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Why Do Most Policies to Reduce Health Inequalities Fail?

[Thoughts from the UK...and a little evidence...]

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Outline

Some key hypotheses on this question:

- **H1:** “Area-based initiatives are doomed to fail” (spatially concentrated areas of multiple deprivation – e.g. public housing estates - are just too difficult to turn around)
- **H2:** “Too soon to tell – it would take at least a human generation..” [cf. RGE/CH/JF’s 1994 CIAR-PHP book chapter on “time and latency”]
 - **H3:** “ “Too little, too late.. have to massively move to socialist redistributive policies across the board” (i.e. need a revolution...)
 - **H4:** “Too inconsistent...the actual public sector policies pursued to date have been profoundly misaligned” (i.e. widely variant ideologies often operate across various ministries)

BACKGROUND: Scottish Health Inequalities by SES

Steepest in Western Europe – and largely not declining (even in absolute terms) since UK devolution began 15 years ago.

Last 30 years: rise in mortality inequalities in teens/young adults, **due to “external causes”**:

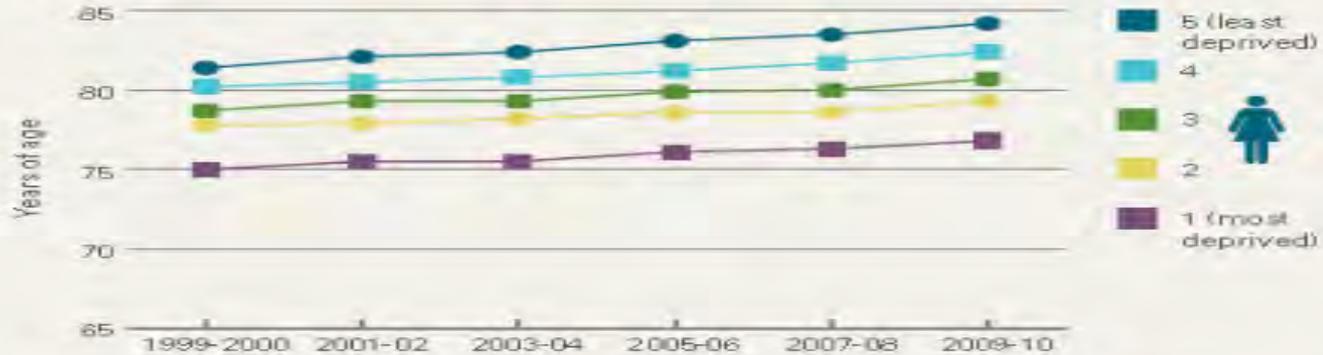
- drugs/alcohol/
- violence/ self-harm

(i.e. conditions related to mental health & strongly influenced by local **“culture”/social env’t**) – seen initially in males, then in females 10 years later – **“Two Scottish paupers’ graveyards (for the young: filling up fast; for the old: stable demand)”**

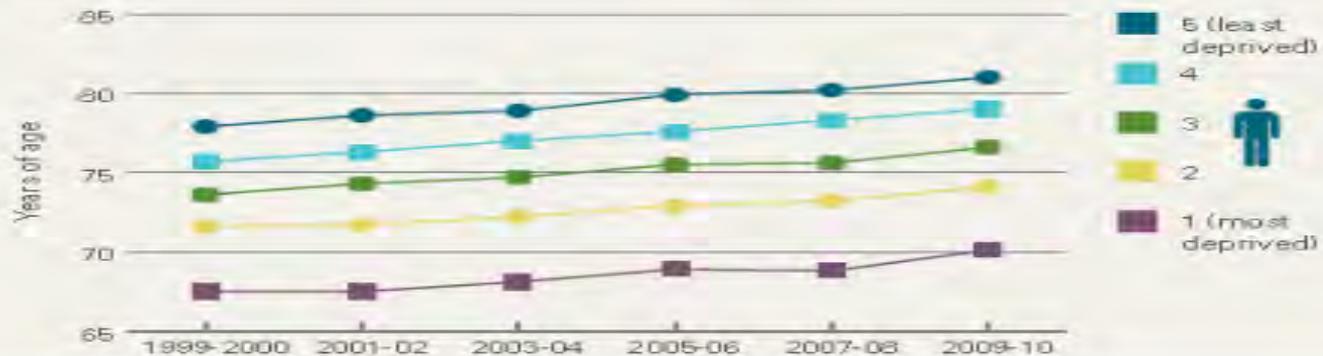


Average life expectancy at birth, 1999-2000 to 2009-10
 Average life expectancy has increased but people in the least deprived areas still live longer than people living in the most deprived areas, and the gap has increased for women.

Female



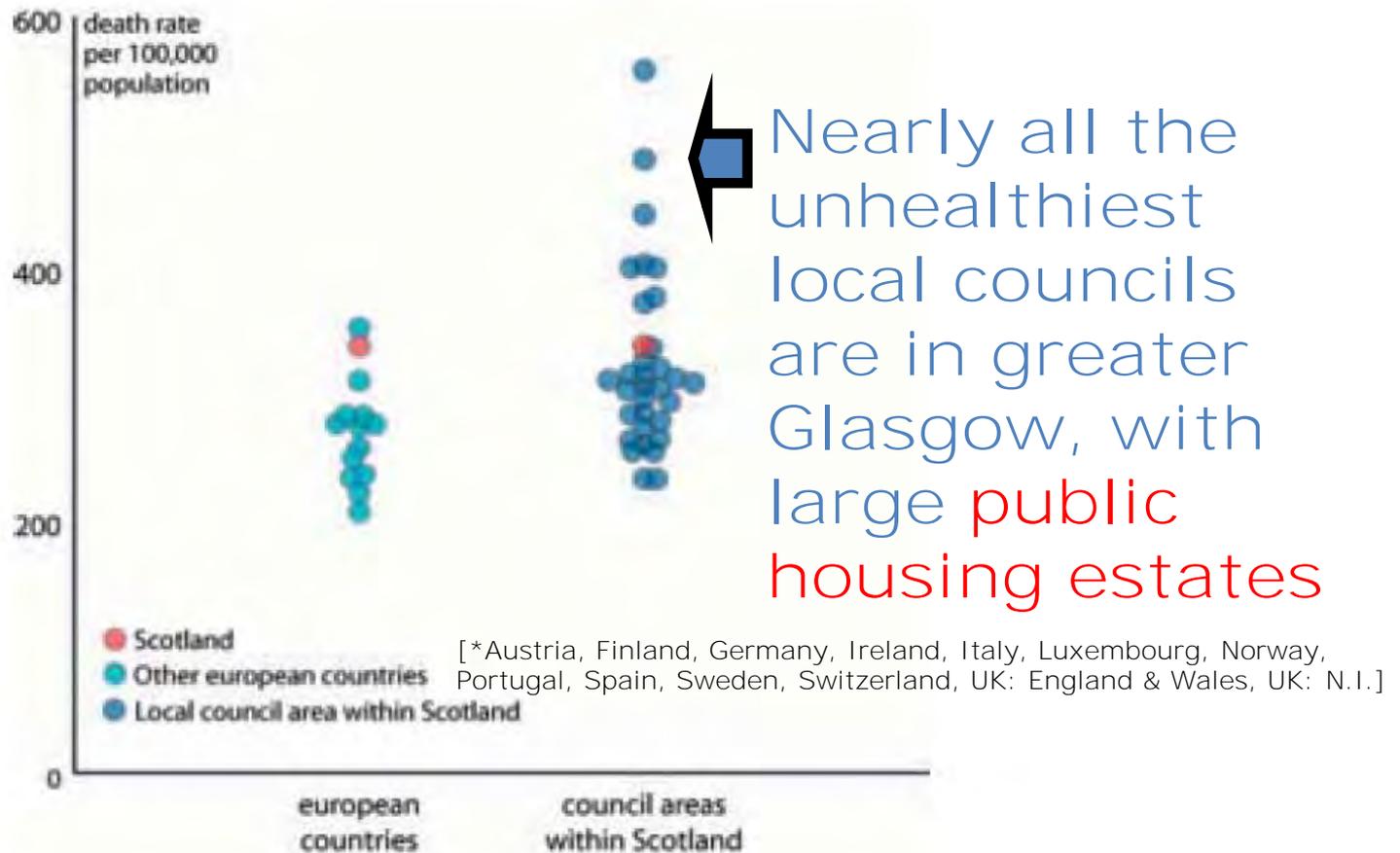
Male



Life expectancy in Scotland (By post-codes' Scottish Index of Deprivation) Source: Audit Scotland

Cited in Scottish Parliament Report of the Health and Sport Committee, Jan. 5, 2015, 1st Report, Session 4: SP Paper 637

H1: Comparison of all-cause death rates in selected European countries*, Scotland and local council areas of Scotland. Men aged 0-64 during 2001



Source: Leyland AH, Dundas R, Mcloone P, Boddy FA. Inequalities in mortality in Scotland 1981-2001. Occasional paper no. 16. Glasgow: MRC Social and Public Health Sciences Unit, 2007.

H1: Comparing SES gradients in health using 1) individually-assigned SES variable (education) values using the Scottish Longitudinal Study; 2) geographically fine-grained, ecologically-assigned SES (Scottish Index of Multiple Deprivation, based on 6505 datazones for 5m population)

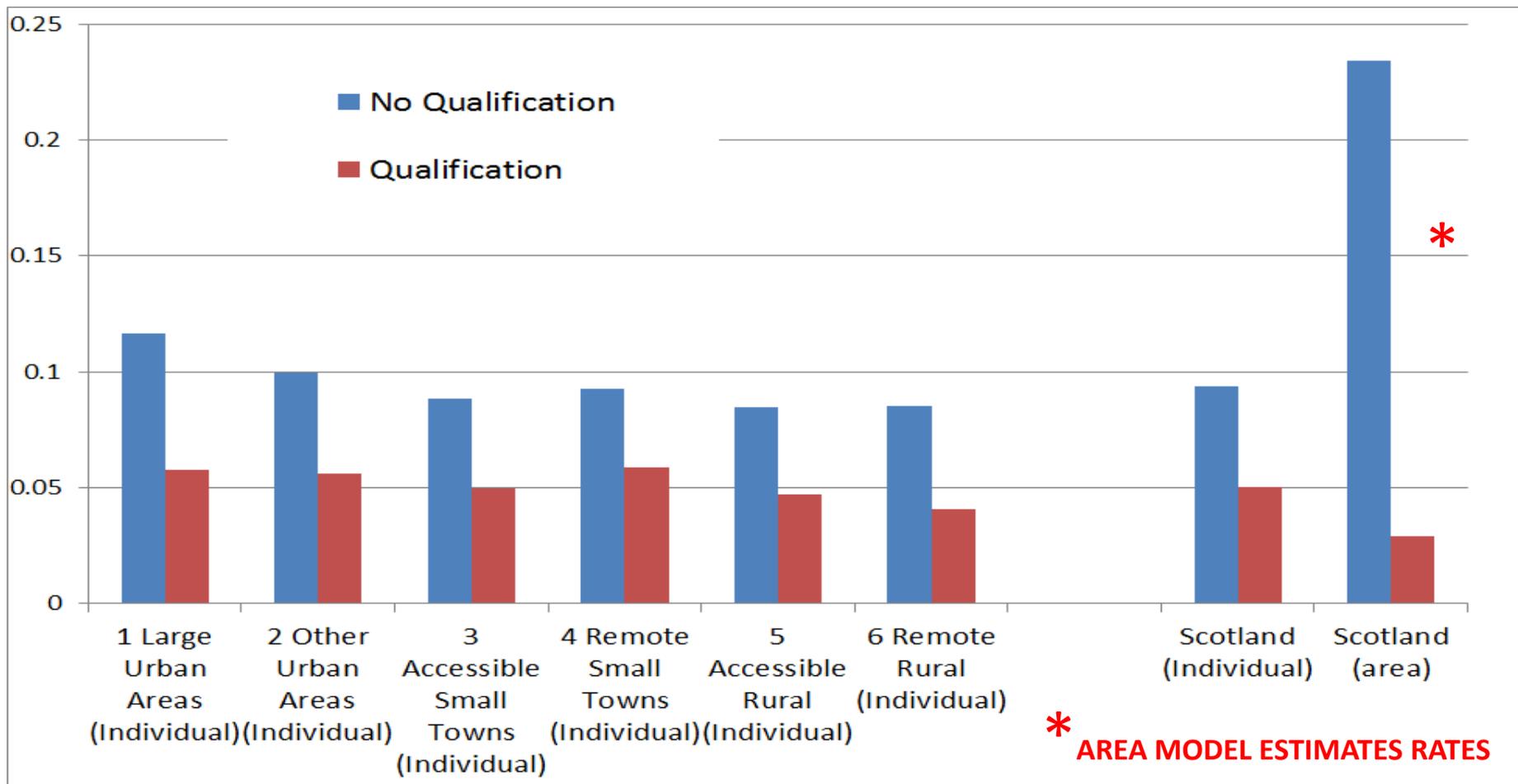
Exploratory analysis presented at IDLN Conf., Perth, 2012:

- Dependent Variable: death risk, from any cause, for a 50-year -old male over 7 years follow-up post-2001 census
- Model based on SLS members, aged 35-74 at 2001, followed from census day 2001 to end of 2007
- 2297 members left Scotland during the follow-up and were dropped from the analysis
- Logistic Regression against categories of basic level of education attained, as recorded in the 2001 census = the socio-economic variable value (for *educational attainment*) assigned to each individual

 Compare these mortality risks to those from regression of same outcome, against mean value of “education level attained” (expressed as the local proportion of adults with “no qualifications”) for Scottish datazone of each subject’s residence (“postcode”), to look for extent to which “SES mis-classification bias,” due to ecological assignment of SES, outweighs the combined influence of area-associated **multiple** aspects of poverty:

- If the former, ecologically assigned SES analysis will show smaller health gradients than individually assigned SES
- If the latter, ecologically assigned SES analysis will show larger health gradients than individually assigned SES

H1: 7-YEAR ALL-CAUSE MORTALITY OF 50-YR-OLD SLS MALES, 2001-2007, BY EDUCATION LEVEL (2 WAYS)



*** AREA MODEL ESTIMATES RATES FOR SMALL AREAS WITH ALL vs. NO QUALIFIED PERSONS (NOT THAT UNLIKELY), THE LATTER WITH MANY OTHER ASPECTS OF POVERTY CONCENTRATED LOCALLY**

**H1: SUPPORT FOR THIS HYPOTHESIS COMES FROM
MACKENBACH'S ANALYSIS OF ENGLISH "HEALTH
ACTION ZONES" INITIATIVES TO REDUCE
INEQUALITIES BY TARGETING THE WORST-OFF
LOCAL AREAS (1998-2010)**

“Health Action Zones could be loosely evaluated but the authors concluded that these made little impact in terms of measurable improvements in health outcomes during their short lifespans.”

- Mackenbach, J.P. Has the English strategy to reduce health inequalities failed? *Soc Sci Med* 2010; 71: 1249-53.

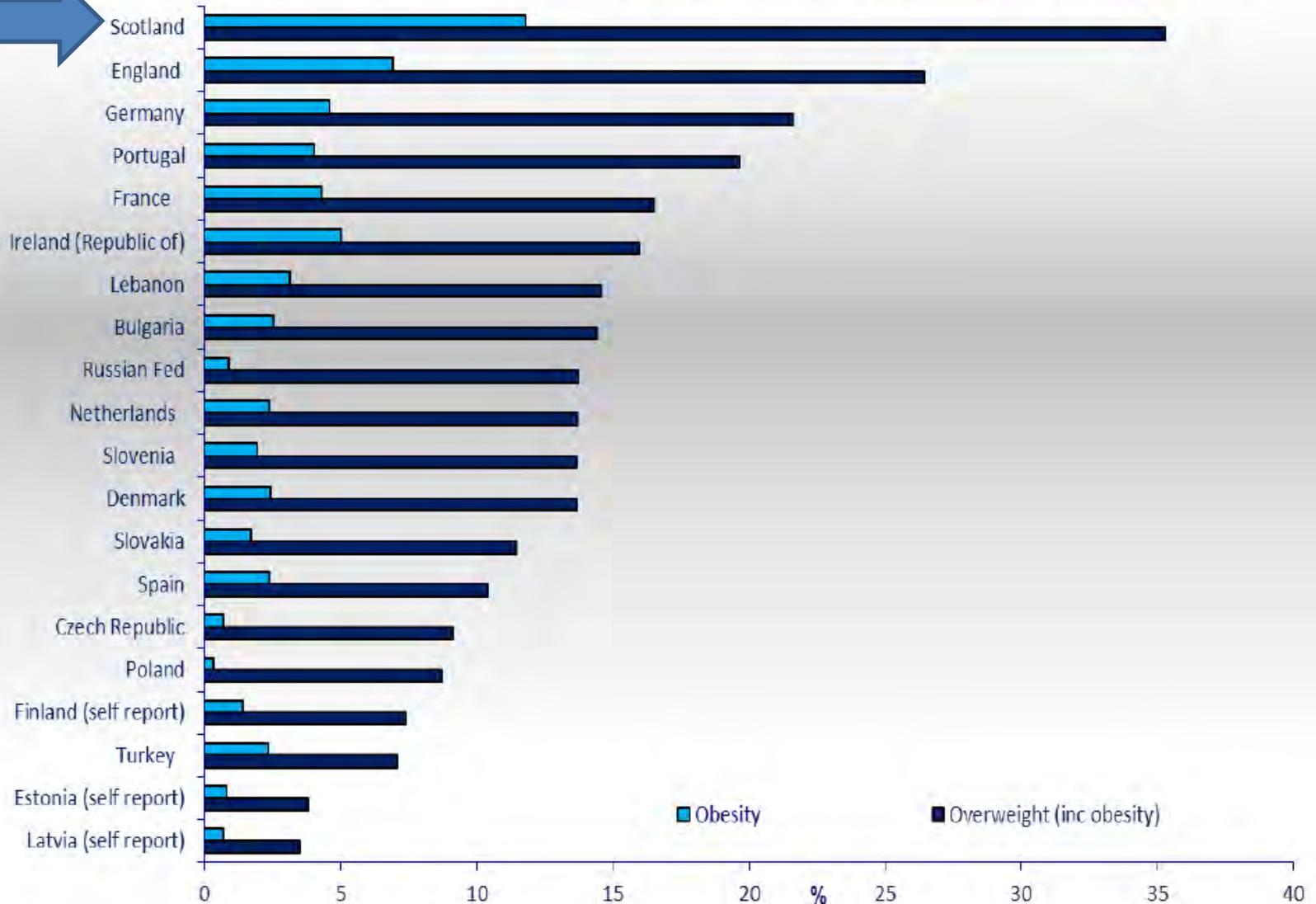
H2: “Too soon to tell: needs at least a whole human generation..”

- OK – the long reach of early life is well established: Clyde’s BMJ article: “*Get’ em while they’re young*”
- But.. shouldn’t we at least see some reductions in the SES gap in adult health outcomes, after a period of steady declines in the rich-poor gap in infant mortality? (as has been seen in all of the UK for at least 50 years)

H2 (BACKGROUND): HOW BADLY AFFECTED BY OBESITY ARE SCOTLAND AND ENGLAND?

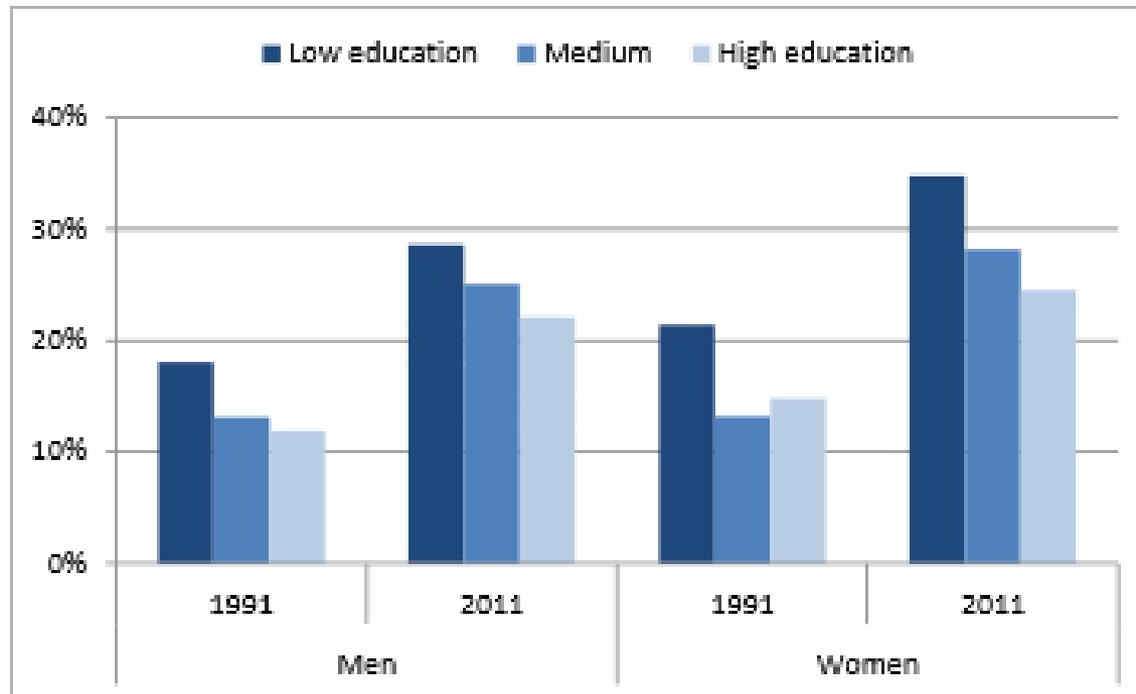


Overweight & Obesity in Post-adolescent (14-17yrs) European Girls



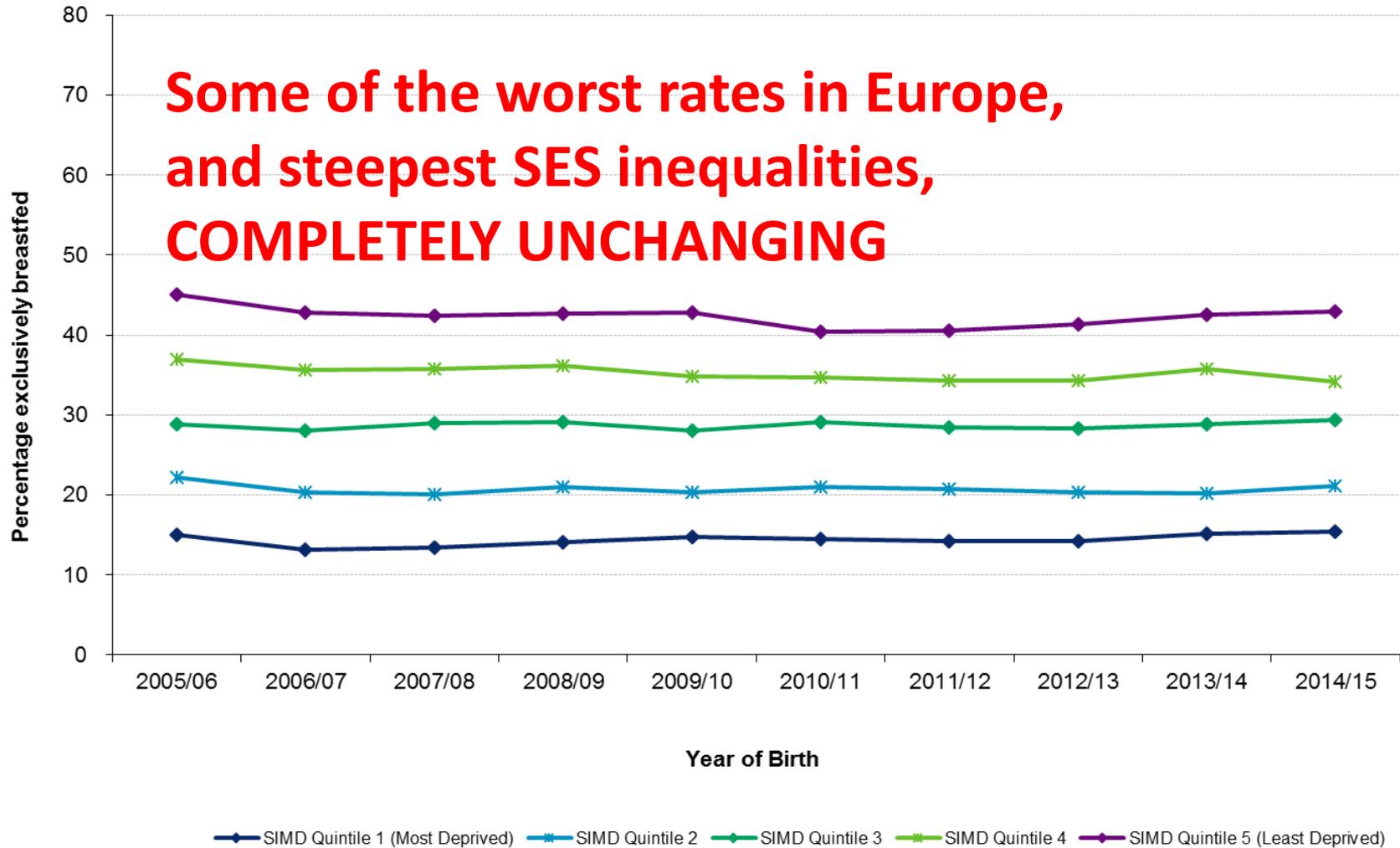
H2: Obesity Prevalence by Education Attained, England, 1991 vs. 2011

England



SOURCE: <http://www.oecd.org/health/Obesity-Update-2014.pdf>

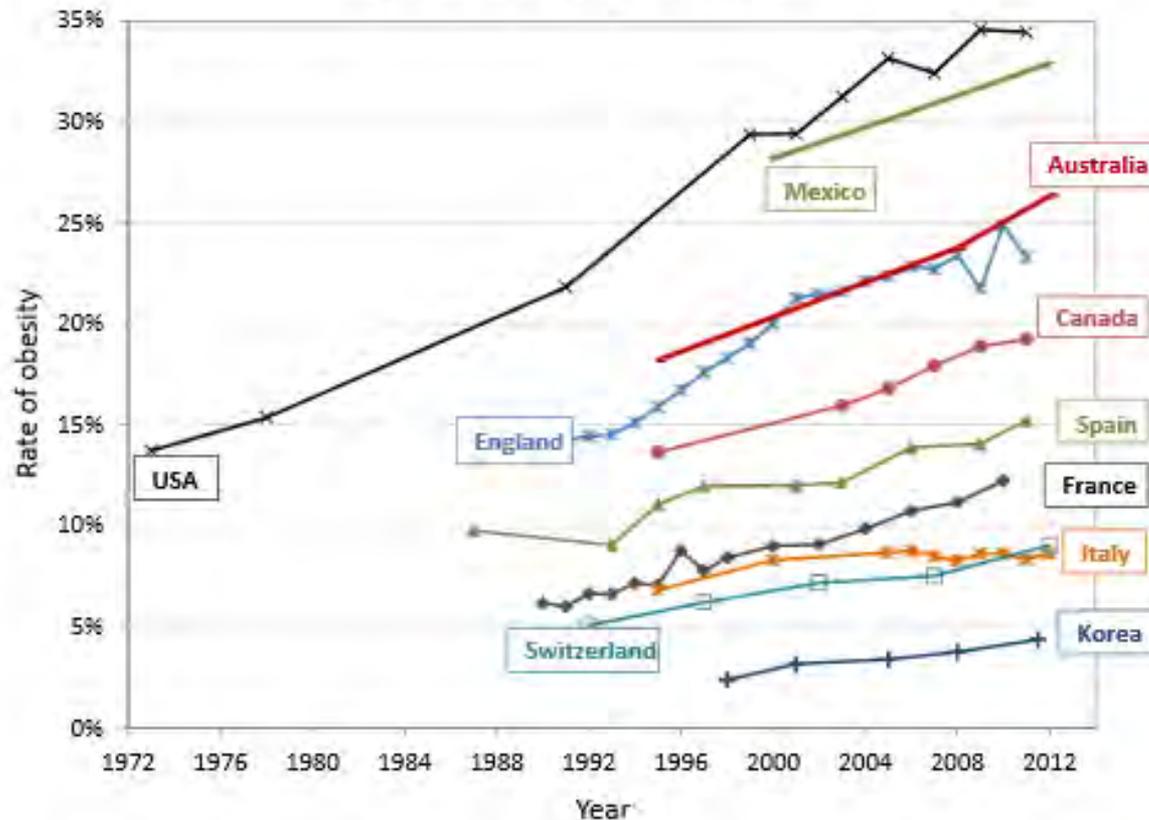
H2: Exclusive BF: 6-8 weeks of age in Scotland



Source: Information Services Division, NSS, Scottish NHS, 2015

Footnote: Obesity Prevalence by Country, 1970s to 2012

Figure 2. Obesity rates

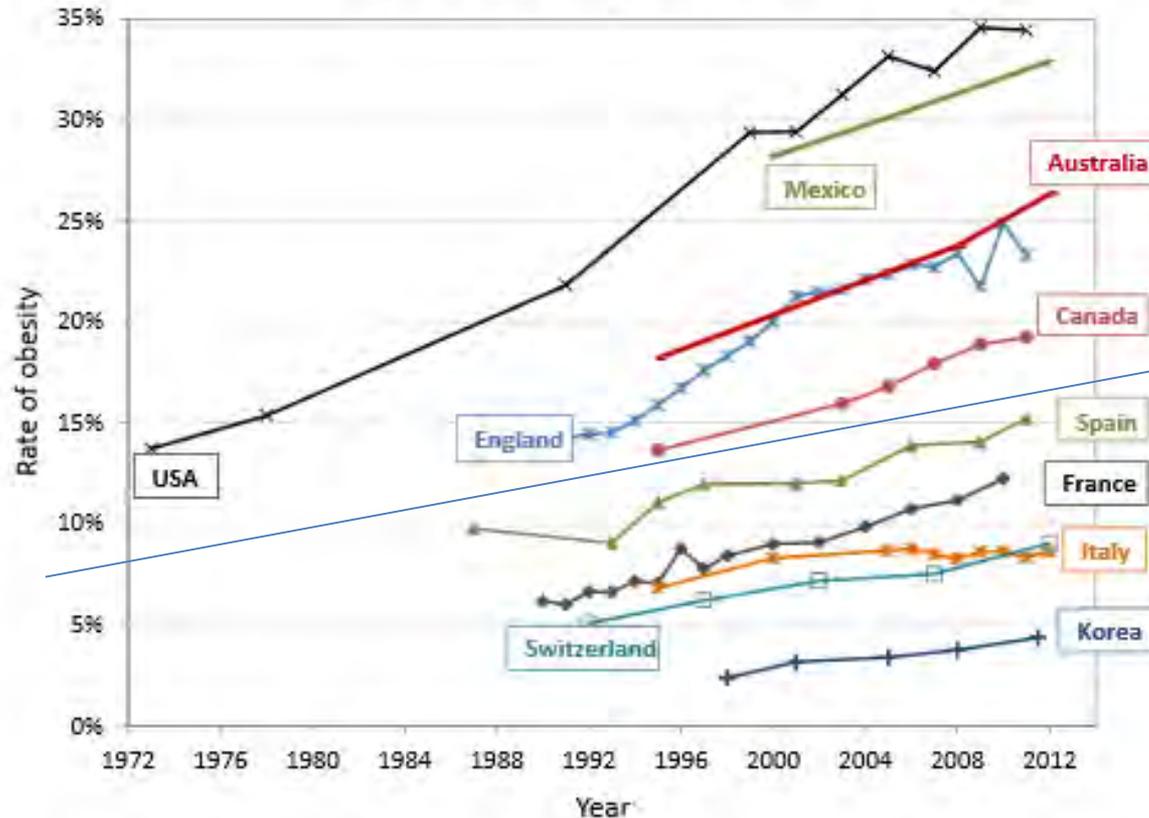


QUICK EPI-
QUIZ Q:
NOTICE ANY
ARCHETYPAL
PATTERNS
HERE?

SOURCE: <http://www.oecd.org/health/Obesity-Update-2014.pdf>

Footnote: Obesity Prevalence by Country, 1970s to 2012

Figure 2. Obesity rates

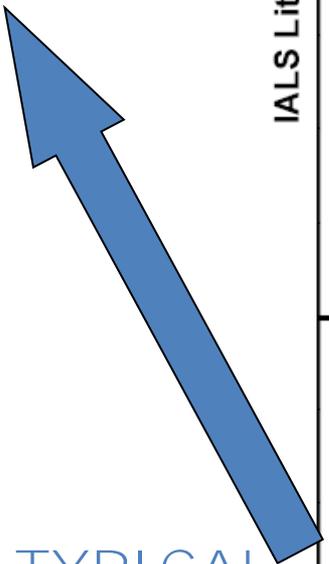


?Two archetypes of obesity's "pandemic curve": a clue to its origins?*

SOURCE: <http://www.oecd.org/health/Obesity-Update-2014.pdf>

*See my Commentary in Nature, April 14, 2016

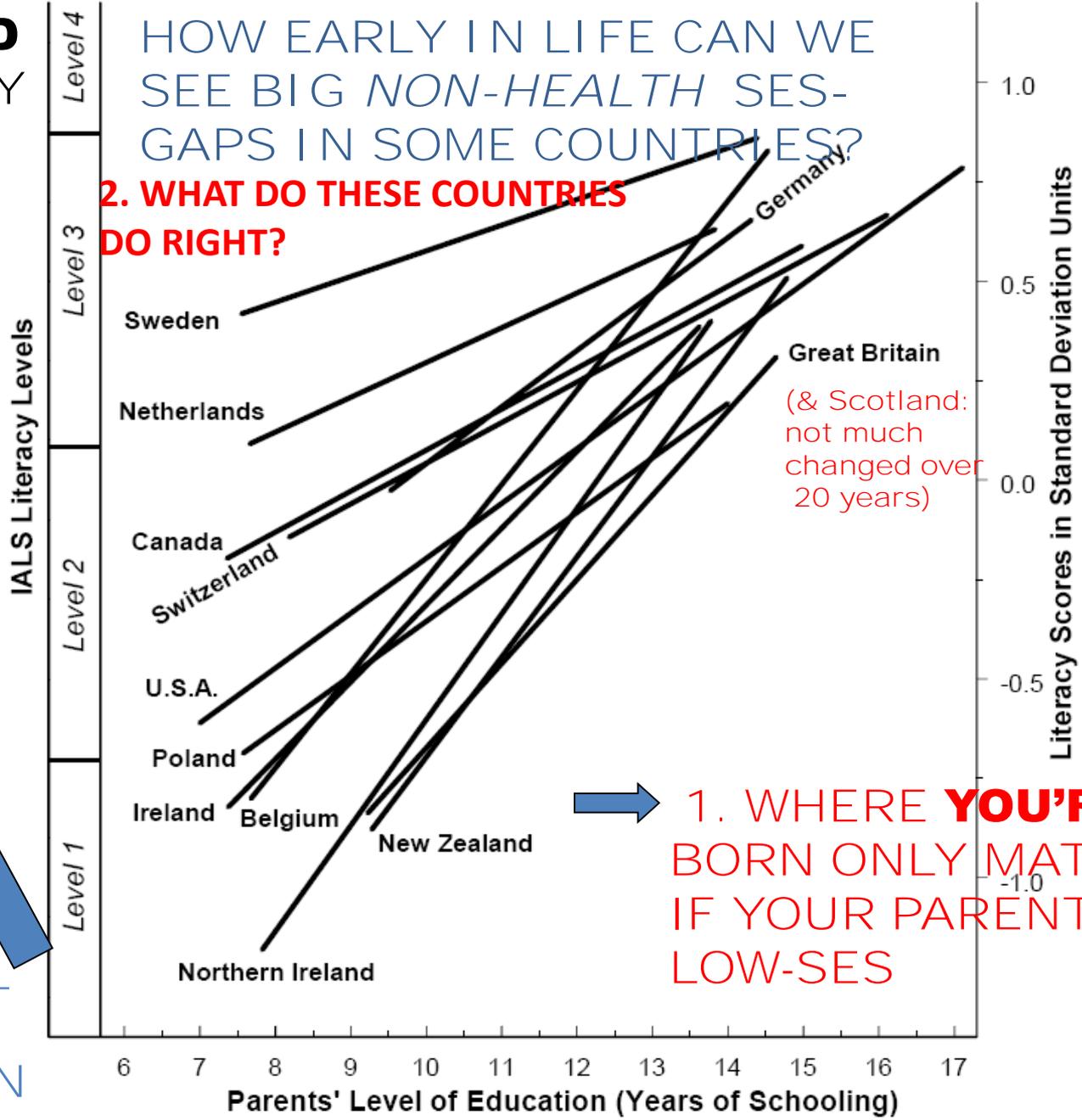
H2: **STD'D**
LITERACY
TEST
SCORES



TYPICAL
"FAN"
PATTERN

HOW EARLY IN LIFE CAN WE
SEE BIG *NON-HEALTH* SES-
GAPS IN SOME COUNTRIES?

2. WHAT DO THESE COUNTRIES
DO RIGHT?



1. WHERE **YOU'RE**
BORN ONLY MATTERS
IF YOUR PARENTS ARE
LOW-SES

Literacy Scores for Youth Aged 16-25 years (Statistics Canada & the OECD, 1995). Source: Willms JD. *Int J Educ Res.* 2003; 39:247-252, p249.

H2: Scotland: Media reports (December 2009)

“Fifth of Scots have poor literacy”

- The BBC:
- <http://news.bbc.co.uk/1/hi/scotland/8393805.stm>

“Literacy report shows Russell there really is a crisis in education”

- The Scotsman:
- <http://news.scotsman.com/opinion/Literacy-report--shows-Russell.5883656.jp>

“Zero-tolerance approach to poor literacy needed, experts say”

- The Herald:
- <http://www.heraldscotland.com/news/education/zero-tolerance-approach-to-poor-literacy-needed-experts-say-1.989347>

H2: Determinants of School Outcomes in Scotland – Why Schools Are Not to Blame

- **“While individuals may defy this trend, no school in a deprived area is able to record a similar level of success to that achieved by almost all schools in the most affluent areas.”¹**
- **“...but the gaps between them (schools) are far less important than differences between students. In Scotland, *who you are** is far more important than what school you attend.”²**

***meaning “*who your parents are (and their social class)*”**

1. Literacy Commission. A Vision for Scotland: The Report and Final Recommendations of the Literacy Commission. Scottish Labour, December 2009. <http://www.scottishlabour.org.uk/literacy>
2. OECD. Quality and Equity of Schooling in Scotland. Paris: OECD, 2007.

National

Children should start school at two - Ofsted

Target underachievers in bold move, says Morgan

Early start to help children from poorer backgrounds

Richard Adams
Education editor

said, later adding: "I said three to 18, it could be two to 18 as far as I'm concerned."

The comments by Morgan, who became chair of Ofsted in 2011, will fuel controversy about the expansion of schools into supportive roles that were previously the domain of parents. Sir Michael Wilshaw, Ofsted's chief inspector of schools, has previously said that where parents are unable or unwilling to help with their children's education, schools should step in.

H3: “Most policy initiatives to reduce inequalities are *trivially impotent* in the face of the deeper, *structural* origins of SES that affect health over the life-course: need massively redistributive, socialist policies”

- **OK – but if that were true, would we not expect those EU nations with the most intensive policy efforts of this kind to have experienced the largest reductions in health inequalities?**

H3: The latest word on recent (1990-2010) HI trends across the EU...

“Remarkable mortality declines have occurred in lower socioeconomic groups in most European countries covered by this study. Relative inequalities in mortality widened almost universally, because percentage declines were usually smaller in lower socioeconomic groups. However, as absolute declines were often smaller in higher socioeconomic groups, absolute inequalities narrowed by up to 35%, particularly among men. Narrowing was partly driven by ischemic heart disease, smoking-related causes, and causes amenable to medical intervention. Progress in reducing absolute inequalities was greatest in Spain, Scotland, England & Wales and Italy, and absent in Finland and Norway.*

Conclusions: Trends in inequalities in mortality have been more favourable than is commonly assumed. Absolute inequalities have been reduced in several countries, probably more as a side-effect of population-wide behavioural changes and improvements in prevention and treatment, than as an effect of policies explicitly aimed at reducing health inequalities.”

Mackenbach, J.P. et al *BMJ* (in press, 2016)

*Who would like to assign these countries a relative score as to the degree of their “socialist redistributive policies” during this 20-year period?

H4: Are government policies, across ministries, often misaligned, so that the “right hand giveth, but the left hand taketh away (from the poor)?”

A striking example, from the UK in recent years, is the lip-service given by gov’t to reducing **child poverty (surely a key SDoH), compared to the net distributive effects of all social and economic policy-changes over this period**

H4:

PART 1

A LEAGUE TABLE OF CHILD WELL-BEING

[Source: UNICEF Innocenti Report, April 2013]

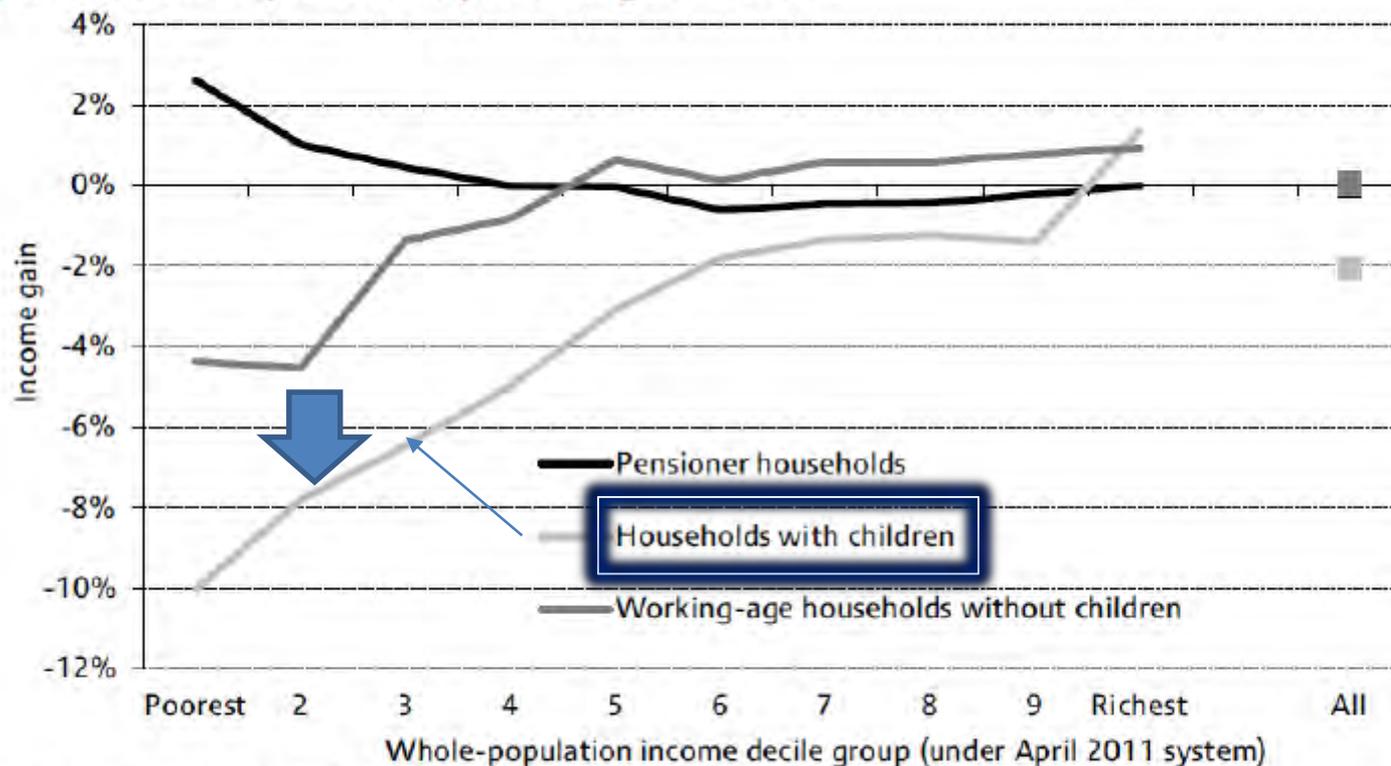
The table below ranks 29 developed countries according to the overall well-being of their children. Each country's overall rank is based on its average ranking for the five dimensions of child well-being considered in this review.

A light blue background indicates a place in the top third of the table, mid blue denotes the middle third, and dark blue the bottom third.

| | | Overall well-being | Dimension 1 | Dimension 2 | Dimension 3 | Dimension 4 | Dimension 5 |
|----|----------------|------------------------------------|------------------------|----------------------|-------------|-------------------------|----------------------------|
| | | Average rank (all 5 dimensions) | Material well-being | Health and safety | Education | Behaviours and risks | Housing and environment |
| | | | (rank) | (rank) | (rank) | (rank) | (rank) |
| 1 | Netherlands | 2.4 | 1 | 5 | 1 | 1 | 4 |
| 2 | Norway | 4.6 | 3 | 7 | 6 | 4 | 3 |
| 3 | Iceland | 5 | 4 | 1 | 10 | 3 | 7 |
| 4 | Finland | 5.4 | 2 | 3 | 4 | 12 | 6 |
| 5 | Sweden | 6.2 | 5 | 2 | 11 | 5 | 8 |
| 6 | Germany | 9 | 11 | 12 | 3 | 6 | 13 |
| 7 | Luxembourg | 9.2 | 6 | 4 | 22 | 9 | 5 |
| 8 | Switzerland | 9.6 | 9 | 11 | 16 | 11 | 1 |
| 9 | Belgium | 11.2 | 13 | 13 | 2 | 14 | 14 |
| 10 | Ireland | 11.6 | 17 | 15 | 17 | 7 | 2 |
| 11 | Denmark | 11.8 | 12 | 23 | 7 | 2 | 15 |
| 12 | Slovenia | 12 | 8 | 6 | 5 | 21 | 20 |
| 13 | France | 12.8 | 10 | 10 | 15 | 13 | 16 |
| 14 | Czech Republic | 15.2 | 16 | 8 | 12 | 22 | 18 |
| 15 | Portugal | 15.6 | 21 | 14 | 18 | 8 | 17 |
| 16 | United Kingdom | 15.8 | 14 | 16 | 24 | 15 | 10 |
| 17 | Canada | 16.6 | 15 | 27 | 14 | 16 | 11 |
| 18 | Austria | 17 | 7 | 26 | 23 | 17 | 12 |
| 19 | Spain | 17.6 | 24 | 9 | 26 | 20 | 9 |
| 20 | Hungary | 18.4 | 18 | 20 | 8 | 24 | 22 |
| 21 | Poland | 18.8 | 22 | 18 | 9 | 19 | 26 |
| 22 | Italy | 19.2 | 23 | 17 | 25 | 10 | 21 |
| 23 | Estonia | 20.8 | 19 | 22 | 13 | 26 | 24 |
| 23 | Slovakia | 20.8 | 25 | 21 | 21 | 18 | 19 |
| 25 | Greece | 23.4 | 20 | 19 | 28 | 25 | 25 |
| 26 | United States | 24.8 | 26 | 25 | 27 | 23 | 23 |
| 27 | Lithuania | 25.2 | 27 | 24 | 19 | 29 | 27 |
| 28 | Latvia | 26.4 | 28 | 28 | 20 | 28 | 28 |
| 29 | Romania | 28.6 | 29 | 29 | 29 | 27 | 29 |

Lack of data on a number of indicators means that the following countries, although OECD and/or EU members, could not be included in the league table of child well-being: Australia, Bulgaria, Chile, Cyprus, Israel, Japan, Malta, Mexico, New Zealand, the Republic of Korea, and Turkey.

H4: Figure 1: Impact of direct tax and benefit reforms introduced or planned between April 2012 and April 2015 by the UK government



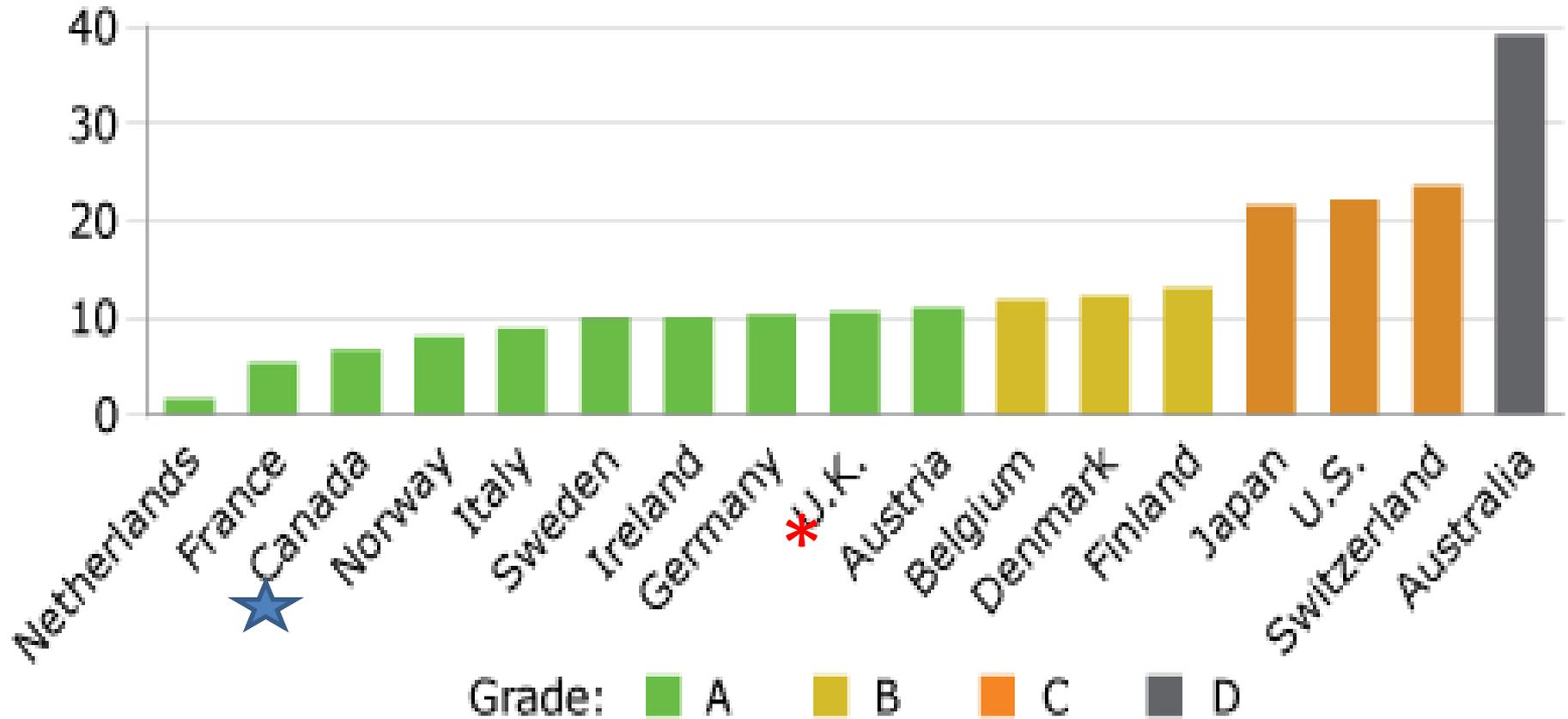
[Source: Cribb et al 2013 [2]]

Cited in Position Statement on ISSOP Position Statement on the impact of austerity on child health and well being of International Society for Social Paediatrics and Child Health (ISSOP): -

http://issop.org/index.php?option=com_phocadownload&view=category&id=2:essop-position-statements&download=236:issop-position-statement_6_on-austerity_2015-07-28.pdf&Itemid=18

IT DOESN'T HAVE TO BE THIS WAY..

“Elderly Poverty Rate, Late 2000s
(per cent)

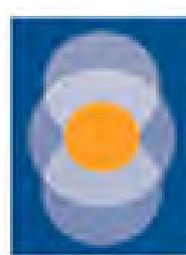




John Frank
Director



SCPHRP



Website - <https://www.scpgrp.ac.uk/>

Twitter - @SCPGRP



Ruth Jepson
Senior Scientific
Advisor



Larry Doi
Early Years

Remit

- Developing novel public health interventions
- Fostering collaboration between government, researchers and the public health community
- Building capacity within the public health community



John McAteer
Adolescence

4 working groups, each a life course stage



Tony Robertson
Working Life



Andrew
Williams
FARR



Michelle
Estrade
Researcher



Renee
Ingram
KTE, office
manager



Sam Bain
Project Co-
ordinator



Catherine
Bromley
PhD
student

Darryl Archibald
Later Life

Useful websites & references

- Scottish Collaboration for Public Health Research and Policy:

www.scphrp.ac.uk

- Geddes, R., Haw, S., and Frank, J. (2010). Interventions for promoting early childhood development for health. An environmental scan with special reference to Scotland. A report for the Early Life Working Group of the Scottish Collaboration for Public Health Research and Policy. Available from: <https://www.scphrp.ac.uk/node/103>

- Offord Centre for Child Studies

<http://www.offordcentre.com/index.html>

- Australian Early Development Index - click on AEDI

http://www.rch.org.au/ccch/index.cfm?doc_id=10556

- British Columbia ECD mapping portal

<http://www.ecdportal.help.ubc.ca/archive/faq.htm>

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- Frank J, Jepson R, Bromley C, Doi L, Estrade M, McAteer J, Robertson T, Treanor M, Williams AJ. Seven key investments for health equity over the life-course: A Scotland – UK Comparison. *Social Science & Medicine* 2015;140:136-146.