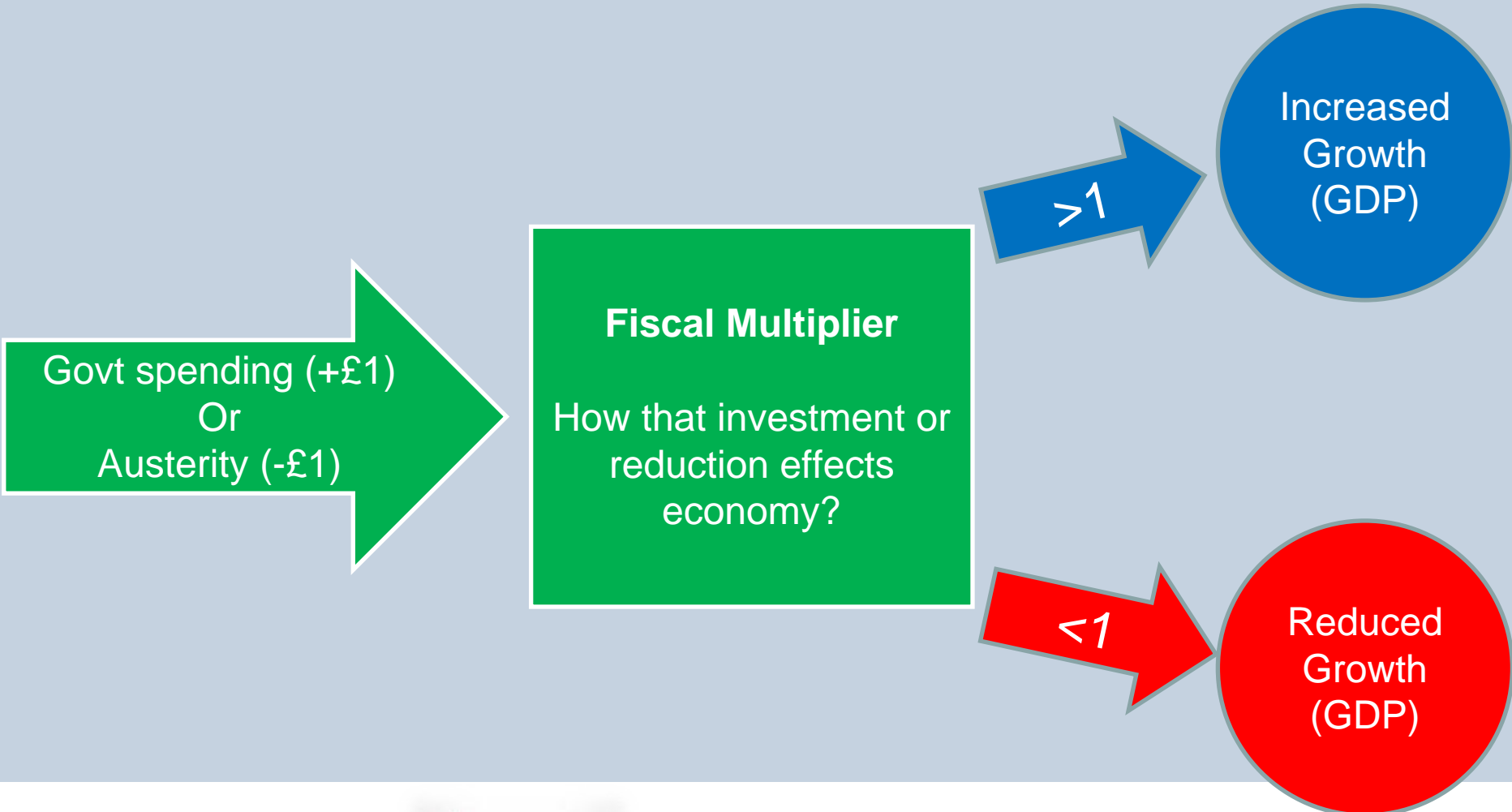
# What does explain healthcare austerity?



Reeves Aaron, Basu S., McKee M., Stuckler D., 2013, The political economy of austerity and healthcare, Health Policy

# AUSTERITY, FISCAL MULTIPLIERS, AND ECONOMIC GROWTH

# Fiscal Multipliers: The effect of public spending on the economy



# IMF admits error

WP/13/1



## IMF Working Paper

Growth Forecast Errors and  
Fiscal Multipliers

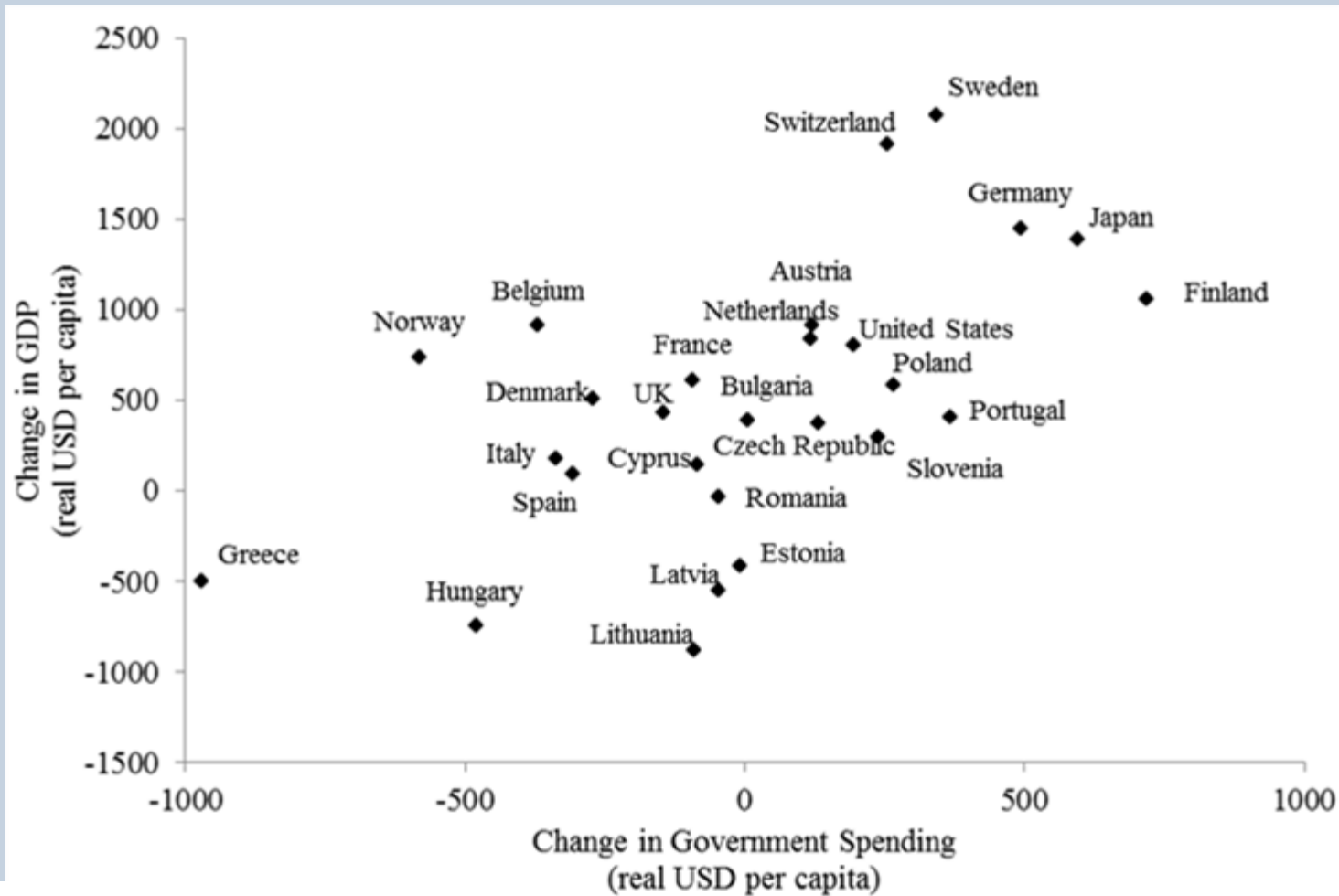
*Olivier Blanchard and Daniel Leigh*

“We underestimated the negative effect of austerity on employment and spending power”

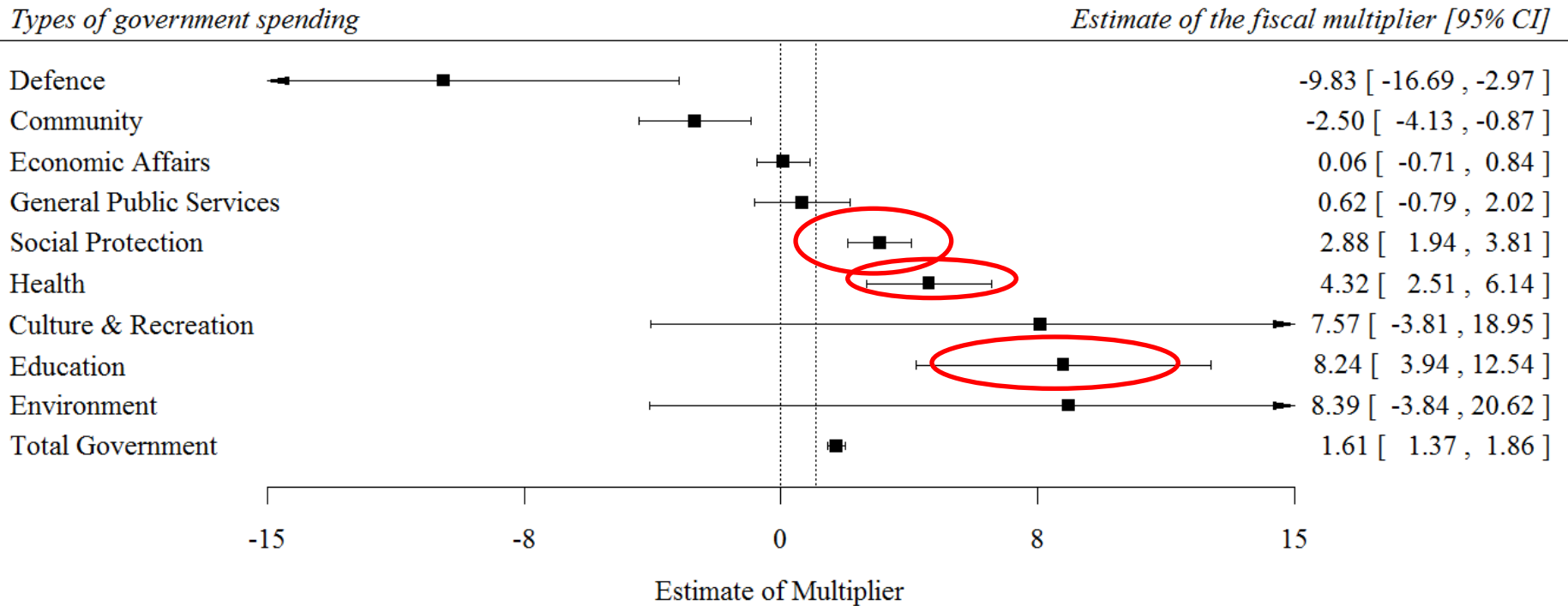
Fiscal multiplier assumed:  
0.5

Actual multiplier: 1.7

# Greater public spending, faster economic recovery

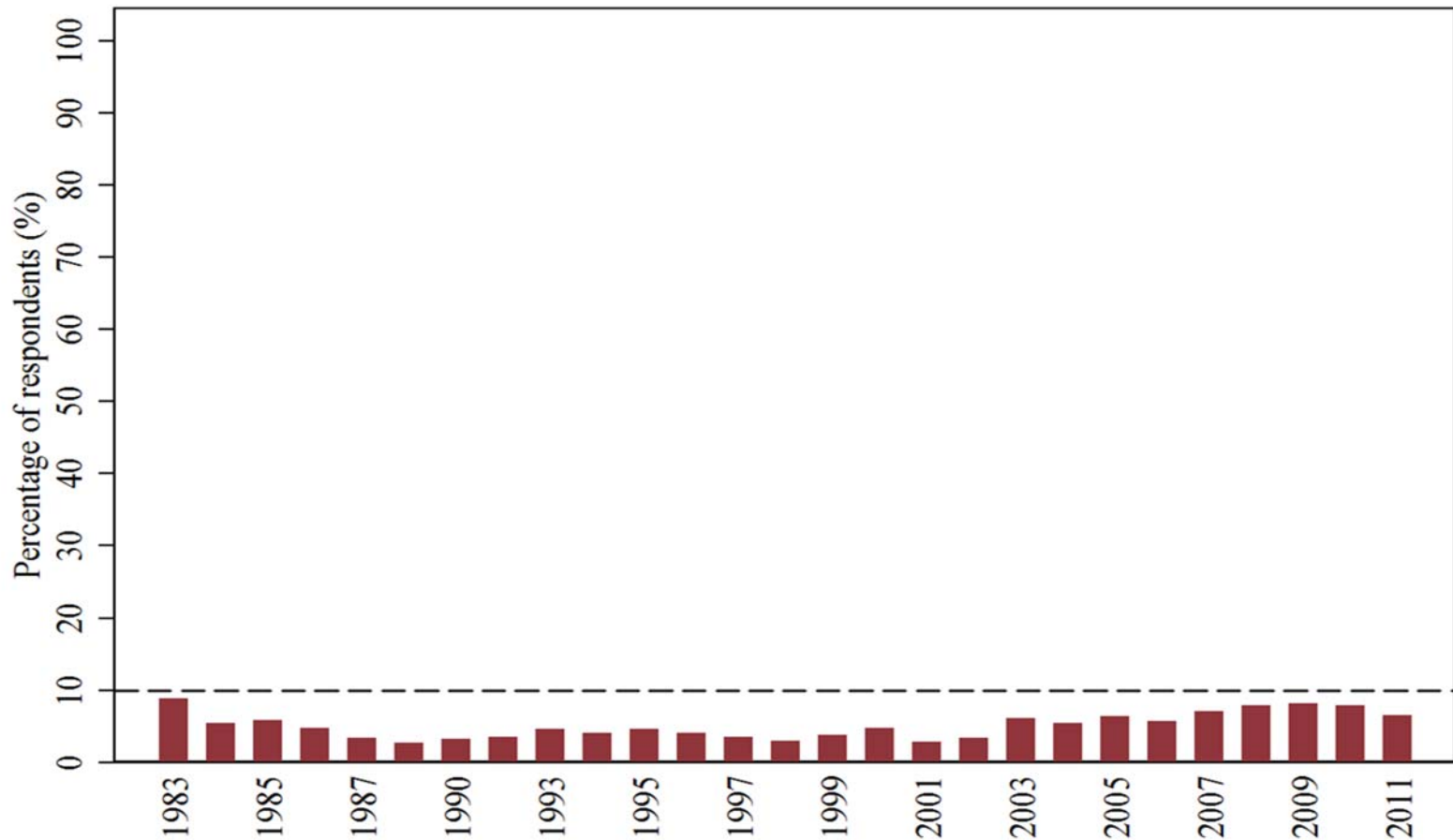


# Protect health, education, and social protection spending



Reeves A, Basu S, McKee M, Meissner C, Stuckler D. Does investment in the health sector promote or inhibit economic growth? *Globalization Health*. 2013; **9(43)**.

# Public support for austerity?



Reduce taxes and spend less on health, education and social benefits



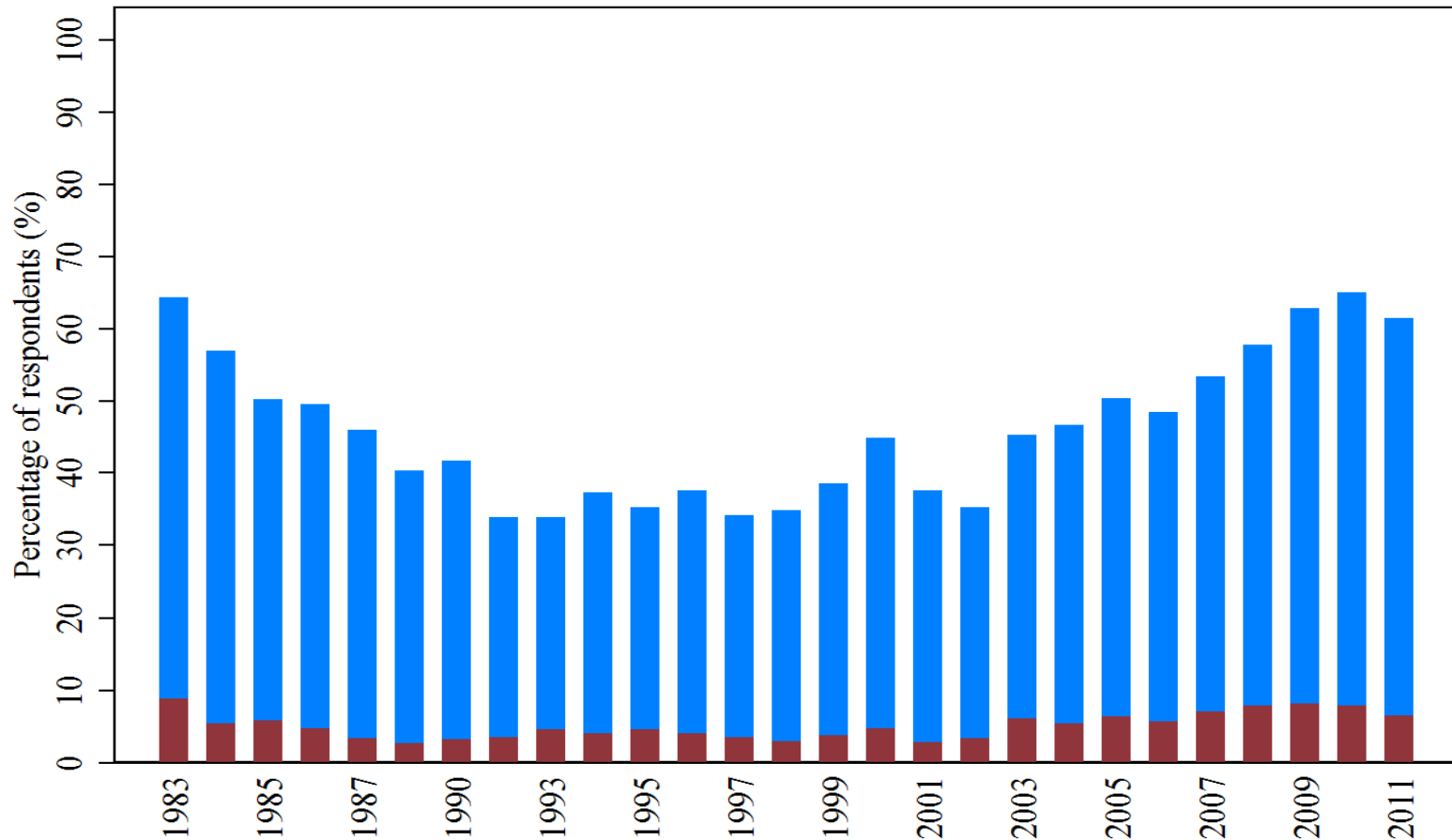
Keep taxes and spending on these services at the same level as now



Increase taxes and spend more on health, education and social benefits



# Public support for austerity?



Reduce taxes and spend less on health, education and social benefits

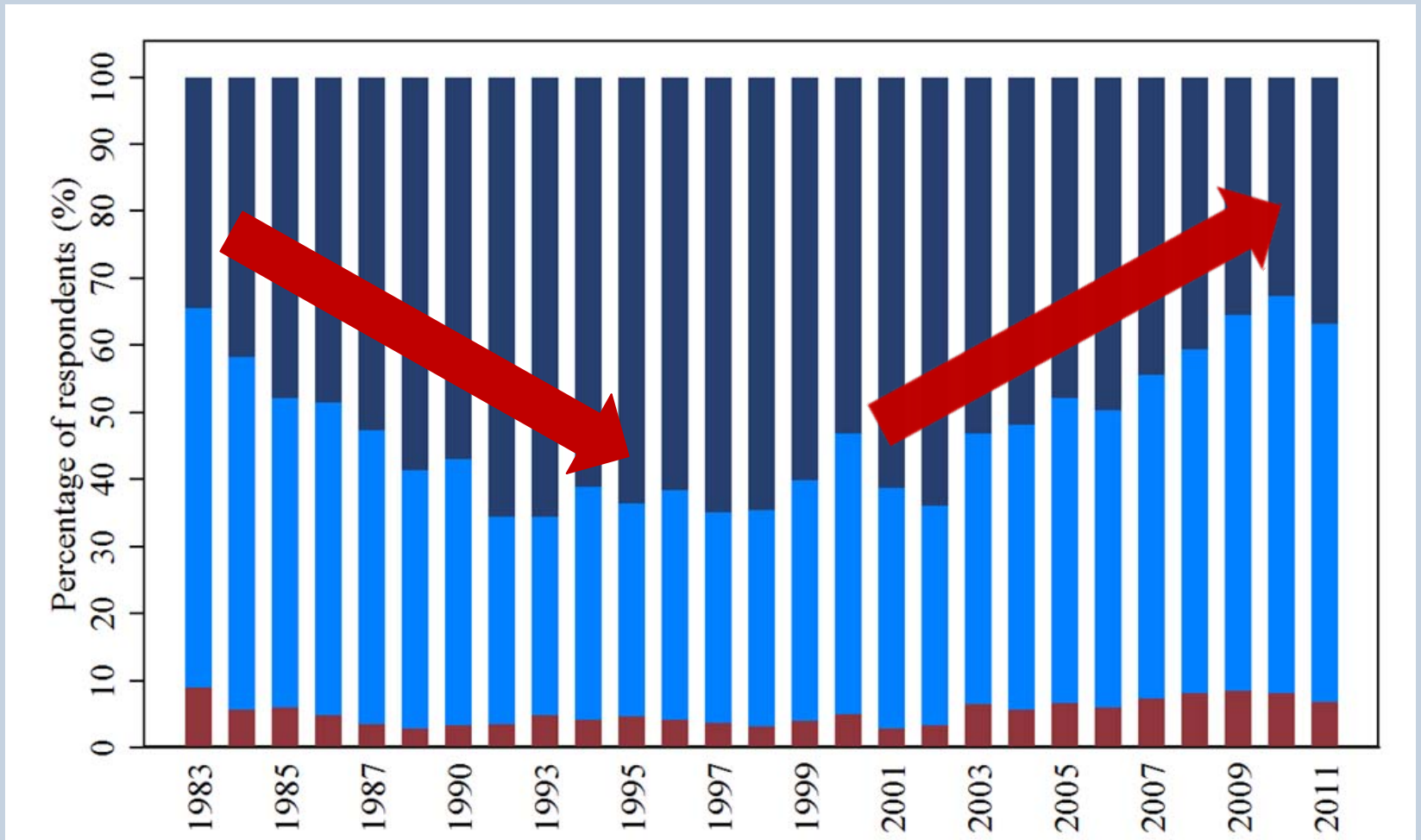


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# Public support for austerity?



Reduce taxes and spend less on health, education and social benefits



Keep taxes and spending on these services at the same level as now



Increase taxes and spend more on health, education and social benefits

# DENIALISM AND AUSTERITY

# Denialism: what is it?

- 'HIV does not cause AIDS.'
- Selectivity
  - Cherry-picking
- Impossible expectations
  - Evidence never good enough
  - Nor will they support efforts to get the best data

# Denialism

- “all vulnerable groups have access to health care, even if they have no health insurance at all, even if they are jobless, homeless, refugees or illegal immigrants. ... It is not the case [that the financial crisis deprives Greeks of access to health care services].”
- “Greece had, has and will have the most advanced system of free access to health services with one of the fastest response times.”
- “no hard evidence has proven that [the crisis] has become a health hazard or even more so a ‘disaster.’”
- “there is no evidence that it has affected health ”.

# CONCLUSIONS

# HEALTH AND SOCIAL PROTECTION AUSTERITY HARM HEALTH

# AUSTERITY HURTS THE MOST VULNERABLE



AUSTERITY IS A CHOICE

AND...

IT HAS HARMED THE RECOVERY

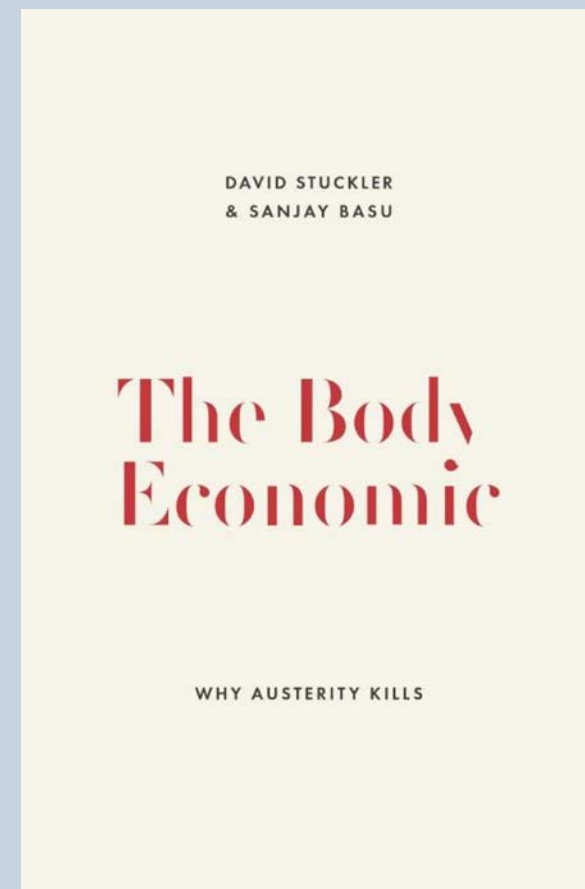
# WHAT'S THE ALTERNATIVE?

'NEW NEW DEAL FOR EUROPE'

1. DO NO HARM

2. HELP PEOPLE RETURN TO WORK

3. INVEST IN PUBLIC HEALTH



# Girl, 13, dies from inhaling stove fumes at home in Thessaloniki



File photo

A 13-year-old girl has died in Thessaloniki after inhaling fumes from a makeshift stove in her house, which did not have electricity.

Authorities said they were called to a home in the Xirokrini neighborhood of the northern city at around 11 p.m. on Sunday. They found that the teenager was already dead. Her 54-year-old mother is thought to have lost consciousness before regaining her senses long enough to call for help.

The brazier was the apartment's only form of heating and it is thought the girl died from carbon monoxide poisoning. Star TV reported that the apartment's electricity had been cut off due to unpaid bills totaling around 1,000 euros.



DEPARTMENT OF SOCIOLOGY



# Does austerity harm health?



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February 25, 2014

# Healthcare austerity: Unmet need

	Unmet med need (yes=1), all persons	Age <65	Age 65+	High pop density	Low pop density
<b>Crisis year (2011=1 vs 2007=0)</b>	1.50*** [1.32,1.69]	1.42*** [1.22,1.66]	1.67*** [1.36,2.05]	1.91*** [1.57,2.31]	1.20* [1.03,1.40]
<b>N</b>	24177	17824	6353	8275	15902

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Controls: Age, Sex, Marital status, Degree of urbanization, and Education

Alexander Kentikelenis, Marina Karanikolos, Aaron Reeves, Martin McKee, David Stuckler, *forthcoming*, **Greece's health crisis: from austerity to denialism**, The Lancet.

# Healthcare austerity: Why are these needs unmet need?

	Could not afford <sup>1</sup>	Waiting list	Could not take time <sup>2</sup>	Too far to travel <sup>3</sup>	Wanted to wait <sup>4</sup>	Other <sup>5</sup>
<b>Crisis year (2011=1 vs 2007=0)</b>	1.43*** [1.23,1.66]	1.24 [0.83,1.85]	0.89 [0.58,1.37]	2.84*** [1.68,4.81]	1.38 [0.87,2.18]	2.34*** [1.57,3.48]
<b>N</b>	24177	24177	24177	24177	24177	24177

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Controls: Age, Sex, Marital status, Degree of urbanization, and Education

1 Could not afford to (too expensive)

2 Could not take time because of work, care for children or for others

3 Too far to travel/no means of transportation

4 Wanted to wait and see if problem got better on its own

5 Other reason

Alexander Kentikelenis, Marina Karanikolos, Aaron Reeves, Martin McKee, David Stuckler, *forthcoming*, **Greece's health crisis: from austerity to denialism**, The Lancet.

# Method: Data

- National accounts data (Tax, Debt, GDP, Healthcare expenditure), EuroStat 2013 edition
- Political ideology of governing party, World Bank Political Institutions database 2012.
- IMF = Stand-By Arrangements (short-term allocations for balance of payments problems) or Extended Fund Facilities (medium-term allocations for balance of payments problems).

# Method: Model

$$\text{Eq. 1 } \Delta\text{Health}_{i,t} = \alpha_i + \beta_1\Delta\text{GDP}_{i,t} + \beta_2\Delta\text{TAX}_{i,t-1} + \beta_2\text{Debt}_{i,t-1} + \beta_3\text{Left}_{i,t} + \beta_4\text{Right}_{i,t} + \beta_5\text{Austerity}_{i,t} + \beta_6\text{IMF}_{i,t} + \theta_i + \varepsilon_{i,t}$$

- Where:
- Health = Change in Public health spending
- GDP = Change in Gross Domestic Product per capita (PPP, Real)
- Tax = Tax revenue per capita (PPP, Real)
- Debt = Total government debt (% GDP) in previous year
- Left / Right = Political ideology of governing party
- Austerity = reduction in total government expenditure
- IMF = Agreement in force
- $\theta$  = random effect: pooled within- and between-country variation



# Results:

## Explaining healthcare austerity

Economic and political determinants of annual change in health spending among 27 EU countries, 1995-2011

Covariates	Annual change in health spending†
\$100 annual increase in tax revenue†	\$2.72** (0.82)
Implemented austerity in current year	
IMF bailout active in current year	
Country-years	339
Countries	27
R <sup>2</sup>	0.26

All non-reported controls are insignificant: Change in GDP, Public debt as percentage of GDP in the previous year, Left or Right governing party

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\$100 annual increase in tax revenue†	\$2.72** (0.82)
Implemented austerity in current year	-\$64.4** (13.3)
IMF bailout active in current year	
Country-years	339
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\$100 annual increase in tax revenue†	\$2.72** (0.82)
Implemented austerity in current year	-\$64.4** (13.3)
IMF bailout active in current year	-\$44.8* (18.7)
Country-years	339
Countries	27
R <sup>2</sup>	0.26

All non-reported controls are insignificant: Change in GDP, Public debt as percentage of GDP in the previous year, Left or Right governing party