

# **Why life expectancy trends have changed, health inequalities are increasing, and our duty to respond: a view from Scotland**

Gerry McCartney

Consultant in Public Health

NHS Health Scotland

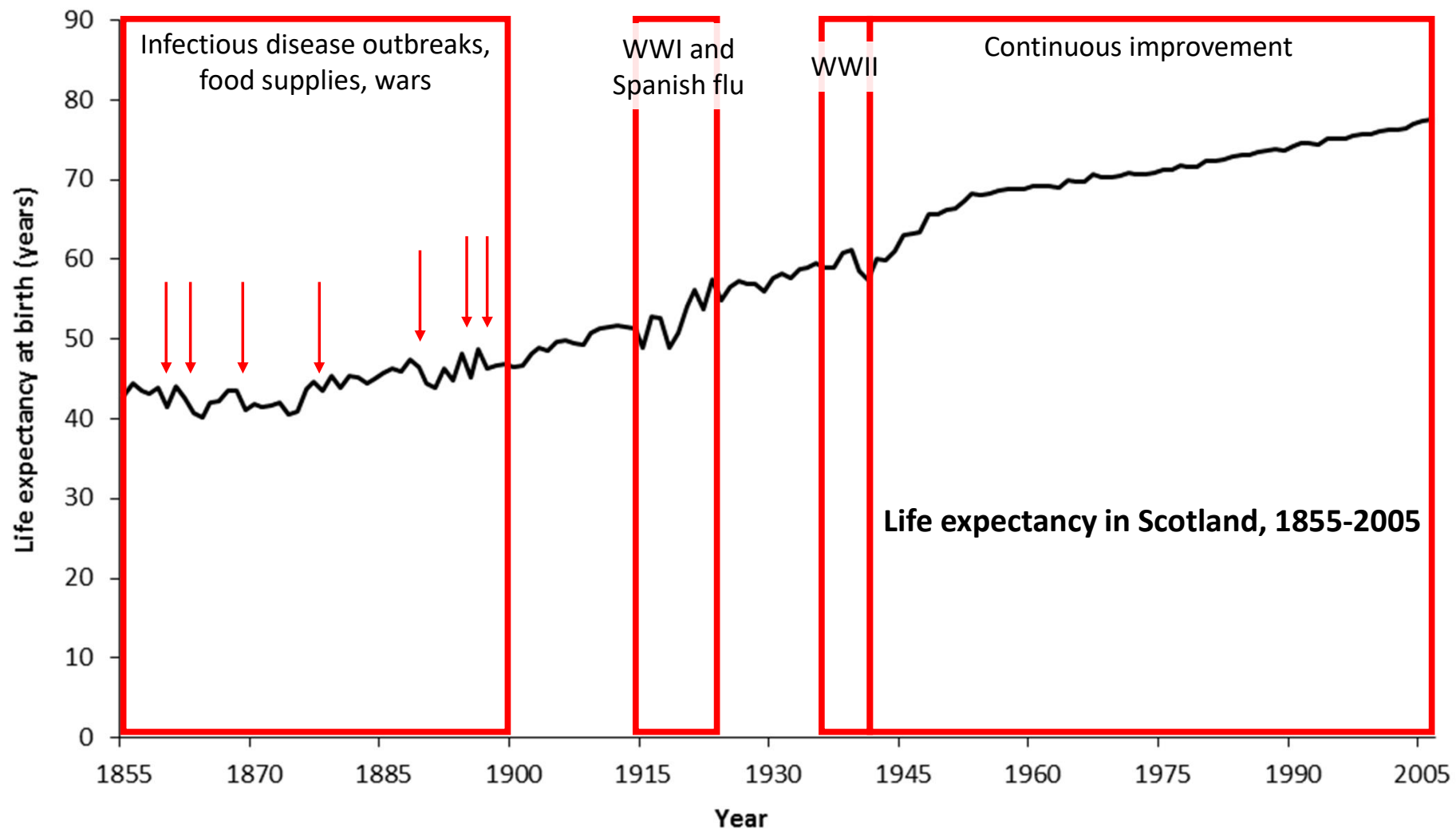
December 2019

# My objectives for the next 25 minutes:

1. To demonstrate that life expectancy trends changed from 2012, but not everywhere
2. ...that this is due to changes for almost all age groups and causes of death
3. ...that this is leading to a rapid rise in unjust and avoidable health inequalities
4. ...that the causes are most likely to be economic, working through a variety of pathways
5. To convince you that you all have a vital role in reversing these trends

# Why does this matter?

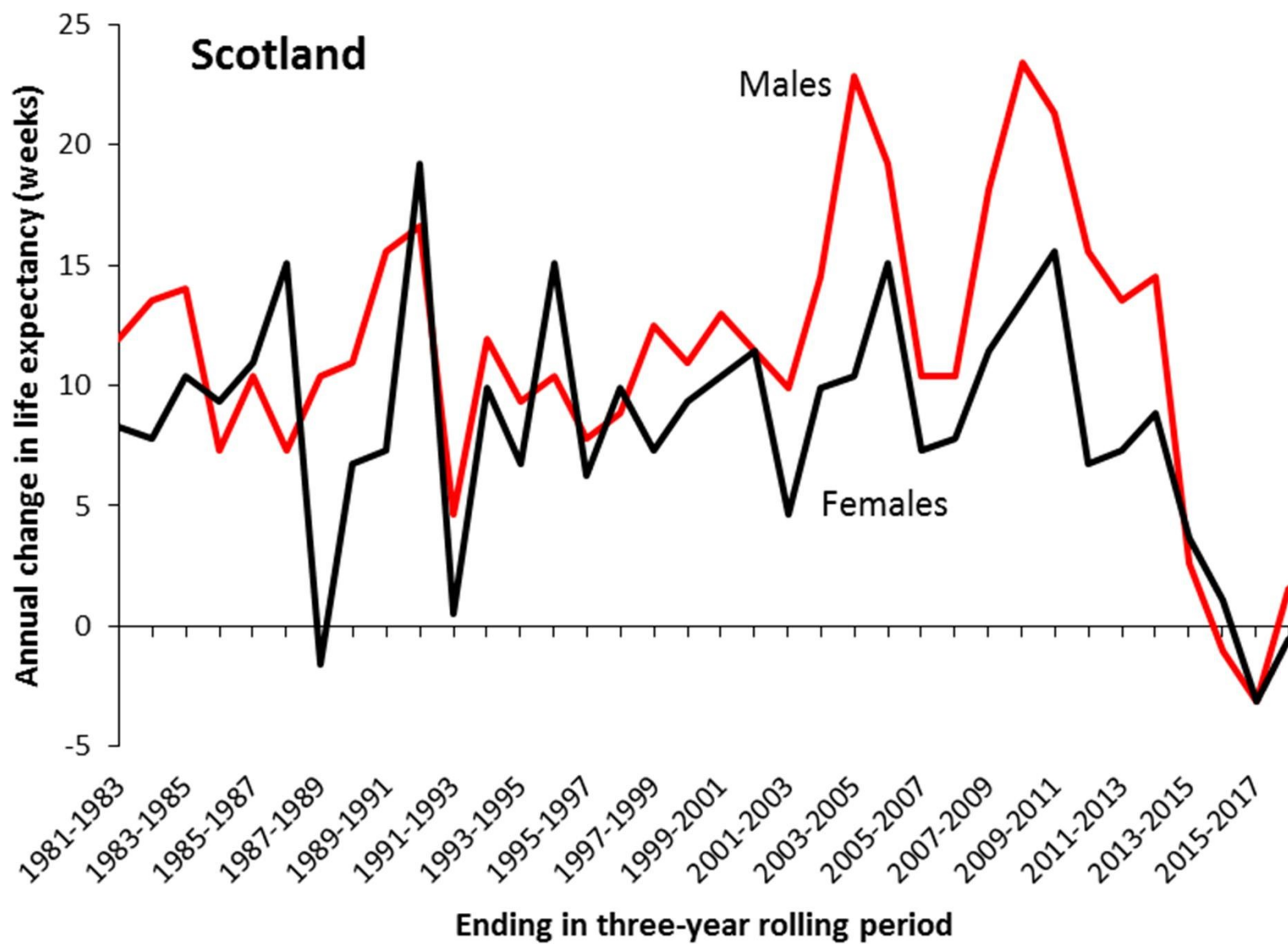
1. Life expectancy is a very good marker of overall societal progress

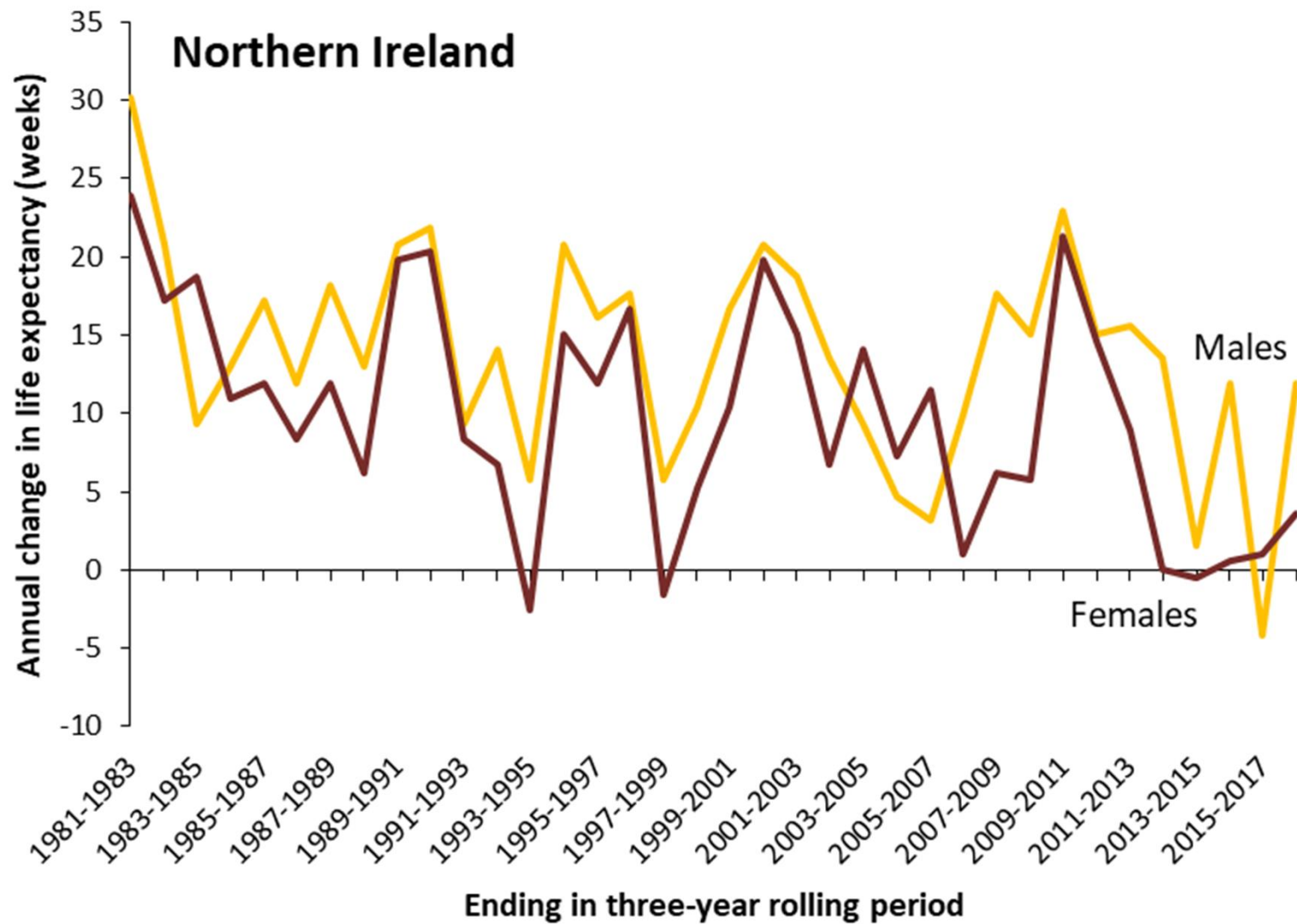


# Why does this matter?

1. Life expectancy is a very good marker of overall societal progress
2. Underneath these numbers are personal and community tragedies
3. We can change these trends

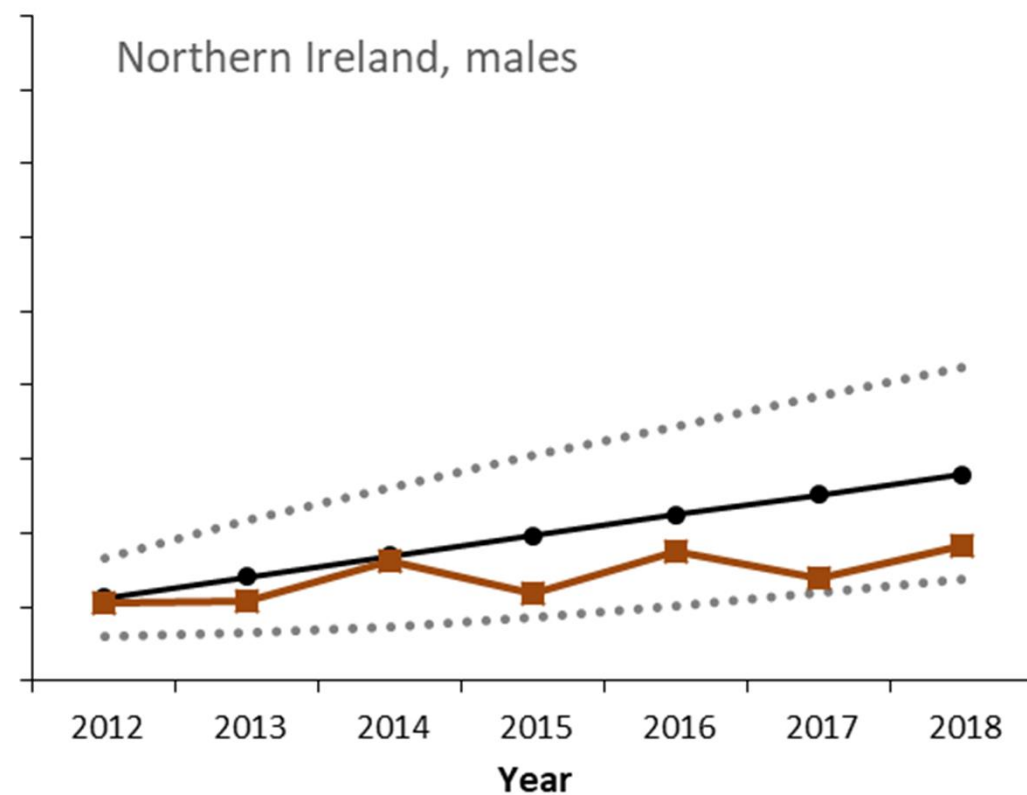
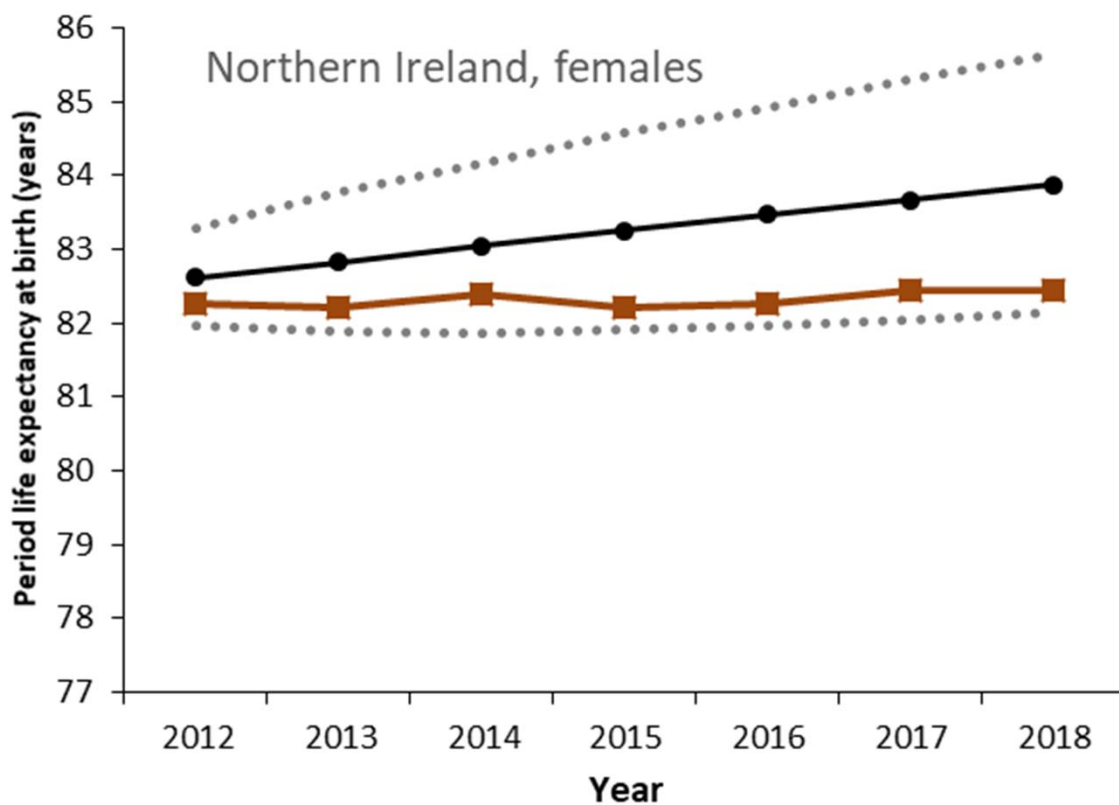
**Life expectancy trends changed from 2012**





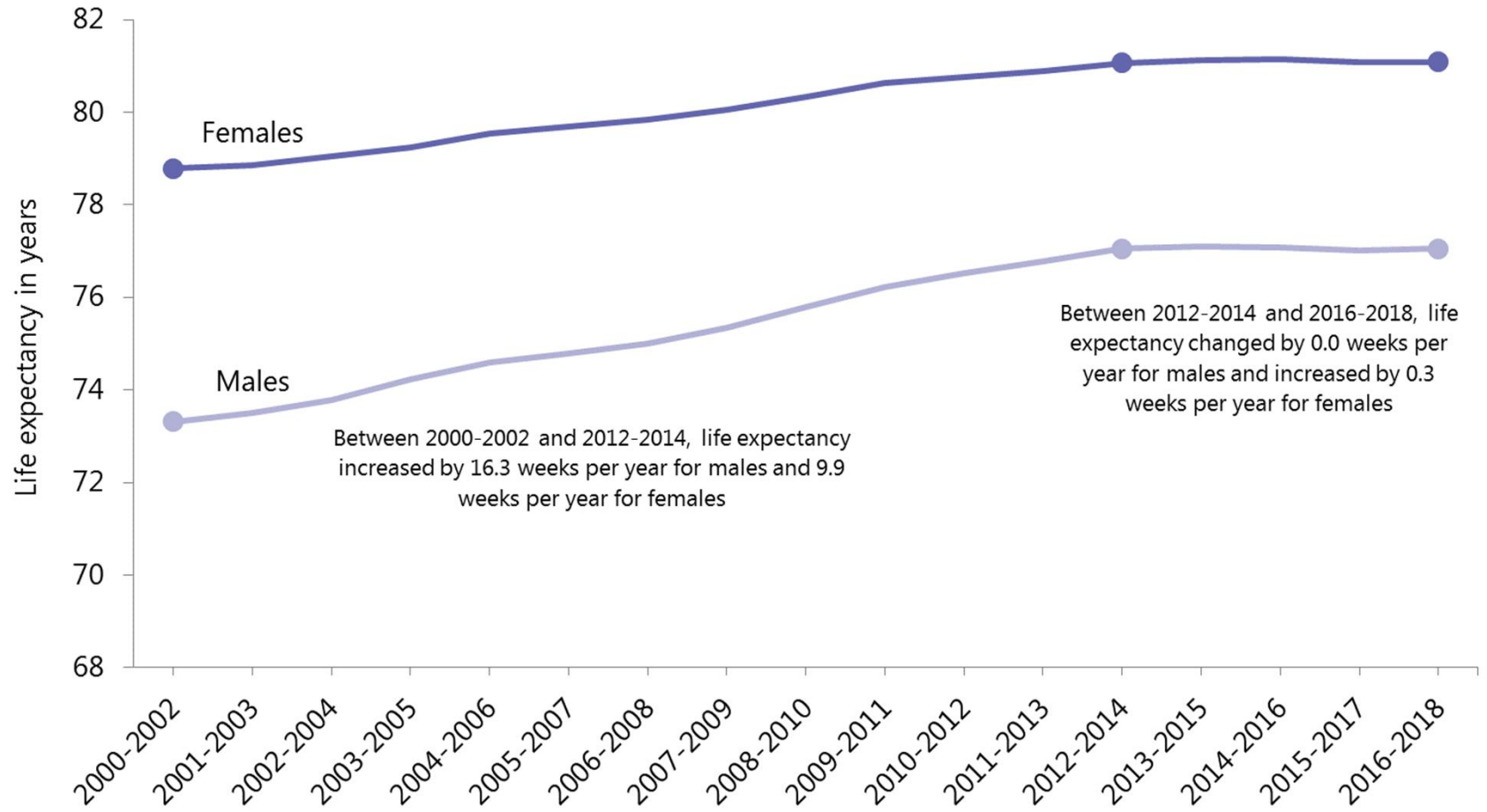


# Projected versus actual life expectancy trends



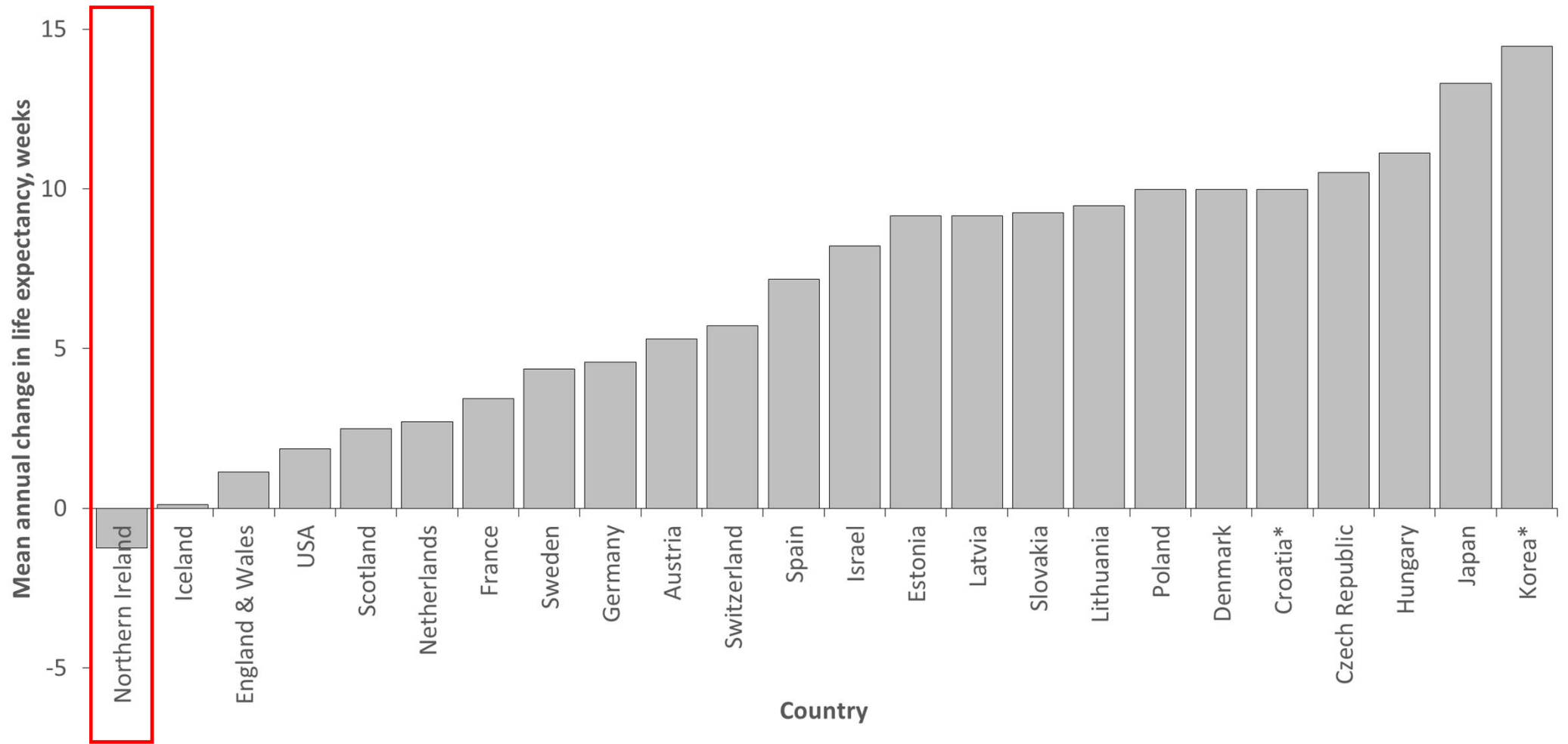
Projection based on year-to-year variance between 1990 and 2011

Figure 2. The slowing rate of improvement to life expectancy in Scotland.  
2000-2002 to 2016-2018

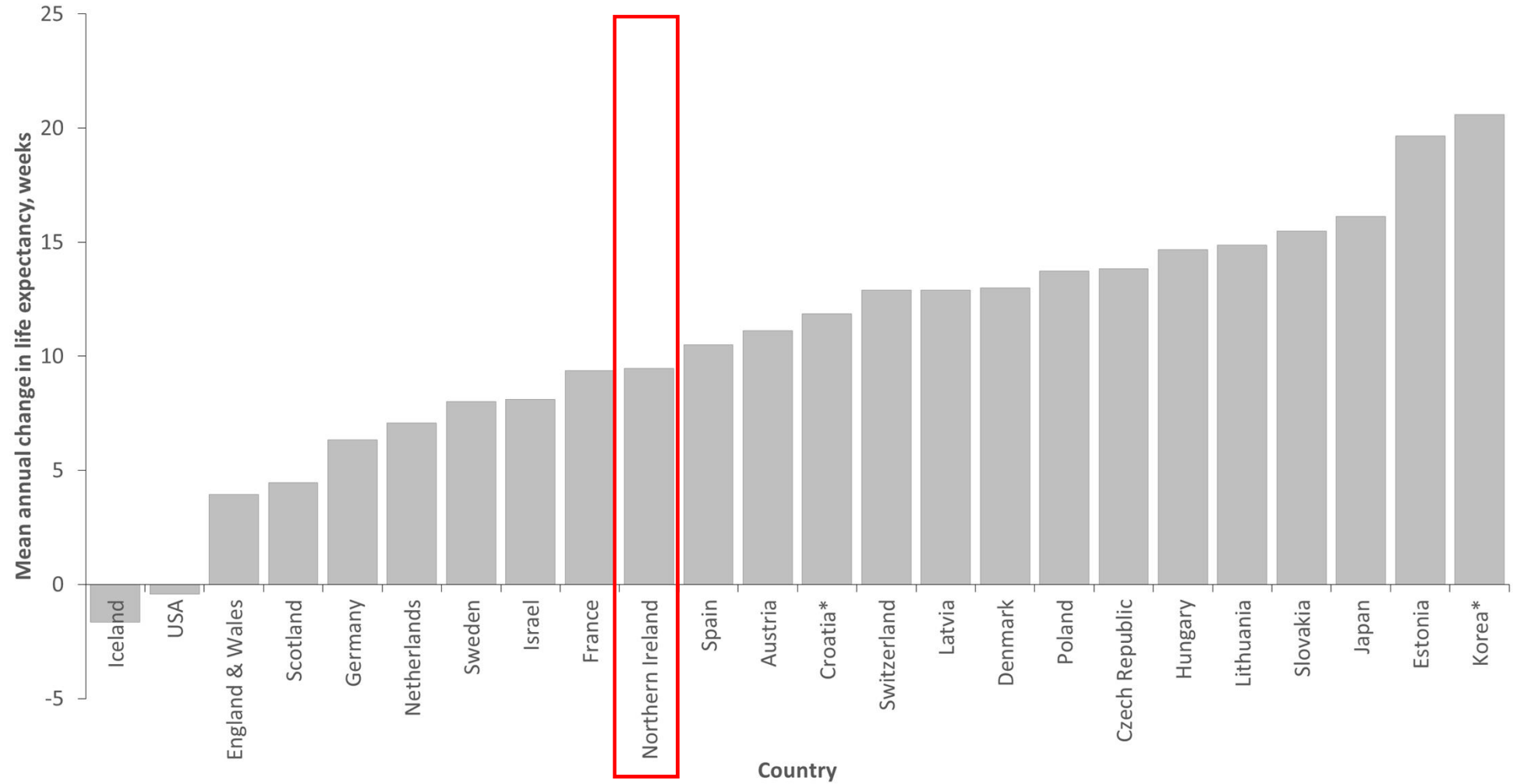


Source: National Life Tables for Scotland (NRS)  
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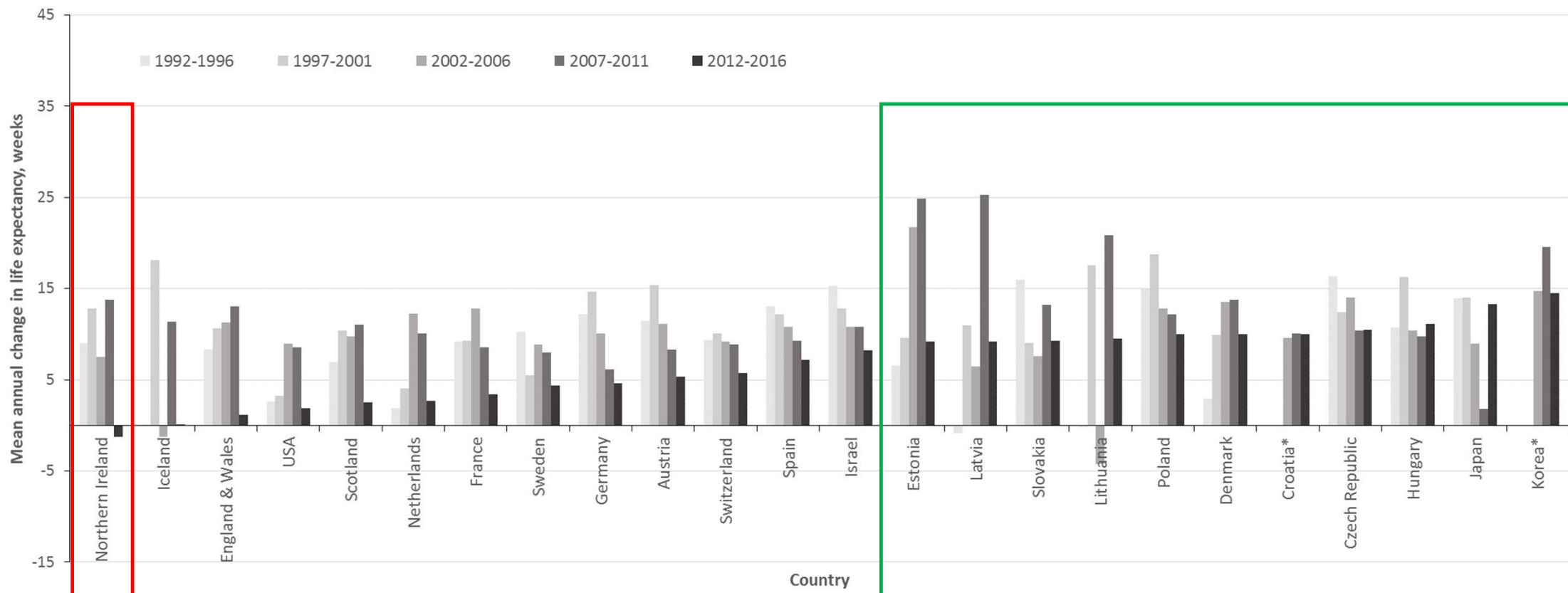
# Mean annual change in female life expectancy, 2012-6



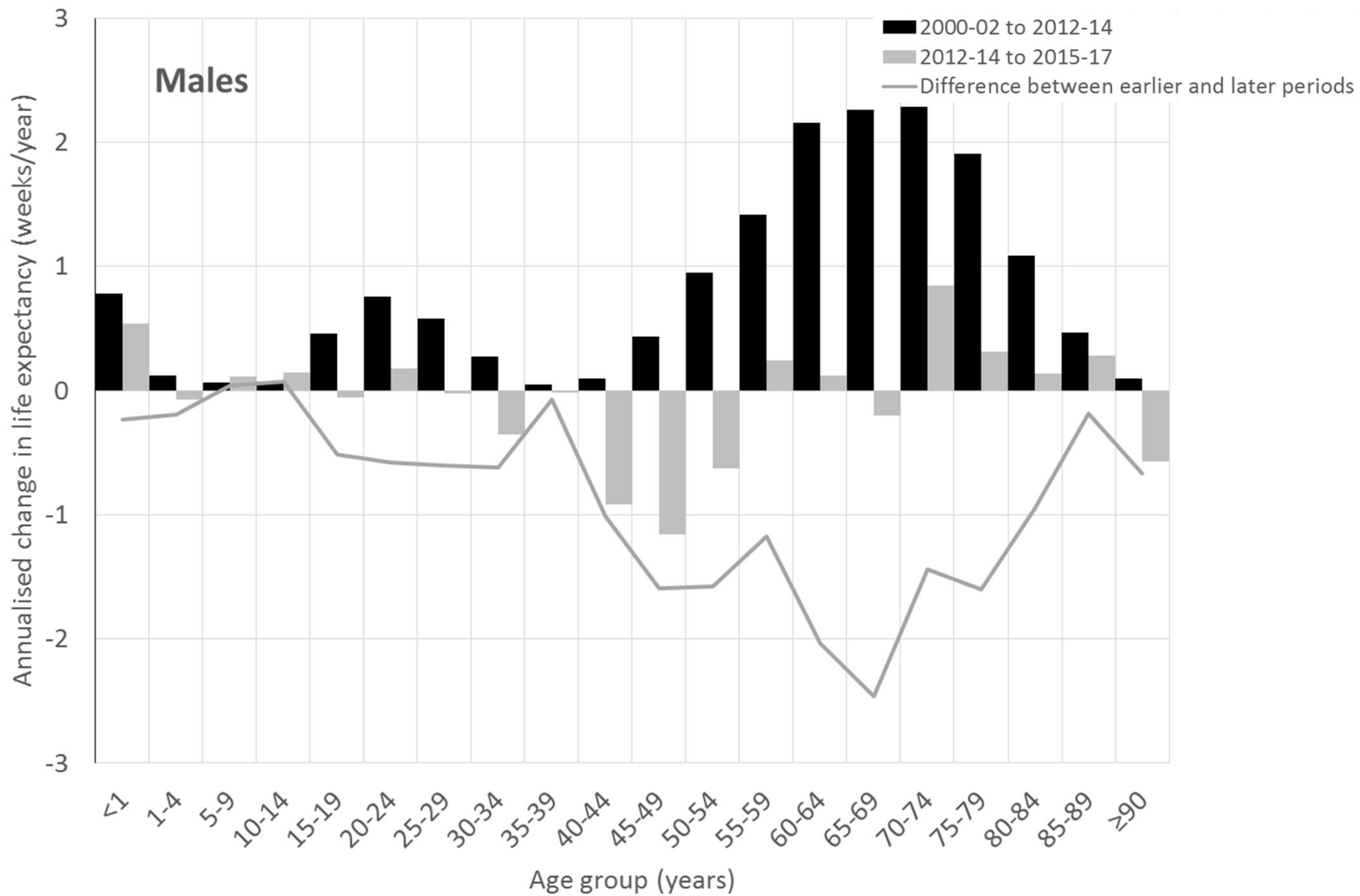
# Mean annual change in male life expectancy, 2012-6

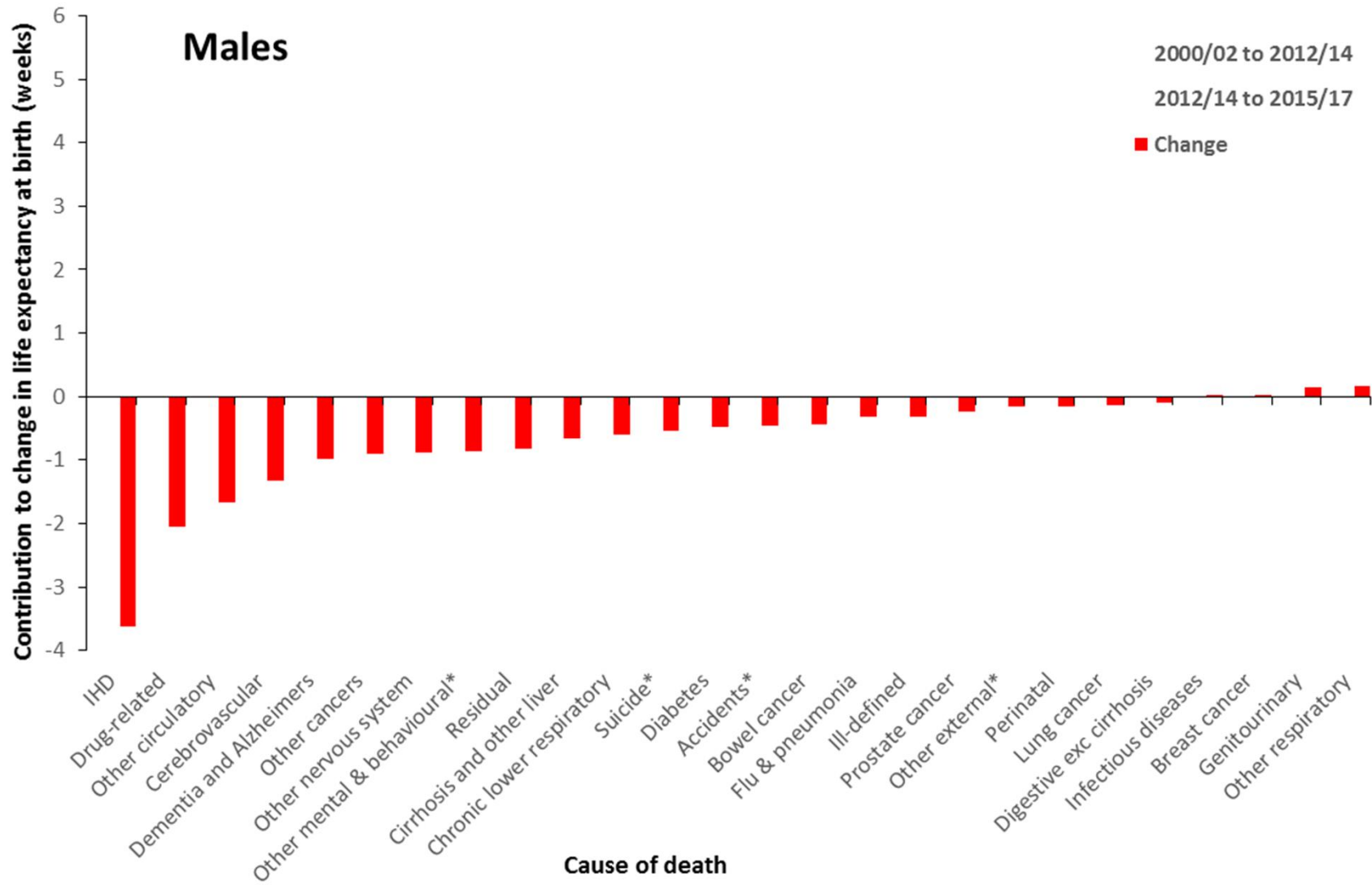


# Mean annual change in female life expectancy

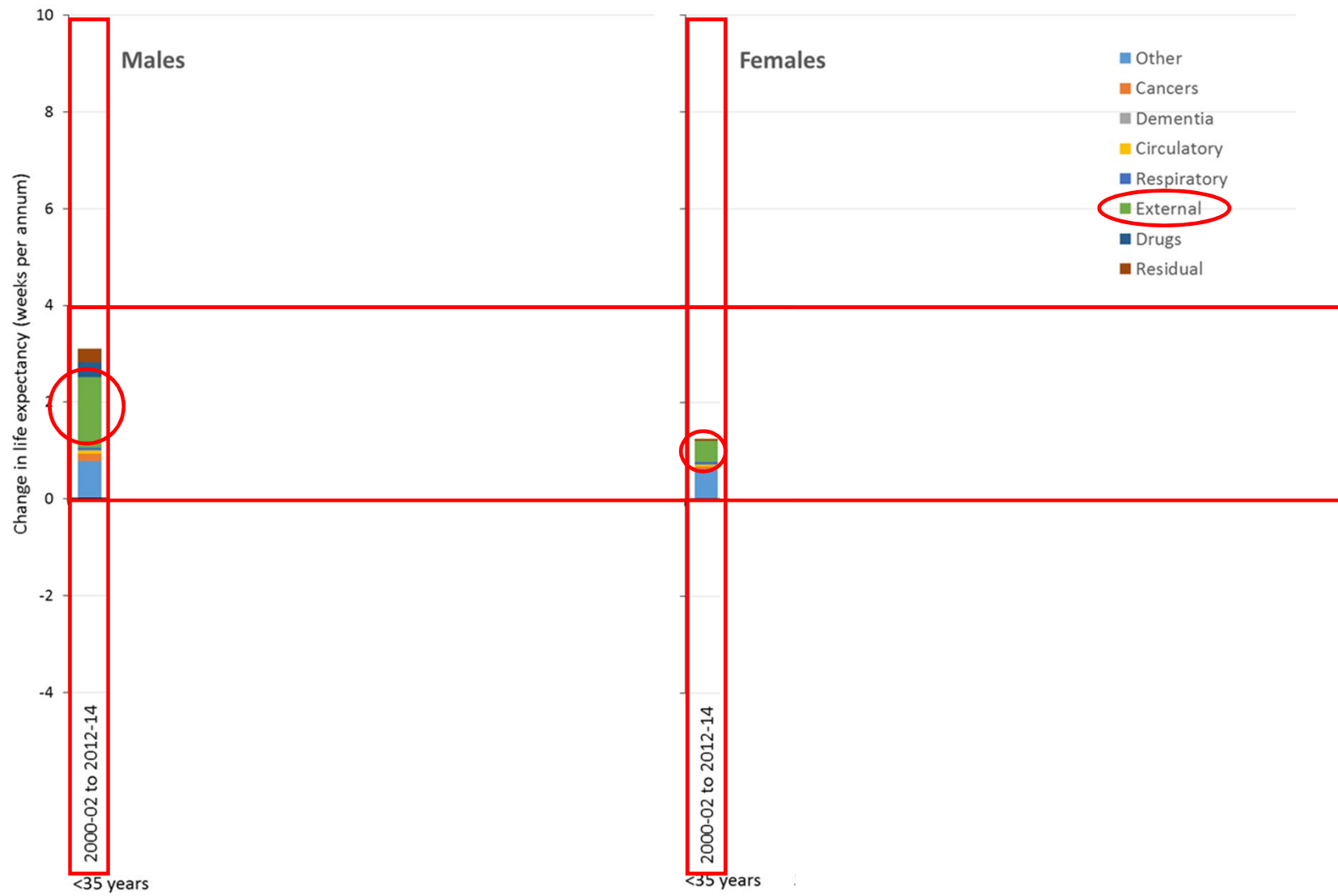


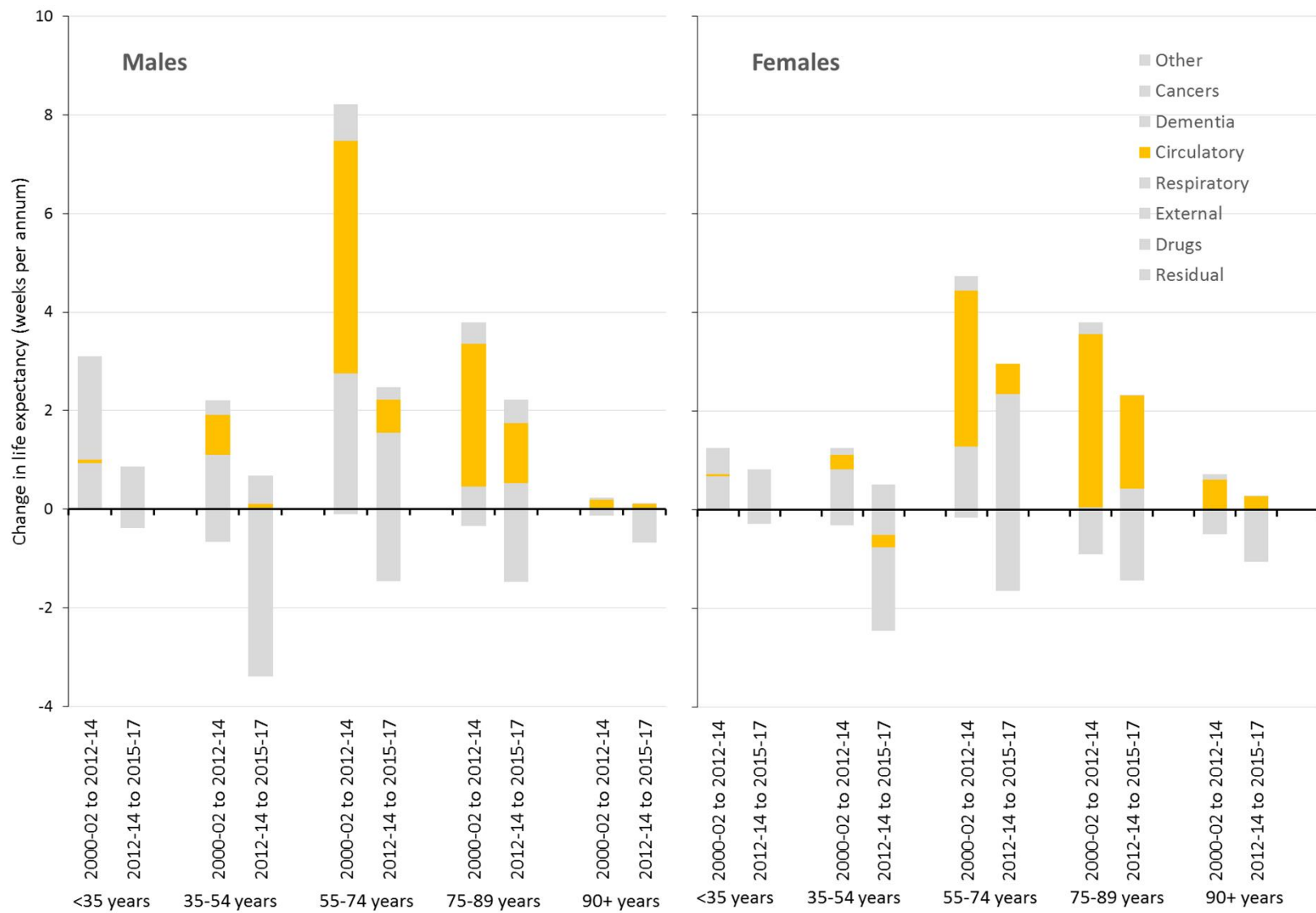
**Almost all age groups and causes of death**

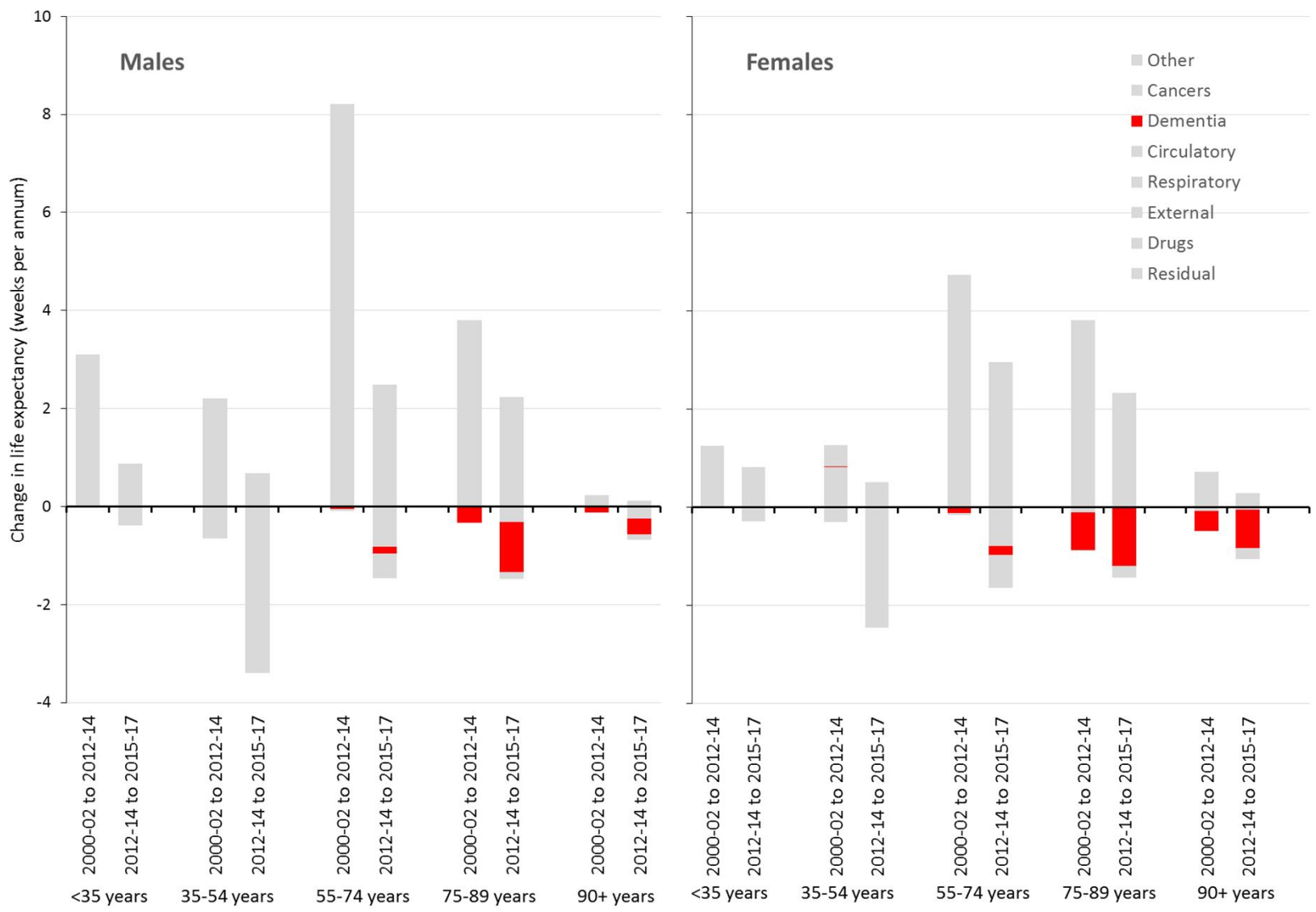








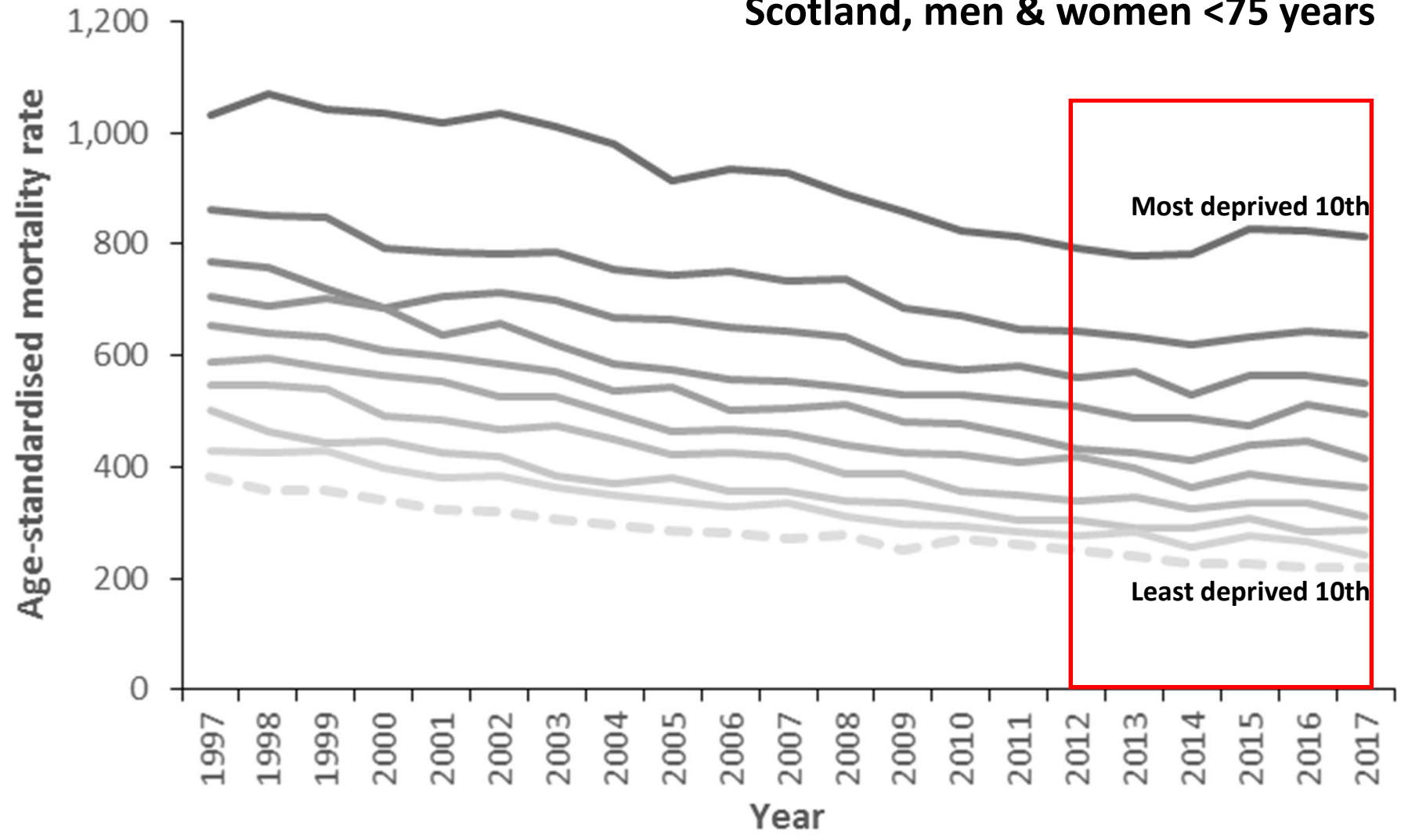




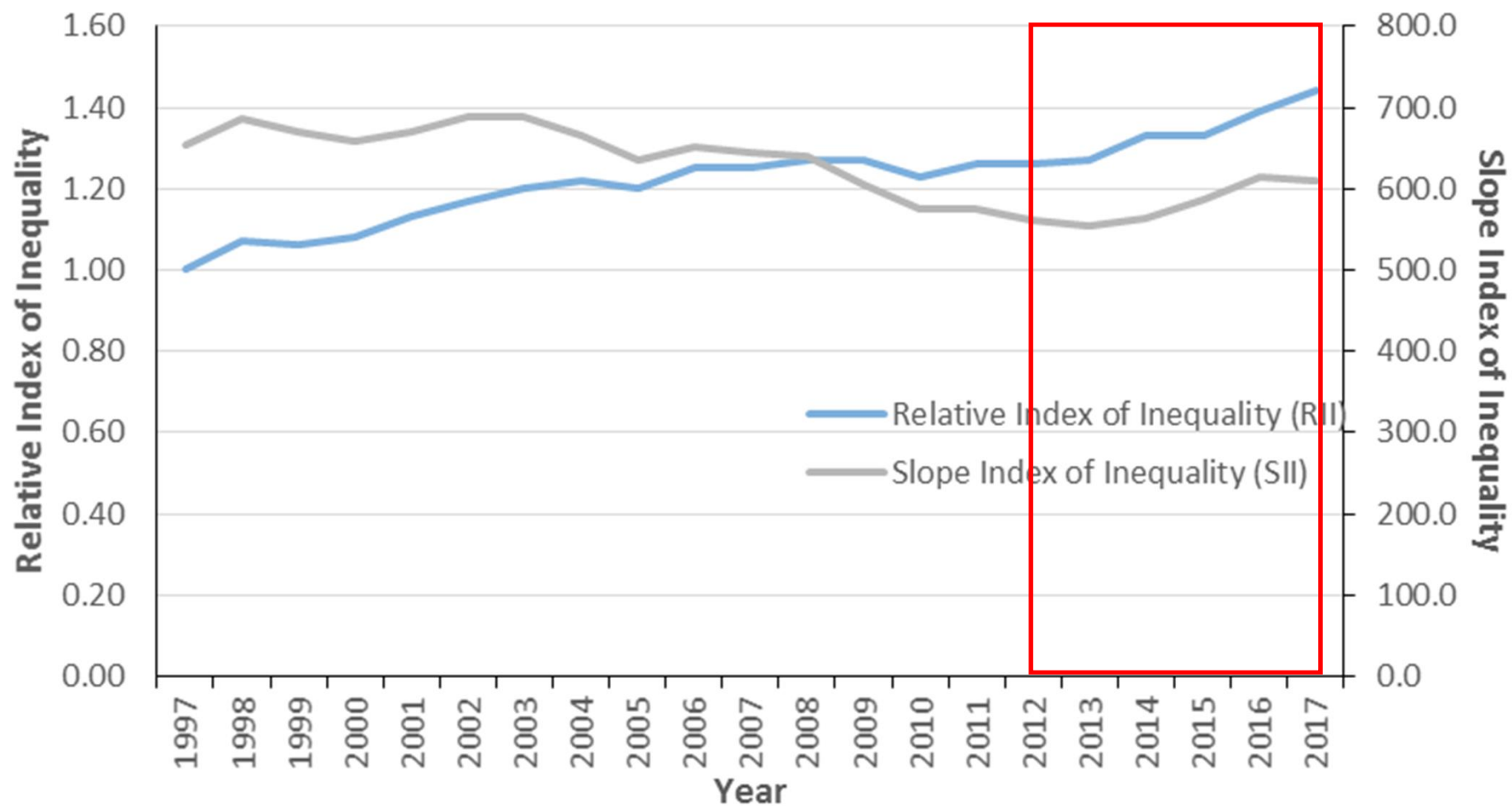


**A rapid rise in unjust and avoidable  
inequalities**

# Scotland, men & women <75 years



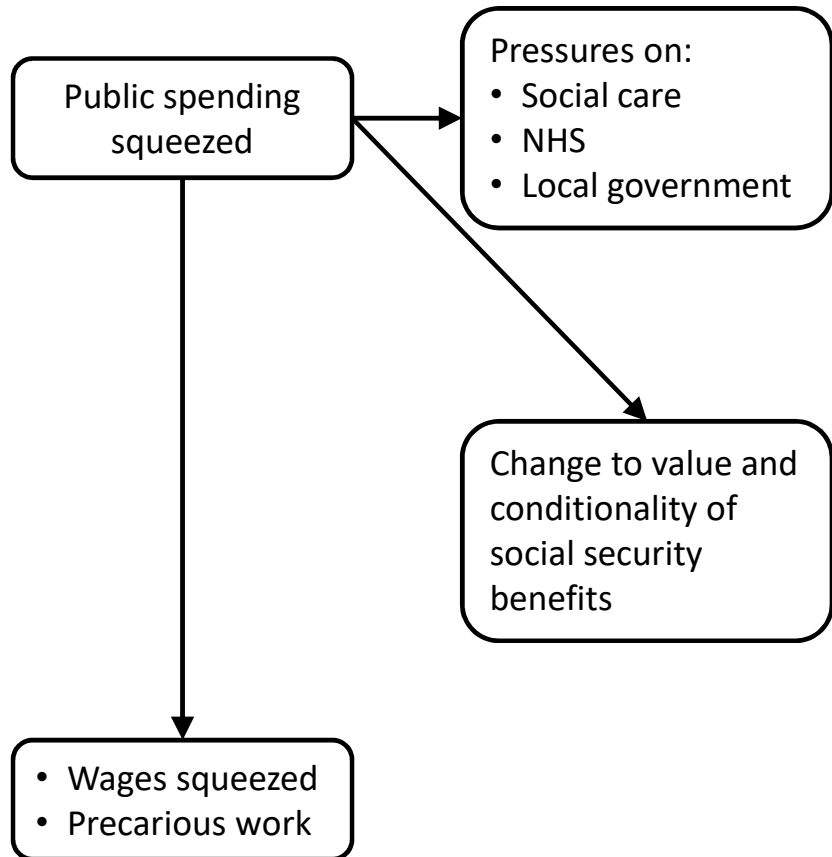
## Inequalities in premature (<75y) mortality, Scotland



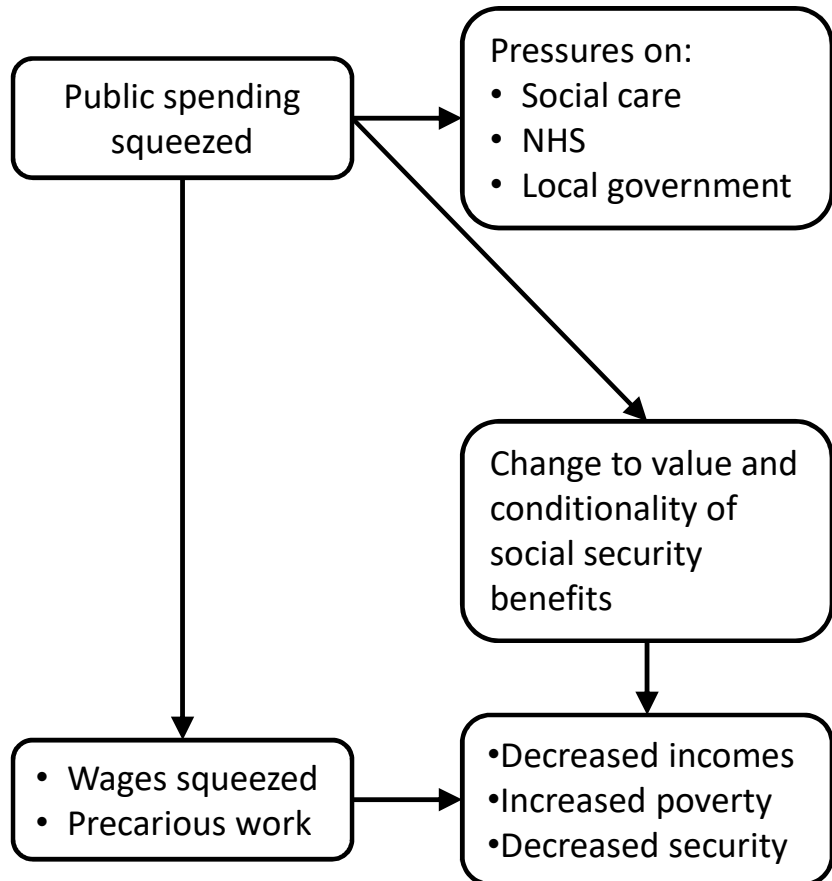
**The causes are economic, working through a variety of pathways**



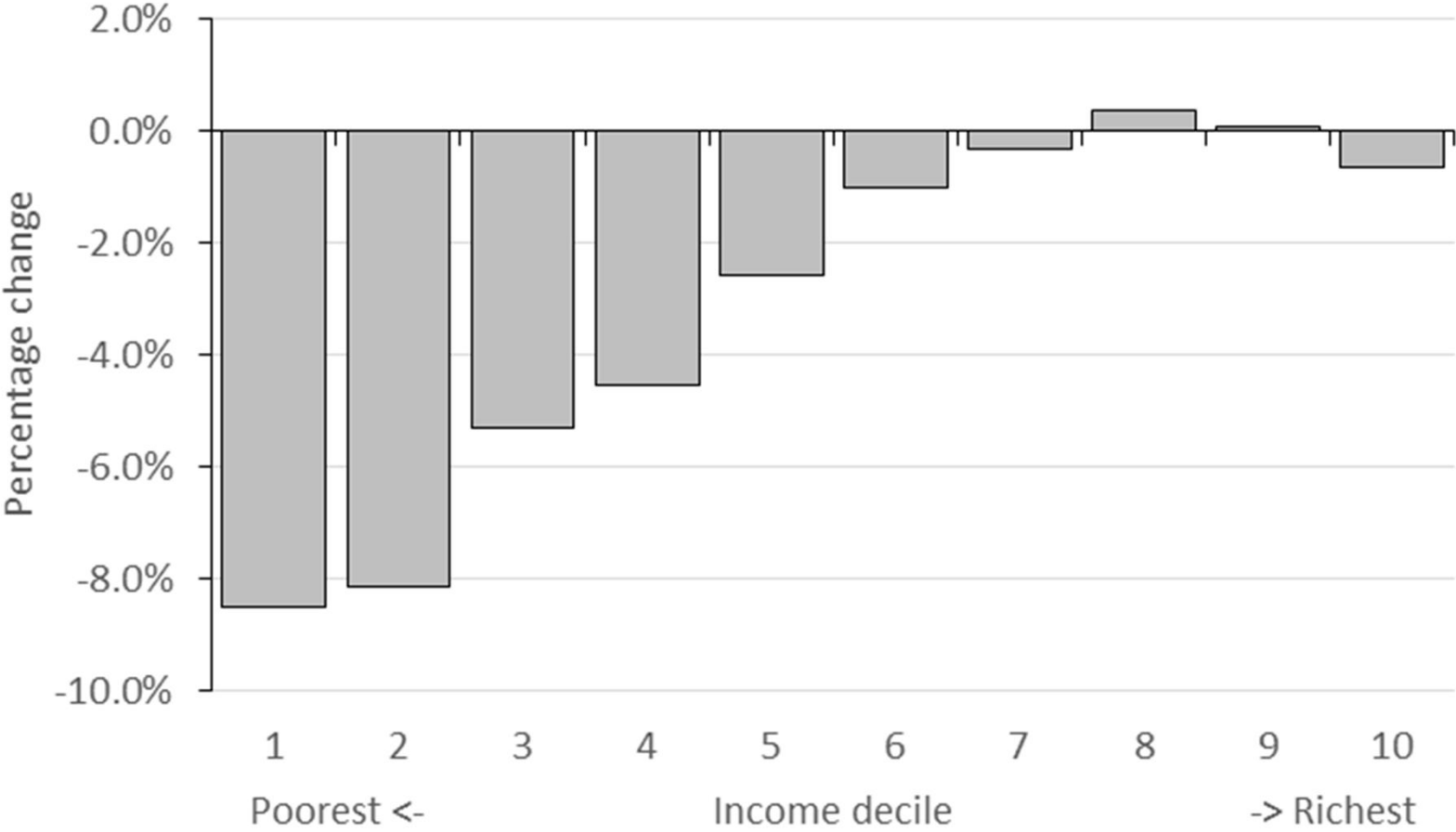
# Theory for the economic causes of the life expectancy trends



# Theory for the economic causes of the life expectancy trends

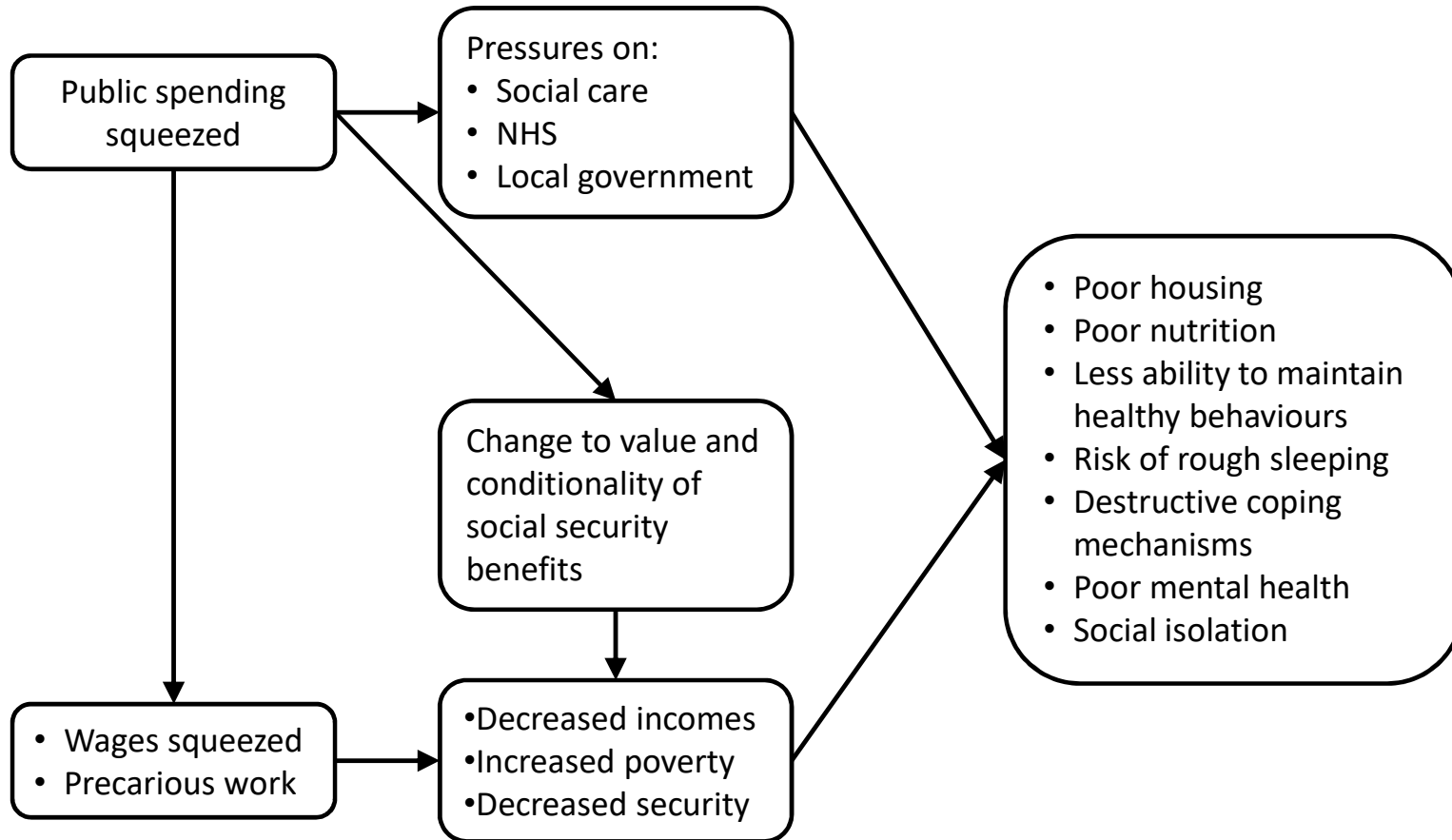


# Percentage impact of reforms to taxes and transfer payments by household net income decile, 2010-2011 to 2021-22 tax year, Great Britain



Source: Portes et al. The cumulative impact of tax and welfare reforms. Manchester, Equality and Human Rights Commission, 2018.

# Theory for the economic causes of the life expectancy trends



‘It has just gone overboard now. I was actually at the doctors today about it. But again, that’s money worries. My anxiety is making me really, really ill.

My anxiety has gone through the roof. I can sleep, but the minute I wake up, all I’m thinking about is money, money, money.

What have I to pay tomorrow? How am I going to get the electricity to do another two days?

It’s quite scary’.

Data from the CPAG Early Warning System [‘Mary’],  
with thanks to Morag Treanor, Heriot Watt University, CPAG and the study participants

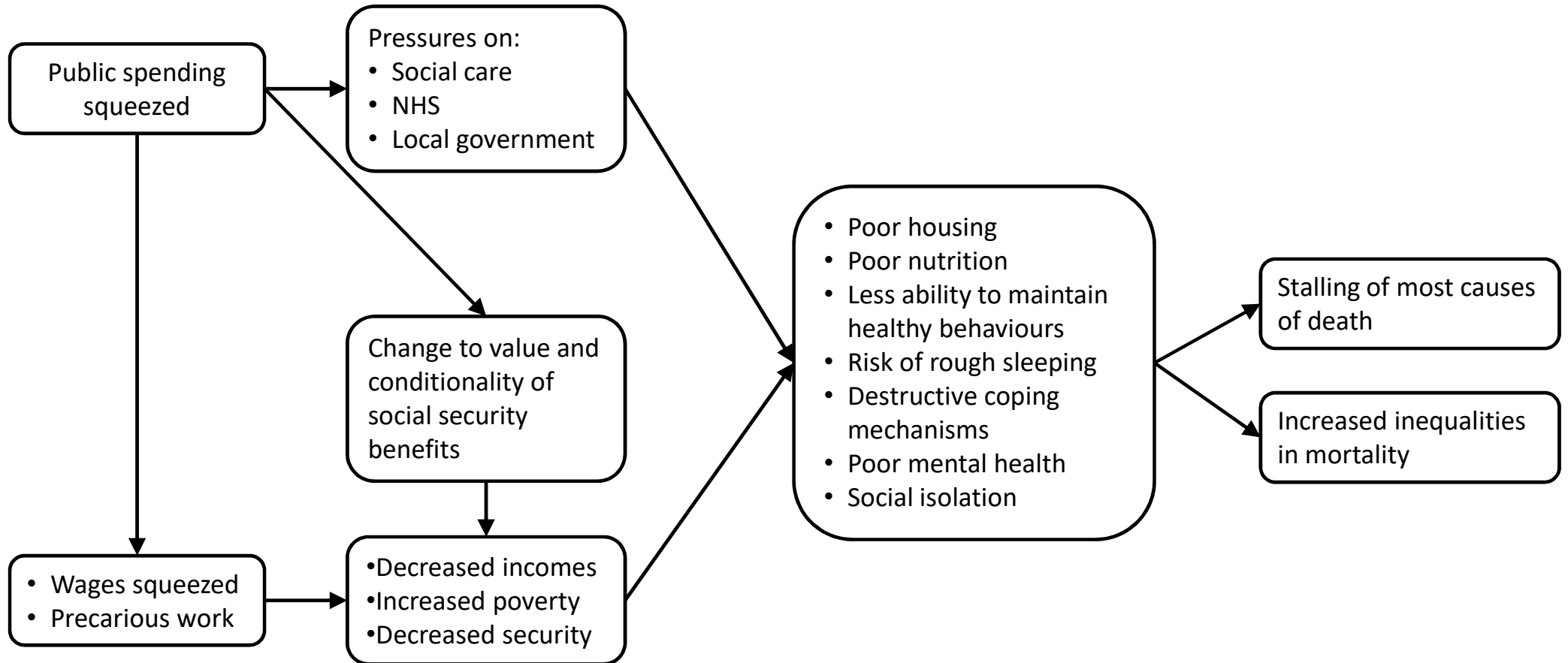
'I've got two really good friends that I used to see them all the time. I've just not got the heart to... I just...there's nothing to tell them.

I've not been nowhere, I've not done nothing. And it comes down to, as well, I think no money, I've, ken, they talk about their work and stuff, and their families, where they've been and where they're going on holiday, and I just, I kinda... like for my birthday, it was my 40th in April, and one of my friends had organised all the girls to come over and I just felt like the chicken with one wing.

Because... I was the only one sitting there with no job, no money, and I didn't ken what I was going to eat that night. It was quite a sad situation to be in.'

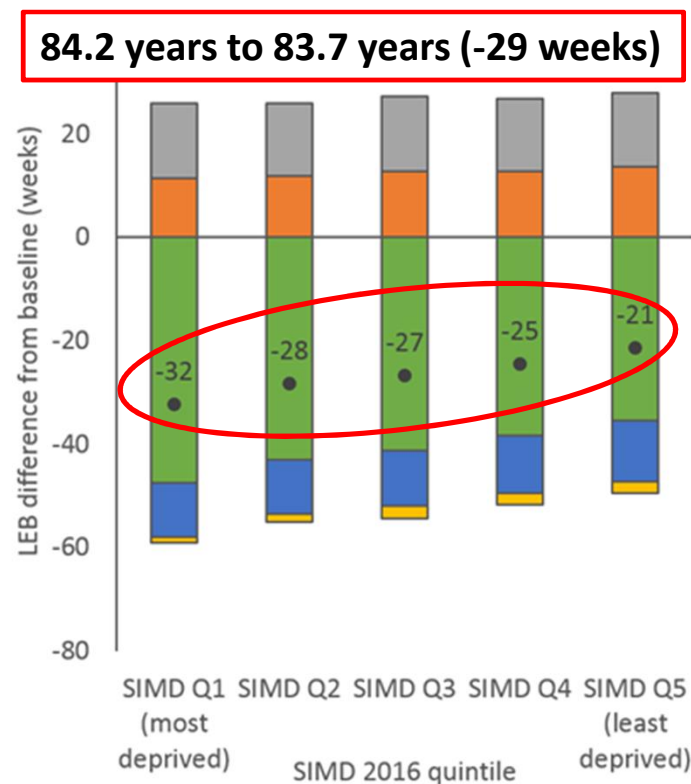
Data from the CPAG Early Warning System ['Mary'],  
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# Theory for the economic causes of the life expectancy trends

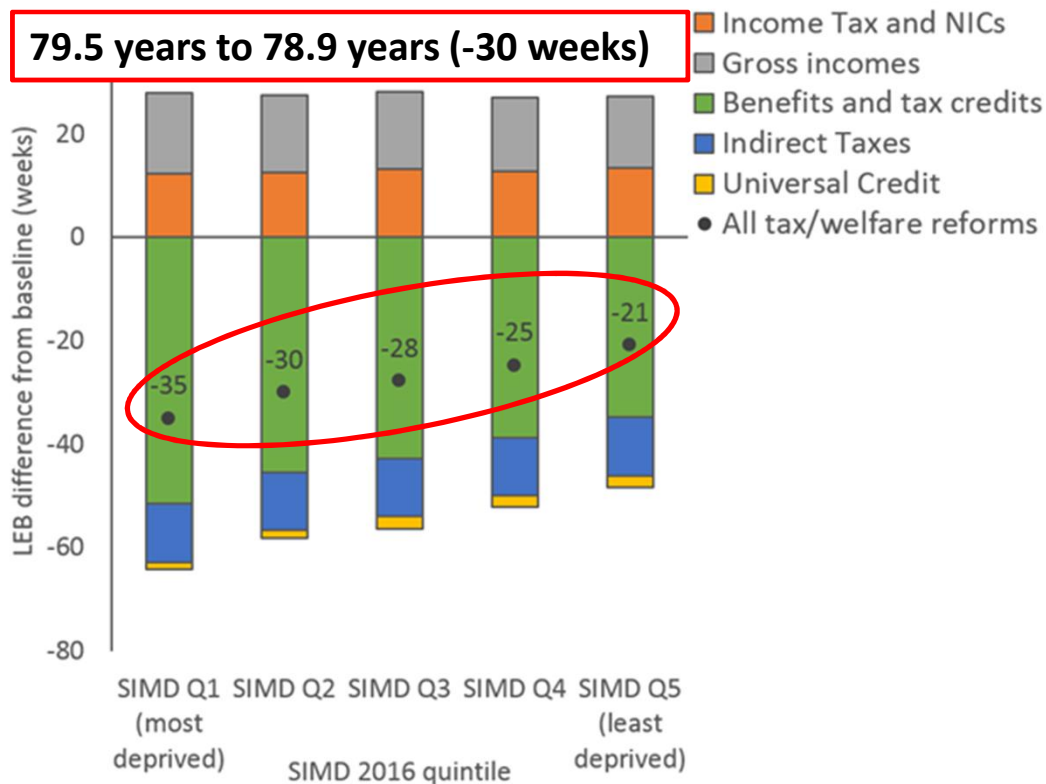


# Modelled impact of changes to taxes and transfer payments (2010-2011 to 2021-22) on life expectancy, Scotland (preliminary analysis using Triple I tool)

(a) Female



(b) Male



- Income Tax and NICs
- Gross incomes
- Benefits and tax credits
- Indirect Taxes
- Universal Credit
- All tax/welfare reforms



# Economic causes

- Different pathways for different groups
- Social security benefit cuts and increased conditions
- Cuts to public services and pressures on health & social care services
- Household incomes squeezed, precarious work



- Austerity measured as Cyclically Adjusted Primary Balance (CAPB) in terciles
- Europe (15 countries), 2011-2015
- Compared with countries in the low-austerity group, countries with intermediate austerity had excess mortality of 40 per 100,000 per year and those with high austerity had excess mortality of 31 per 100,000 per year.
- Generally good quality study
- No data beyond 2015 – likely to underestimate effects

Rajmil, Luis; Fernández de Sanamed, María-José. Austerity Policies and Mortality Rates in European Countries, 2011–2015. *AJPH* 2019; 109: 768-870, doi:10.2105/AJPH.2019.304997.

RESEARCH AND PRACTICE

## Austerity Policies and Mortality Rates in European Countries, 2011–2015

*Luis Rajmil, PhD, and María-José Fernández de Sanamed, MD*

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**Objectives:** To assess time trends in mortality rates in European countries for the period 2011 to 2015 by level of austerity measures imposed by governments in response to the economic and financial crisis.

**Method:** We analyzed standardized mortality rates (SMRs) for 2011 through 2015 in 15 European countries based on Eurostat data (<http://ec.europa.eu/eurostat/data/database>). We used the Cyclically Adjusted Primary Balance (CAPB) in terciles as an independent variable to represent the level of austerity adopted in each country. We conducted a longitudinal analysis of panel data using generalized estimating equation models of SMR. We included interaction terms to assess the influence of time period and level of austerity.

**Results:** SMRs generally declined in the study period, except in the last year of the study. In 2015, compared with countries in the low-austerity group, countries with intermediate austerity had excess mortality of 40.2 per 100 000 per year and those with high austerity had excess mortality of 31.22 per 100 000 per year.

**Conclusions:** The results suggest a negative effect on mortality in those countries that apply a higher level of austerity. (*Am J Public Health*. Published online ahead of print March 21, 2019; doi:10.2105/AJPH.2019.304997)

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**Impact on social determinants of health, with strong effects in some countries, has also been reported.<sup>2</sup>**

A recently published article<sup>3</sup> that compared trends in mortality rates in Spain and the United States reported an increase in mortality since 2011 in Spain. Although the authors attributed the increase to the austerity policies of the Spanish government, an editorial in the same issue of *AJPH* suggested that methodological problems deriving from a change in the reference population had led the authors to overestimate mortality rates.<sup>4</sup> There is an evidence need to differentiate the impact of the crisis from the responses of governments and its consequences in terms of health and mortality.

In this study, we assessed time trends in mortality rates in 15 European countries for the period 2011 through 2015 by level of austerity measures imposed by governments in response to the economic and financial crisis.

### METHODS

We carried out a longitudinal ecological study of trends in standardized mortality rates (SMRs) at the country level. We included 15 countries from the European Economic Area for which routinely collected and comparable data for the period 2011 to 2015 were available (<http://ec.europa.eu/eurostat/data/database>). We excluded postcommunist countries, as well as Luxembourg and Sweden because of their high level of economic development, which does not usually affect the real wealth of residents. We included Austria, Belgium, Denmark, France, Finland, Germany, Greece, Iceland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and the United Kingdom.

We used the Cyclically Adjusted Primary Balance (CAPB) to categorize the severity of austerity policy responses to the crisis in each country. The CAPB, which was developed by the International Monetary Fund,<sup>5</sup> represents the cyclical component of the overall fiscal balance, computed as the difference between cyclical revenues and cyclical expenditures. A high score signifies a higher level of austerity. We stratified CAPB into terciles representing high, medium, and low levels of austerity, and we calculated CAPB differences within countries from 2009, the year of the major impact of the crisis, to 2015, the last year with major spending cuts.<sup>7</sup> Table

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**ABOUT THE AUTHORS**  
Luis Rajmil is professor of epidemiology and public health practice, Cornell University, Ithaca, New York, and a primary care physician, Cornell Medical.  
Correspondence should be addressed to Luis Rajmil, Cornell University, Ithaca, NY 14853 (e-mail: lra15@cornell.edu). Reprints can be ordered at <http://www.ajph.org> by clicking on "Reprints & Ads". The address above is current as of January 13, 2019.  
doi:10.2105/AJPH.2019.304997

Published on the ahead of print March 21, 2019 | *AJPH* | Rajmil and Fernández de Sanamed | Peer Reviewed | Research and Practice | 81

- Austerity measured using the Alesina-Ardagna Fiscal Index (AAFI) (also called ‘Blanchard Fiscal Index’)
- Europe (28 countries), 1991-2013 (many up to 2012)
- Austerity regimes are associated with an increase in mortality of 0.7% after adjusting for recession effects
- Good quality study
- No data beyond 2012/3 – likely to underestimate effects



Toffolutti V, Suhrcke M. Does austerity really kill? Economics and Human Biology 2019; 33: 211-3.

- Austerity measured by welfare spending, adjusted for unemployment and GDP
- 2002-2014, Europe (25)
- GDP drops and increasing unemployment were associated with decreasing health inequalities. Austerity, however, was related to increasing health inequalities, an association that grew stronger with time.
- Good quality study though response rate for European Social Survey is highly variable across countries, and only self-rated health measures.
- No data beyond 2014 – likely to underestimate effects

van der Wel, Kjetil A.; Saltkjel, Therese; Chen, Wen-Hao; Dahl, Espen; Halvorsen, Knut. European health inequality through the 'Great Recession': social policy matters. *Sociology of Health & Illness* 2018; 40(4): 750-768, doi:10.1111/1467-9566.12723

**European health inequality through the 'Great Recession': social policy matters**

**Kjetil A. van der Wel<sup>1</sup>, Therese Saltkjel<sup>1</sup>,  
Wen-Hao Chen<sup>2</sup>, Espen Dahl<sup>1</sup> and Knut Halvorsen<sup>1</sup>**

<sup>1</sup>*Department of Social Work, Child Welfare and Social Policy, OsloMet – Oslo Metropolitan University, Oslo, Norway*

<sup>2</sup>*Social Analysis and Modelling Division, Statistics Canada, Ottawa, Canada*

**Abstract** This paper investigates the association between the Great Recession and educational inequalities in self-rated general health in 25 European countries. We investigate four different indicators related to economic recession: GDP; unemployment; austerity and a 'crisis' indicator signifying severe simultaneous drops in GDP and welfare generosity. We also assess the extent to which health inequality changes can be attributed to changes in the economic conditions and social capital in the European populations. The paper uses data from the European Social Survey (2002-2014). The analyses include both cross-sectional and lagged associations using multilevel linear regression models with country fixed effects. This approach allows us to identify health inequality changes net of all time-invariant differences between countries. GDP drops and increasing unemployment were associated with decreasing health inequalities. Austerity, however, was related to increasing health inequalities, an association that grew stronger with time. The strongest increase in health inequality was found for the more robust 'crisis' indicator. Changes in trust, social relationships and in the experience of economic hardship of the populations accounted for much of the increase in health inequality. The paper concludes that social policy has an important role in the development of health inequalities, particularly during times of economic crisis.


**Keywords:** social determinants of health, social change, social capital, inequalities/social inequalities in health status, welfare state

**Introduction**

The 2008 financial crisis and the ensuing 'Great Recession' experienced by many European countries led to longstanding high levels of unemployment. According to scholars, the crisis was further deepened by inadequate policy responses as many countries – not only those answering to the 'Troika' – introduced austerity policies to balance national budgets (e.g. Karanikolos *et al.* 2013). The economic recession, and particularly when coupled with undeveloped or retrenching social protection, may in particular have had consequences for European health inequalities (Marmot *et al.* 2013; Stuckler and Basu 2013). Social inequality in health is a key public health challenge in Europe (European Commission 2013) and the European

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- Austerity measured as change in Pension Credit and social care spending; local authorities in England, 2007-2013
- Each 1% decline in Pension Credit was associated with a 0.68% increase in mortality. Each 1% decline in social care spending was associated with a rise of 0.08% but not after adjusting for pension credit spending changes.
- Moderate quality study which could be confounded by deprivation, only to 2013, only oldest age group.



THE ROYAL SOCIETY OF MEDICINE

Journal of the Royal Society of Medicine 2016; 109(3): 109-116  
DOI: 10.1177/0141076816632215

## Austerity and old-age mortality in England: a longitudinal cross-local area analysis, 2007–2013

Rachel Loopstra<sup>1</sup>, Martin McKee<sup>2</sup>, Srinivasa Vittal Katikireddi<sup>3</sup>, David Taylor-Robinson<sup>4</sup>, Ben Barr<sup>4</sup> and David Stuckler<sup>1,2</sup>

<sup>1</sup>Department of Sociology, Oxford University, Manor Road Building, Manor Road, Oxford OX1 3UQ, UK  
<sup>2</sup>Faculty of Public Health & Policy, London School of Hygiene & Tropical Medicine, London WC1E 7HT, UK  
<sup>3</sup>MRC/CSO Social & Public Health Sciences Unit, University of Glasgow, Glasgow G12 8QQ, UK  
<sup>4</sup>Department of Public Health and Policy, University of Liverpool, Liverpool L69 3BX, UK

Corresponding author: Rachel Loopstra, Email: rachel.loopstra@sociology.ox.ac.uk

**Summary**

**Objective:** There has been significant concern that austerity measures have negatively impacted health in the UK. We examined whether budgetary reductions in Pension Credit and social care have been associated with recent rises in mortality rates among pensioners aged 85 years and over.

**Design:** Cross-local authority longitudinal study.

**Setting:** Three hundred and twenty-four lower tier local authorities in England.

**Main outcome measure:** Annual percentage changes in mortality rates among pensioners aged 85 years and over.

**Results:** Between 2007 and 2013, each 1% decline in Pension Credit spending (support for low income pensioners) per beneficiary was associated with an increase in 0.68% in old-age mortality (95% CI: 0.41 to 0.95). Each reduction in the number of beneficiaries per 1000 pensioners was associated with an increase in 0.08% (95% CI: 0.15 to 0.24). Each 1% decline in social care spending was associated with a significant rise in old-age mortality (0.08%, 95% CI: 0.006–0.12) but not after adjusting for Pension Credit spending. Similar patterns were seen in both men and women. Weaker associations observed for those aged 75 to 84 years, and none among those 65 to 74 years. Categories of service expenditure not expected to affect old-age mortality, such as transportation, showed no association.

**Conclusions:** Rising mortality rates among pensioners aged 85 years and over were linked to reductions in spending on income support for poor pensioners and social care. Findings suggest austerity measures in England have affected vulnerable old-age adults.

**Keywords:** Old-age mortality, austerity, social security

**Introduction**

The long-term decline in mortality among those aged 85 years and over in England has reversed, since 2010 among men and 2011 among women (Figure 1).<sup>1</sup> By 2013, rates for men were 4% higher than in 2010, while among women they were 6.1% higher. This was not seen in other older age groups, though the long-term decline among those aged 75 to 84 years recently plateaued. Among those aged 65 to 74 years, and those just under pension age, mortality rates continued to decline.

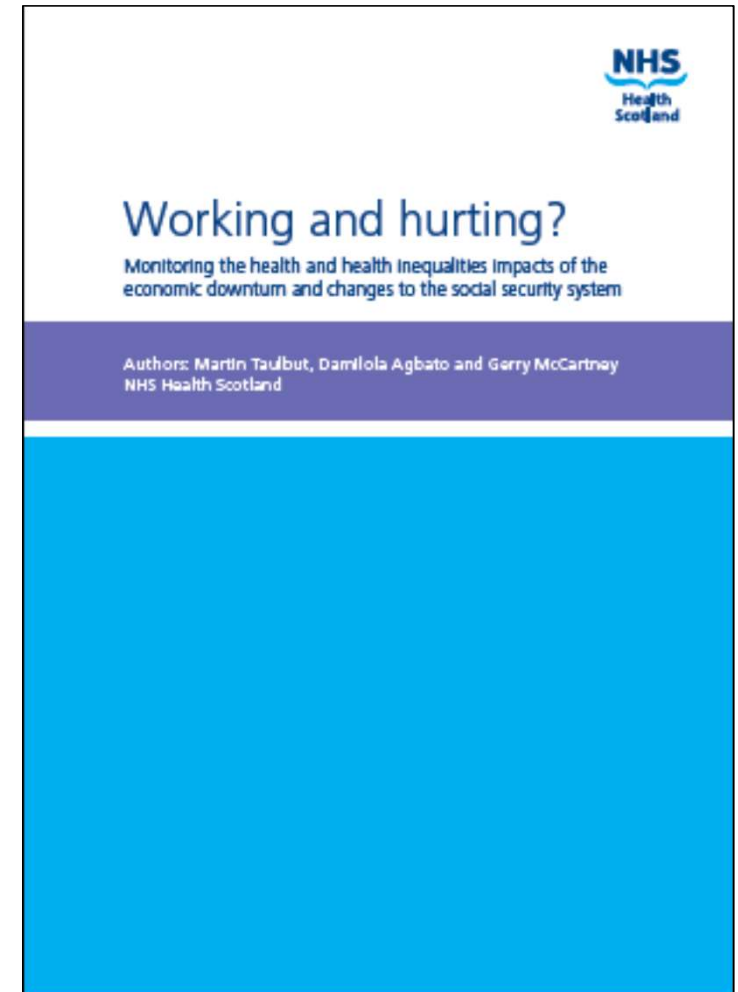
These unexplained increases have occurred in the context of a large-scale experiment with austerity measures in the UK. With a stated aim to reduce the deficit, the Coalition government sought cuts totalling £85 billion.<sup>2</sup> It reduced per capita spending on local services by 23.4% and made structural reforms to welfare administration and the generosity and conditions attached to receipt of benefits. In total, these changes resulted in a net reduction in welfare expenditure of £16.7 billion, about 7% less than would be expected prior to these reforms.<sup>3</sup> The coincidence of rising mortality and budget cuts has led several commentators to speculate that these might be a causal relationship.

Healthcare professionals are in the front line when it comes to dealing with the health consequences of some of these policies. A survey published in the *BMJ* in 2013 found that, among over 1000 GPs surveyed, 68% indicated that they had seen evidence of their patients' health being affected by reductions to their benefits, and 94% said their work load had increased to some degree due to increasing financial hardship among their patients.<sup>4</sup> Rising claims for homelessness assistance have been linked to reduced spending on housing services and welfare support.<sup>5</sup> Food bank use has been highest in areas facing largest cuts to benefit spending and where most claimants have had their benefit payments stopped for failing to meet certain conditions.<sup>6</sup> Fit-for-work tests have coincided with rising suicides, prescriptions for anti-depressants and declining mental health.<sup>7</sup> In turn, there have been calls for medical professionals to be involved

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Loopstra R, McKee M, Katikireddi SV, Taylor-Robinson D, Barr B, Stuckler D. Austerity and old-age mortality in England: a longitudinal cross-local area analysis, 2007–2013. *Journal of the Royal Society of Medicine* 2016; 109(3):109-116, doi:10.1177/0141076816632215.

- Observational evidence that many health trends have worsened for those groups most exposed to benefit cuts and increased conditionality in the social security system.
- High quality evidence that some specific changes (e.g. increased conditionality for lone mothers receiving income support) have been detrimental for mental health.
- It is proving impossible to do better studies on this because the DWP will not co-operate to release relevant linked data.



Taulbut M, Agbato D, McCartney G. Working and hurting? Monitoring the health and health inequalities impacts of the economic downturn and changes to the social security system. Glasgow, NHS Health Scotland, 2018.

# Austerity and health

Aaron R...  
1Department of...  
2Department of...  
3Department of...  
4Department of...  
Correspondence

## Introduction

The UK's promising due to bar... (85%),<sup>1</sup> r... April 201... many pub... still em... these swe... mates fr... show th... 2011/2012... the statist... absorptio... A major... nomic gre...

There i... has fail... recovery... austerity... necessary... mists, suc... David B... Obama's... a much f... ures. The... austerity... (IMF). Th... estimated... spending... Yet, o... data as w... reflecting... market c... Two pro... sionary a... appropri...



BMJ 2013;347:f

## PREMATUR

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consultant...  
leader and...  
applied pu...

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2Blackburn with...

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## COMMENTARY

# Austerity and

MARK A. GREEN

1Department of Geogra

**Abstract**  
The Great Recession o... Depression of the 19... how society and gover... response to the Great... this Commentary, I b... negative impact of aus... of evidence on within... level of austerity, raise... improving population... and political determin

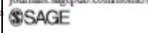
**Key Words:** Austerity,

The Great Recession... period of economic... World War or the Gr... dominant political... spending through cu... programmes, such as w... provision. The argu... to encourage ec... ing public finances... private sector.

Both the recession... austerity were large... whole populations (t... the potential to aff... What became evid... recession on popula... that due to austerity... (particularly middle... recession in many c...

Correspondence: Mark A. G...  
E-mail: mark.green@overpoo

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Correspondence: Dr Mahben Mar...  
Dr Johnathan W...  
Dr Johnathan W...  
j.watkins@pilar.o



## Introduction

The link betw... documented... in the Great R... experienced mark... recession in 2007... downward trend... elevated throug... rates have long b... in females, the in... (EU) during the... further widening... Yet, there is al... rates across Euro... Great Recession,

- (i) acceleration... in Poland;
- (ii) no significa... reversal of... countries, a... in Greece, Germany ar

Why are some... male suicides? T... small numbers,

## Health and Financial

Marina K...

The fina... economi... effects of... our pred... falls in r... understo... economi... diseases... contrast, discern... analysis... shocks a... decision... public h...

## Introduction

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## Total and onset of the time-series

Ioannis Laliotis, John P A

1Department of...  
2Department of...  
3Aix Marseille

**Summary**  
Background Greece's... effect of the crisi... affected the trend of

**Methods** We used r... region, and cause... age-standardised... before the crisis [an... We tested for chang

**Findings** Overall mo... but at a slower pace... (0.040, 0.013-0.066... 95% CI 0.042 to 0.1... -0.0089 to -0.0059... compared with left... vehicular accidents... 20-34 years (-0.006... 95% CI 0.00092-0... health problems (0... adverse events durin... 95% CI 0.0012-0.00... extrapolated values... after the onset of the

**Interpretation** Mort... vary by age, sex, and... reflect the effects of

**Funding** None.

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**Introduction**  
Since the global fina... lessons is persisting... in its recent history... the Greek health sy... and structural probl... health reforms, inclu... expenditures and th... insurance funds, h... decade, but had nev... absence of politica... stakeholders.<sup>1</sup> How... exactly, the Greek... severely. The triple

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## The impact on health in England

Rachel Loopstra

1Department of...  
2Department of...  
3Aix Marseille

**Summary**  
Background Greece's... effect of the crisi... affected the trend of

**Methods** We used r... region, and cause... age-standardised... before the crisis [an... We tested for chang

**Findings** Overall mo... but at a slower pace... (0.040, 0.013-0.066... 95% CI 0.042 to 0.1... -0.0089 to -0.0059... compared with left... vehicular accidents... 20-34 years (-0.006... 95% CI 0.00092-0... health problems (0... adverse events durin... 95% CI 0.0012-0.00... extrapolated values... after the onset of the

**Interpretation** Mort... vary by age, sex, and... reflect the effects of

**Funding** None.

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**Introduction**  
Since the global fina... lessons is persisting... in its recent history... the Greek health sy... and structural probl... health reforms, inclu... expenditures and th... insurance funds, h... decade, but had nev... absence of politica... stakeholders.<sup>1</sup> How... exactly, the Greek... severely. The triple

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## Effects of mothers

Srinivas Vittal Katik

1Department of...  
2Department of...  
3Aix Marseille

**Summary**  
Background In th... child reaches a c... been reduced in... the health effects

**Methods** From t... when the age cu... (intervention gro... (control group 2)... characteristics o... on the health of... and control gro... (SF-12).

**Findings** The me... For intervention... group 1 and by 2... by 2.45 (-0.57 t... When pooling th... control group 1 a

**Interpretation** St... Our results sug... welfare benefits.

**Funding** UK Me... Research Scotla

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**Introduction**  
Lone-parent fam... poverty, and lo... families.<sup>1-3</sup> The p... parent (defined... widowed) has in... with 25% of all... the UK now head... attempted to re... parenthood, pov... parents' partici... number receivi... work measure re... and to demon... conditionality, st... common in soci... in Australia, Can... For the period... Support was the... payable to lone p

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# Working and hurting?

Monitoring the health and health inequalities impacts of the economic downturn and changes to the social security system

Authors: Martin Taulbut, Damilola Agbato and Gerry McCartney  
NHS Health Scotland

## Research

# Austerity and cross-local

Rachel Loopstra

1Department of...  
2Faculty of Public Health &...  
3MRC/CSO Social & Public...  
4Department of Public Hea...  
Corresponding author:

**Summary**  
Objective: There has been... measures have negatively... examined whether budget... and social care have been... mortality rates among pe... Design: Cross-local audit... Setting: Three hundred... authorities in England... Main outcome measure... mortality rates among pe... Results: Between 2007... Credit spending (support... beneficiary was associa... age mortality (95% CI: 0... number of beneficiaries pe... with an increase in 0.05... decline in social care spen... cant rise in old-age mor... but not after adjusting for... patterns were seen in bot... cations observed for th... among those 65 to 74 ye... ture not expected to affe... portation, showed no as... Conclusions: Rising me... 85 years and over were l... income support for po... Findings suggest aust... affected vulnerable old-ag

**Methods** From t... when the age cu... (intervention gro... (control group 2)... characteristics o... on the health of... and control gro... (SF-12).

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**Keywords**  
Old-age mortality, aust...

## Introduction

The long-term decline... 85 years and over in Eng... among men and 2011 a



# What are the causes?

- Other factors could be playing a role
  - > Mental health problems and social isolation as mechanisms linking economic factors and mortality
  - > Obesity could be a mechanism linking economic factors to cardiovascular disease
  - > Large programme of work underway to investigate all causes at present

# It's not an ageing population

- These trends are shown in life expectancy and age-standardised mortality data

# It's not a 'natural' limit

- Trends have changed at all age groups, not just the oldest
- Trends are worst in the most deprived groups where life expectancy is already lowest
- Life expectancy continues to improve in countries who lead the world such as Japan

# It's not 'flu

- All causes of death impacted including implausible causes such as drug-related deaths
- Trends changed in 2012 across most countries, not in the 'flu-year' 2015, and have been sustained subsequently
- All age groups impacted

# Summary and implications

- This is the biggest public health challenge for many decades – encompassing the sub-plots on drug deaths, homelessness, poverty, etc.
- Austerity, social security cuts, service cuts/pressures all likely to be causal
- We need to reverse and mitigate these economic and social policies
- We need to design our services to meet the unmet needs of the population and ensure accessibility to those who need those services most
- We need a public health approach to substance misuse
- We need your leadership to ensure all relevant policymakers and service managers at all levels understand the contribution they can make
- We have a duty to explain and champion action for our population/patients

All the data and evidence is summarised at:

[www.scotpho.org.uk/population-dynamics/recent-mortality-trends/](http://www.scotpho.org.uk/population-dynamics/recent-mortality-trends/)

The programme of research and dissemination is detailed here:

<https://www.scotphn.net/groups/public-health-mortality-monitoring/mortality-sig-introduction/>

Contact me at:

Email: [gmccartney@nhs.net](mailto:gmccartney@nhs.net)

Twitter: @gerrymccartney1

# But what can I do (if I work in public health)?

- Ensure everyone is in receipt of the benefits they are entitled to through high quality service outreach.
- Ensure mitigation of inequalities through employment and procurement processes (see 'Maximising the role of NHSScotland in reducing health inequalities').
- Design our services to meet the unmet needs of the population and ensure accessibility to those who need those services most.
- Lead and influence across the 'whole system' for change.
- Ensure all your teams, managers, elected representatives, friends, etc., know what is going on and what is needed.



- Leadership
- Research Administration
- Policy advice and navigation
- Resourcing
- Communications
- Engagement
- Data preparation
- Networking
- Challenge and support
- Policy influence

All the data and evidence is summarised on 'Recent Mortality Trends' page of ScotPHO.

The programme of research and dissemination is on the Mortality Special Interest Group page of ScotPHN website.

Contact: [gmccartney@nhs.net](mailto:gmccartney@nhs.net)  
@gerrymccartney1



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