

Reasons to be cheerful

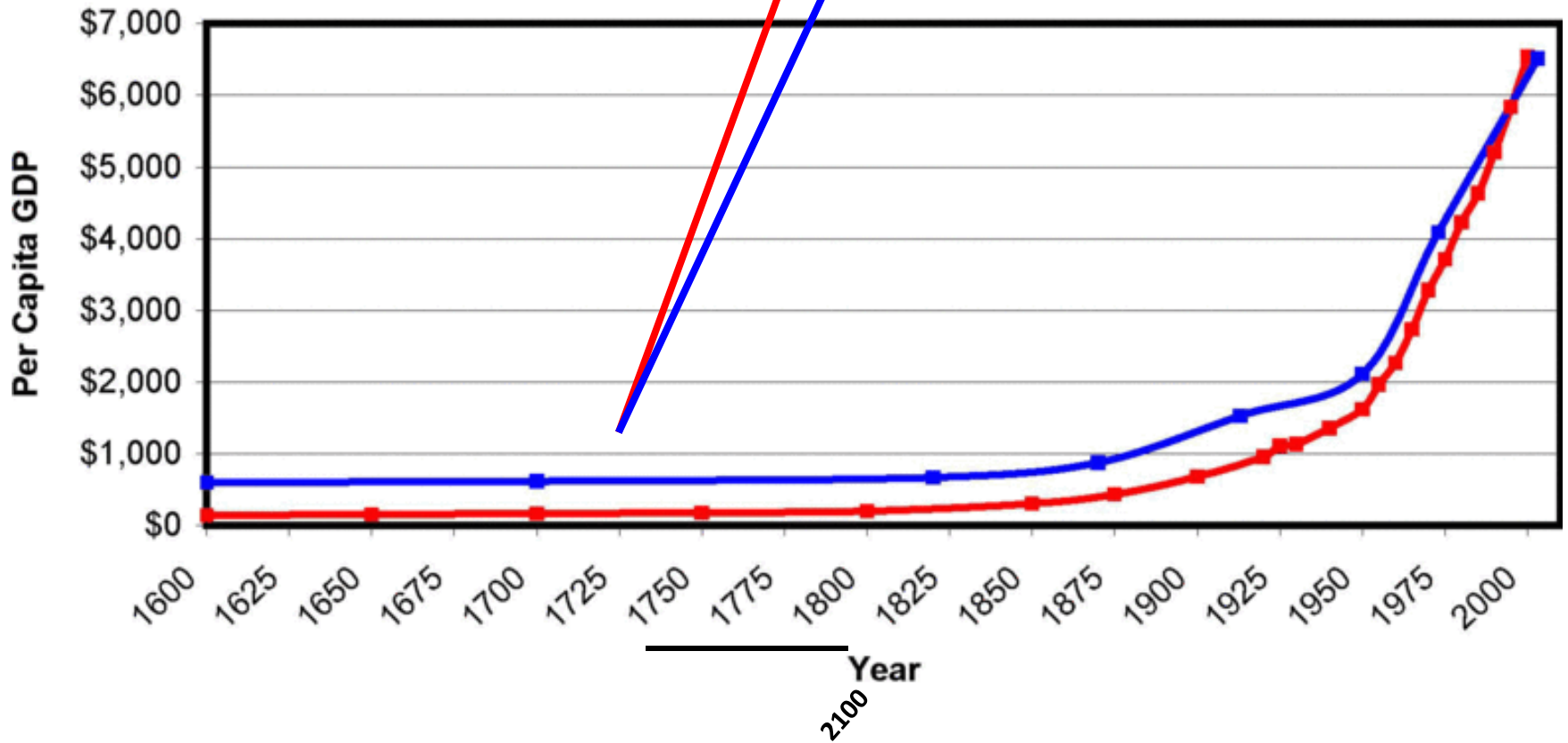
Matt Ridley

Are we better off?

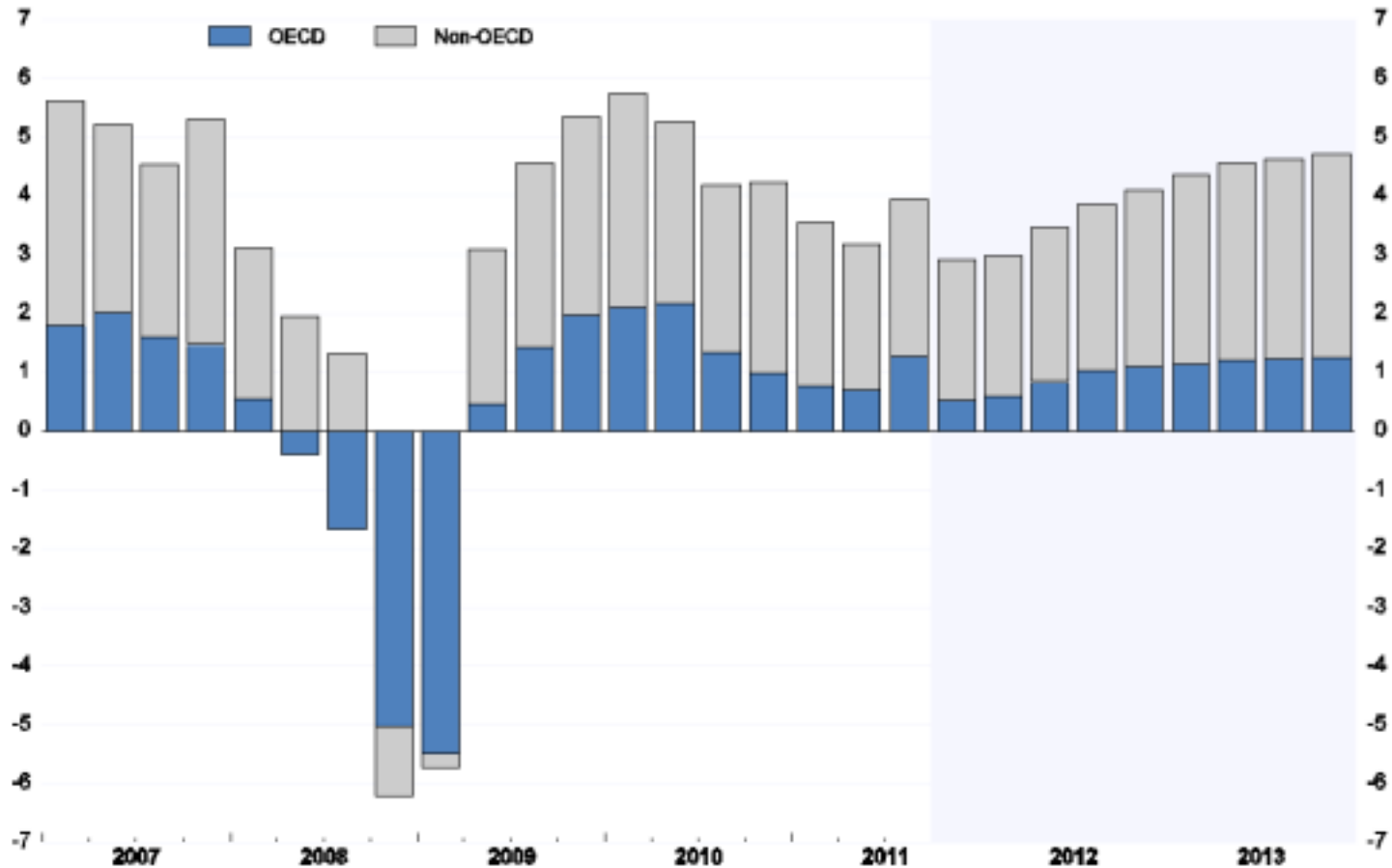
World GDP per capita

1600 - 2003 (1990 Int'l Dollars)

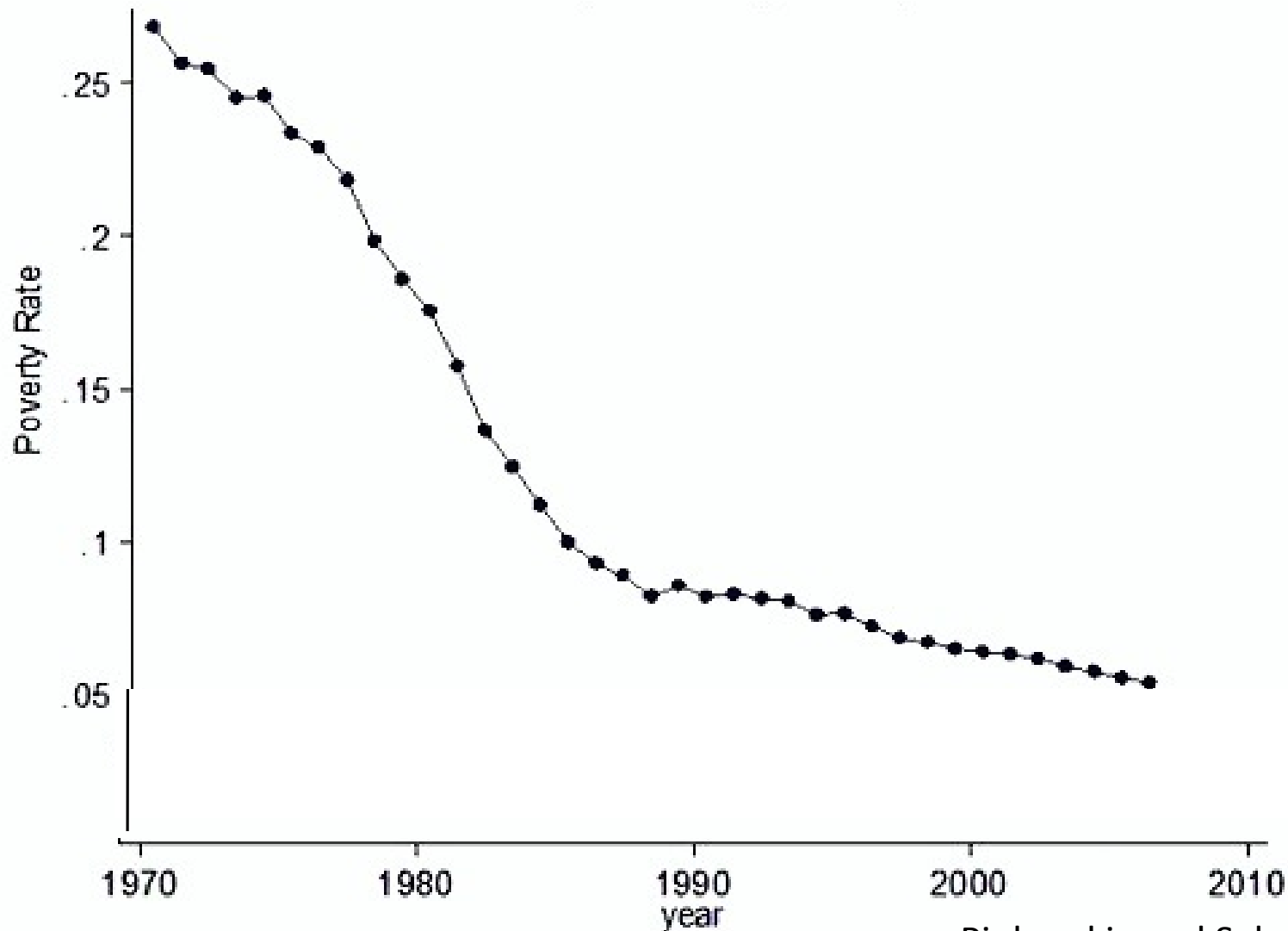
Brad DeLong Angus Maddison



World economic growth



People living on less than \$1* a day

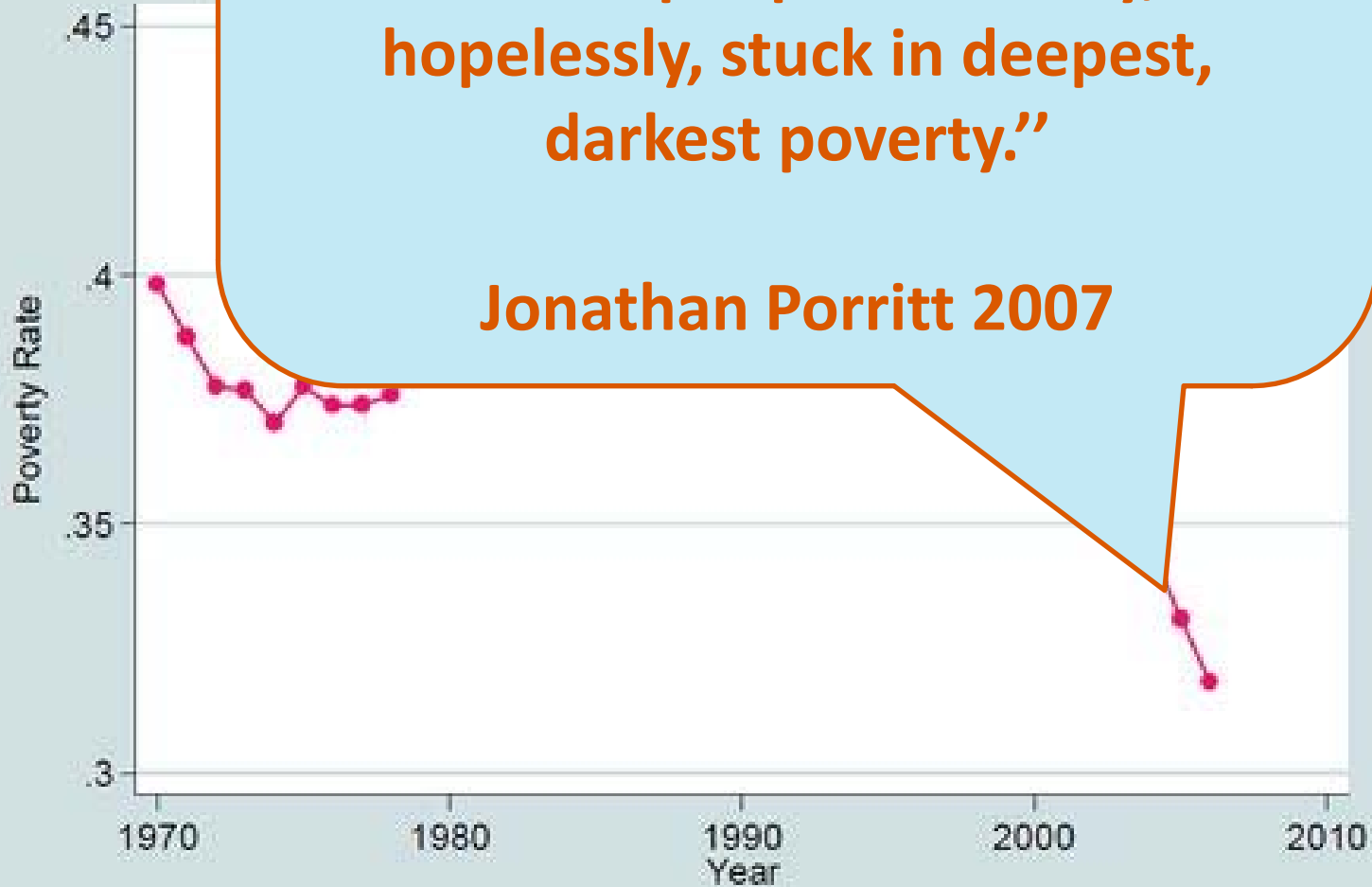


* Adjusted for inflation

Pinkovskiy and Sala-i-Martin 2009

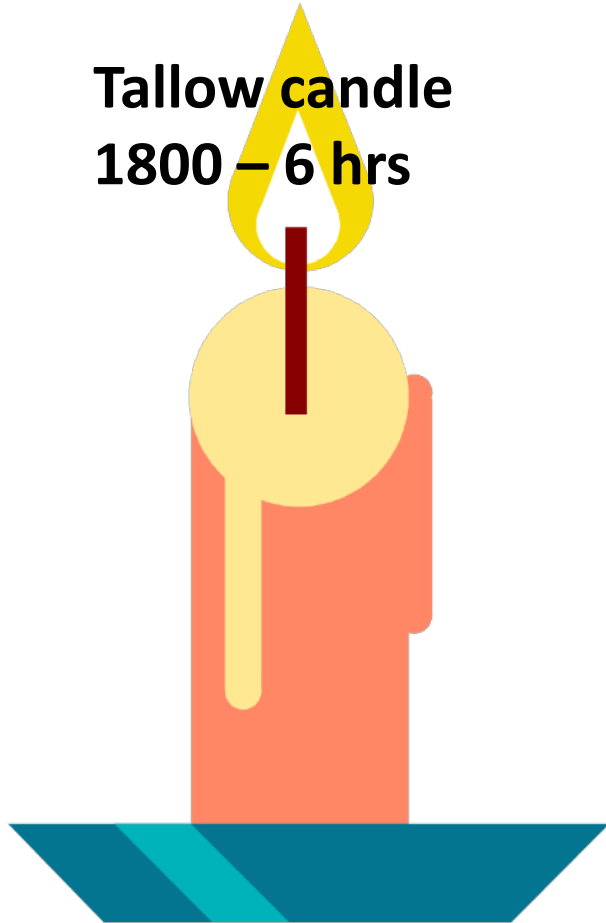
“It’s blindingly obvious that completely unsustainable population growth in most of Africa will keep it permanently, hopelessly, stuck in deepest, darkest poverty.”

Jonathan Porritt 2007



How long does it take to earn an hour of reading light?

Tallow candle
1800 – 6 hrs



Labour cost of 1,200 lumen
hours at average US wage

Kerosene lamp
1880 – 15 mins



Incandescent bulb
1950 – 8 secs

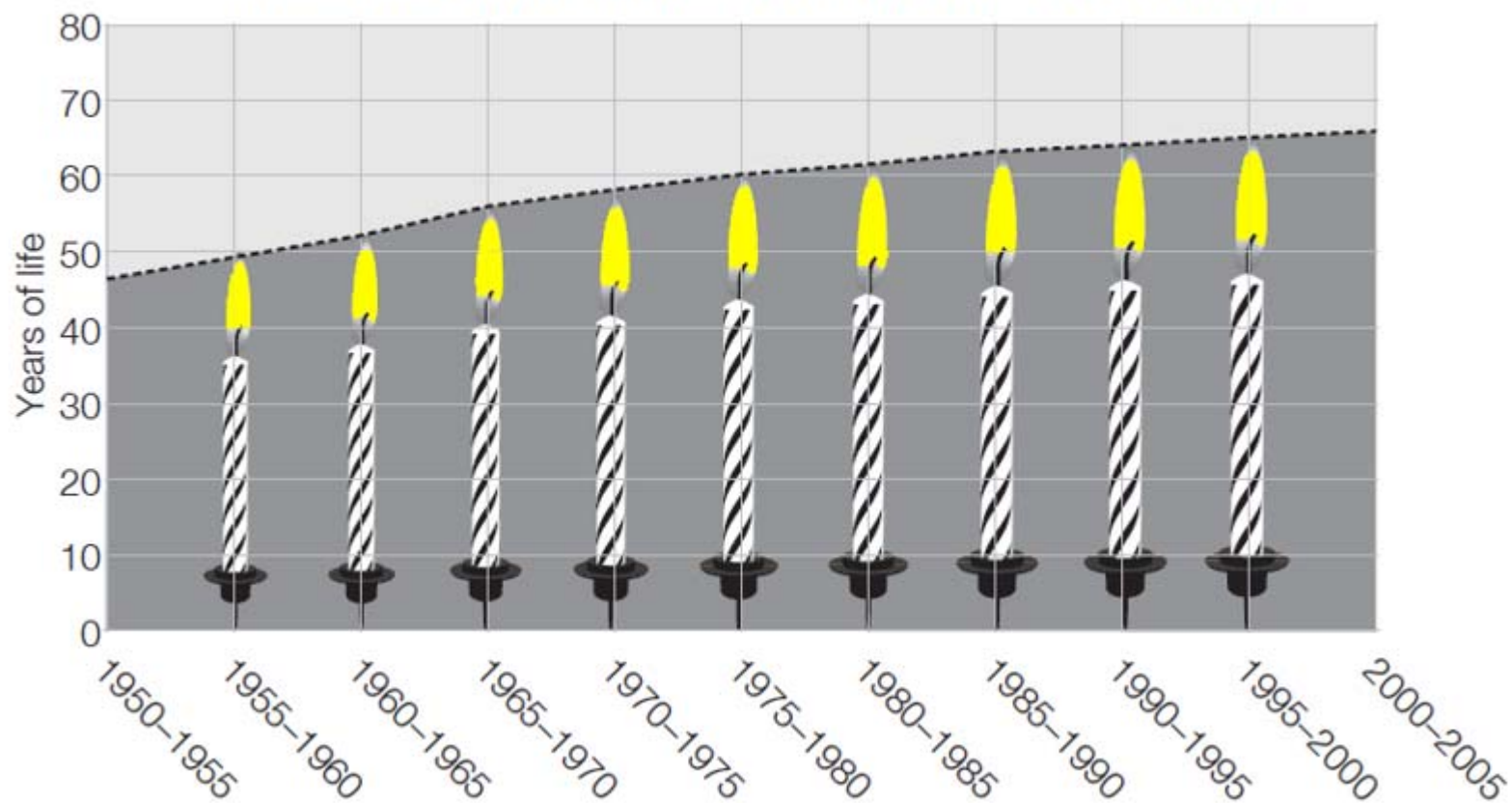


CF bulb
1997 – ½ sec

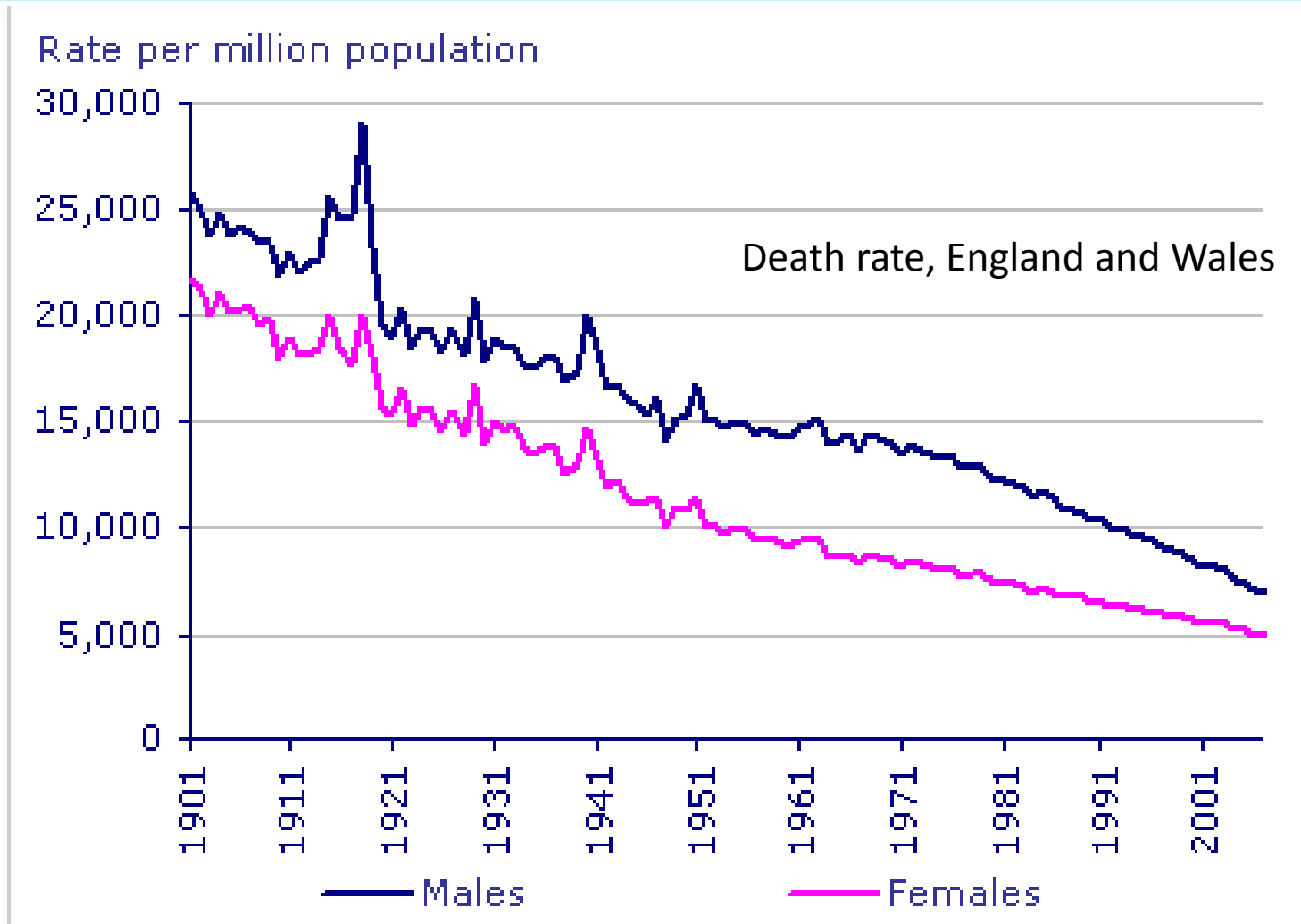


Living longer

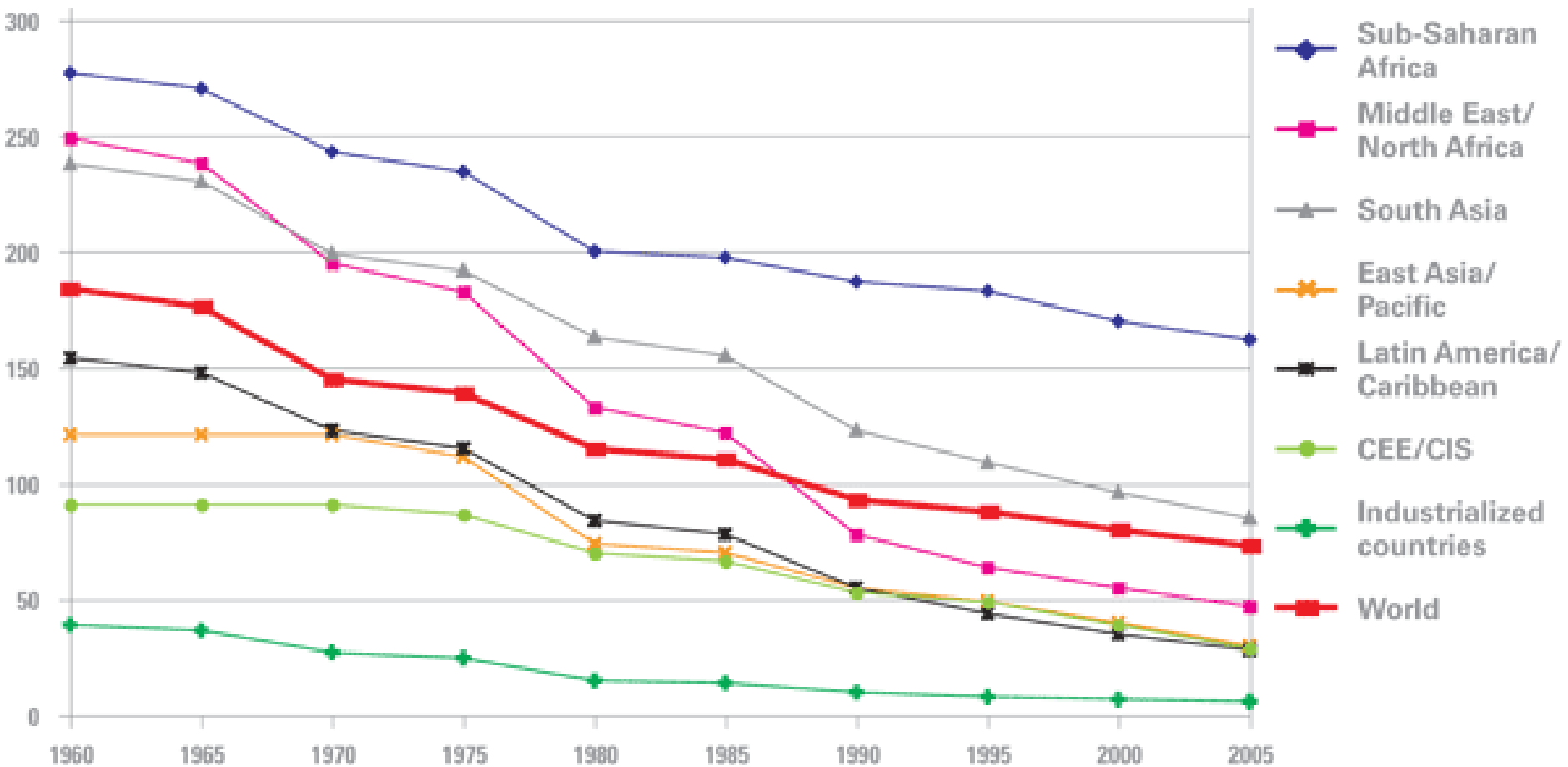
LIFE EXPECTANCY AT BIRTH (WORLD AVERAGE)



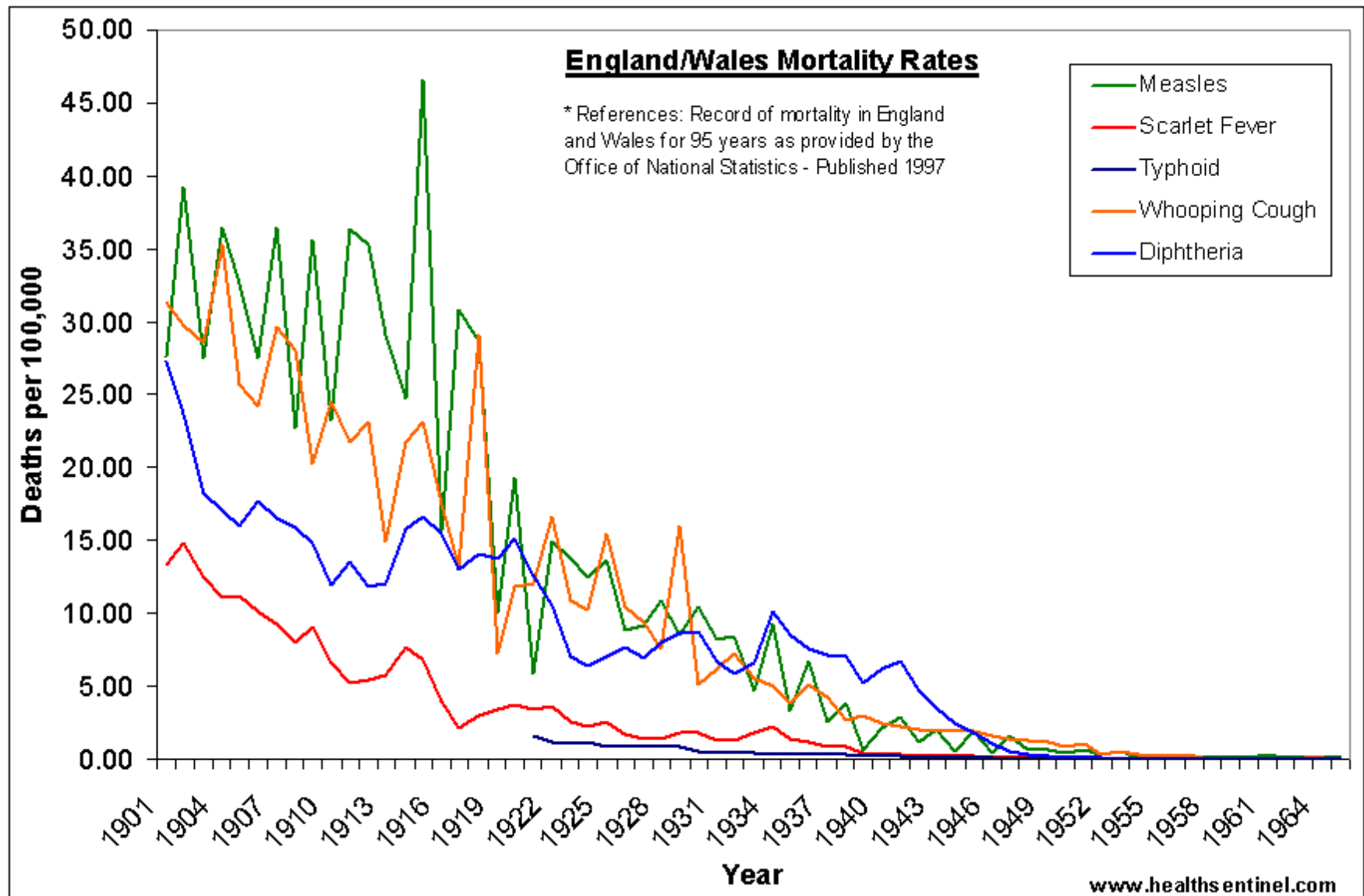
Falling death rate



Child mortality

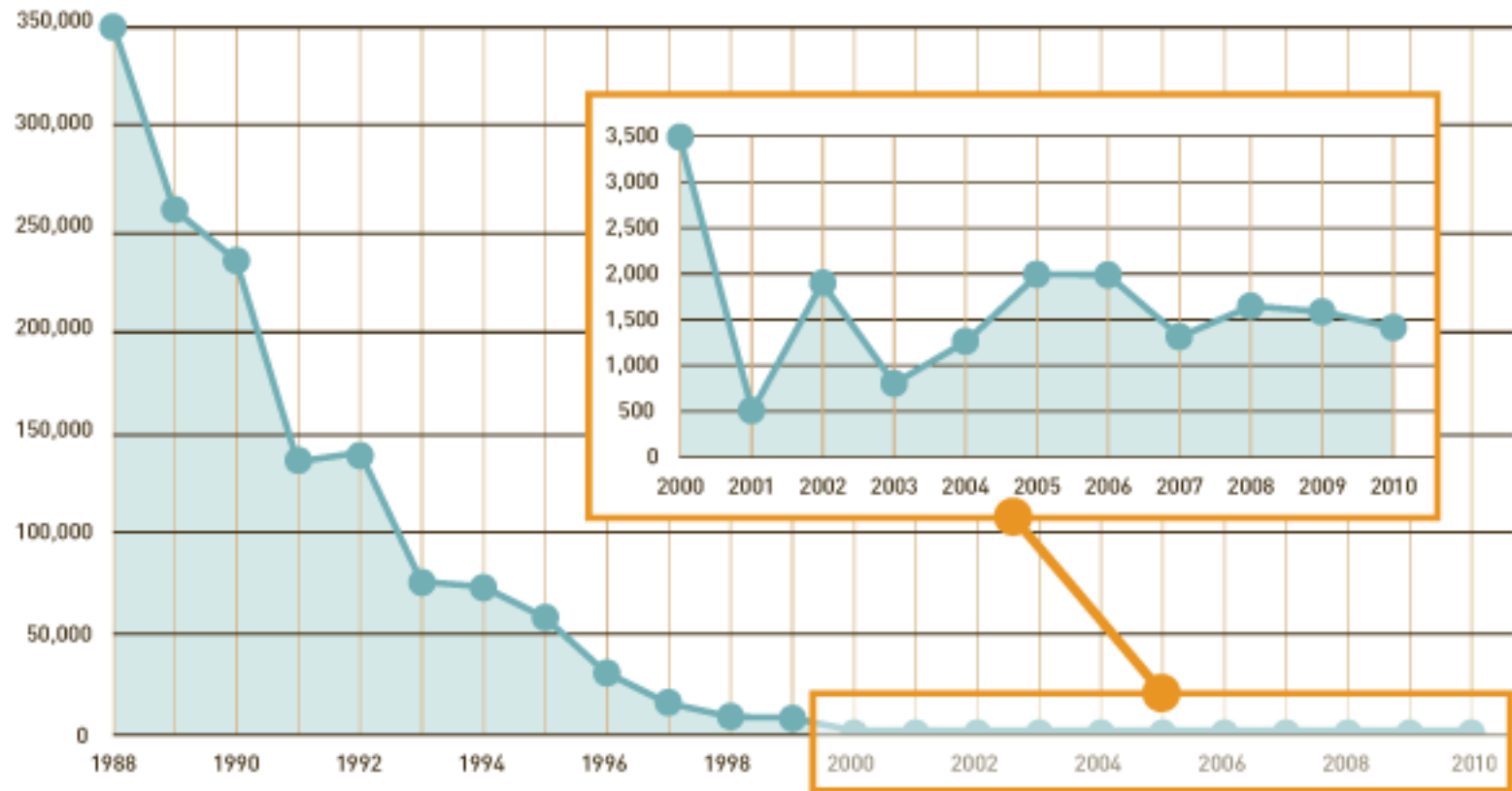


Infectious disease



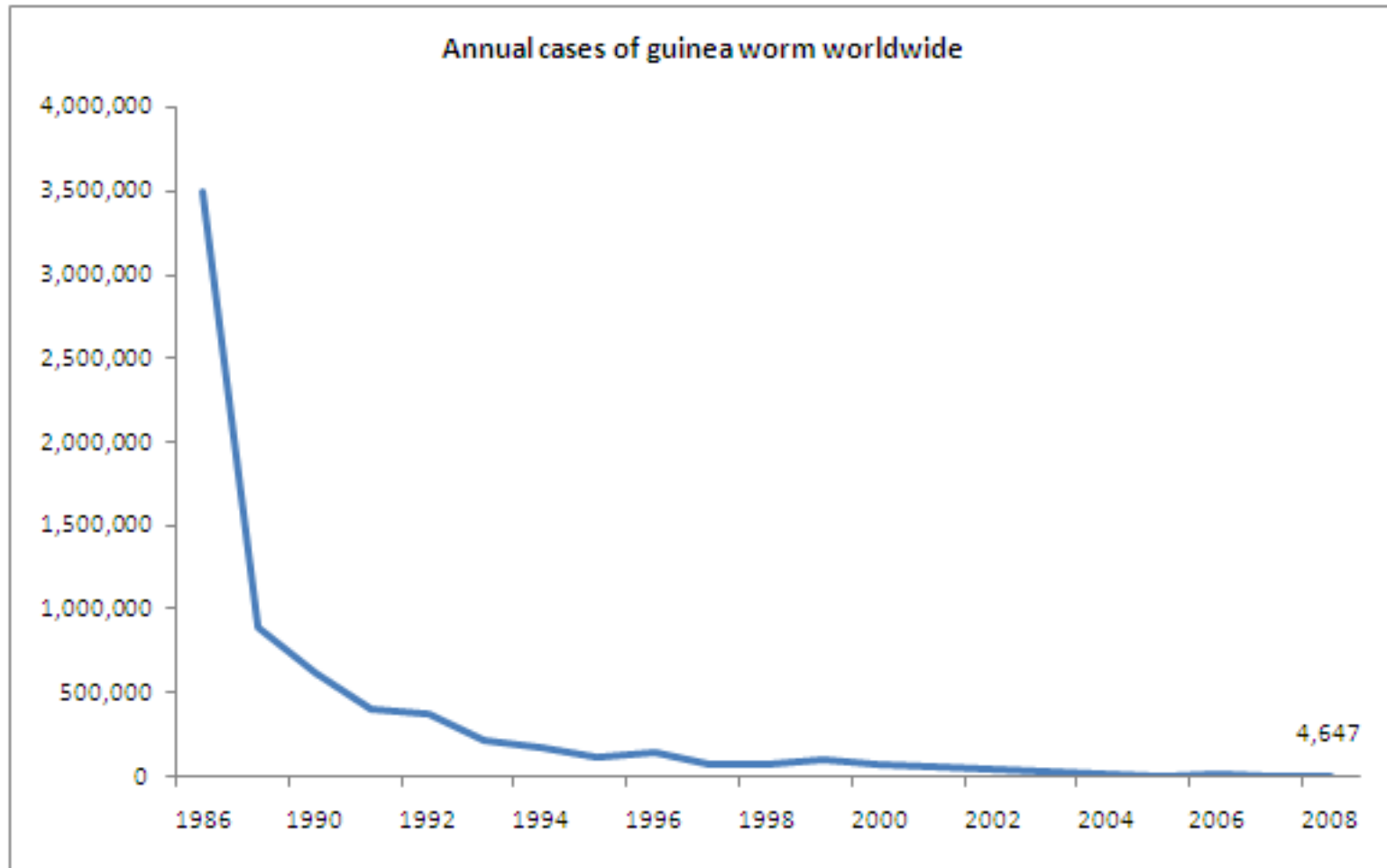
Polio

Estimated number of polio cases per year

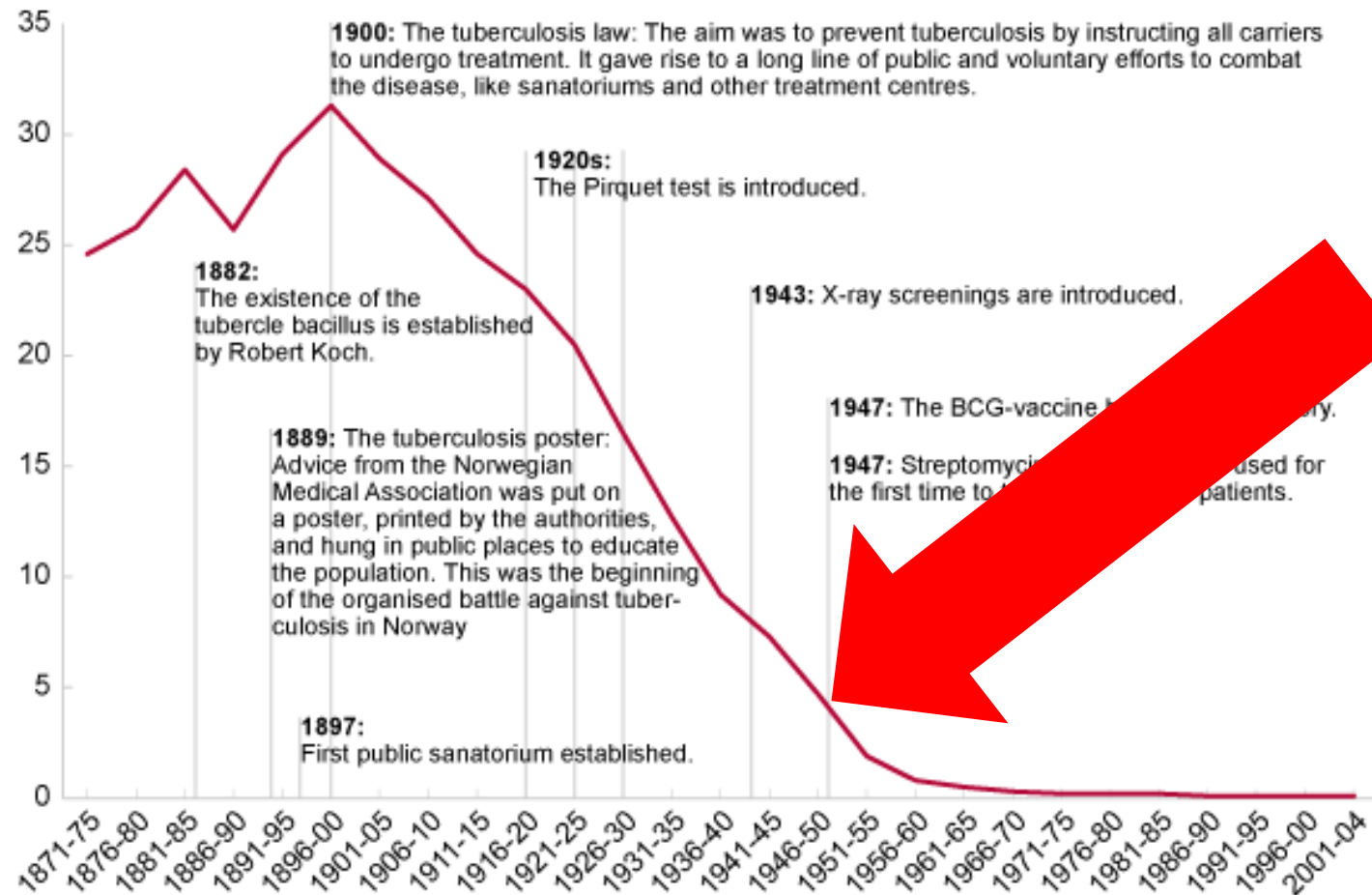


Source: WHO/Polio database

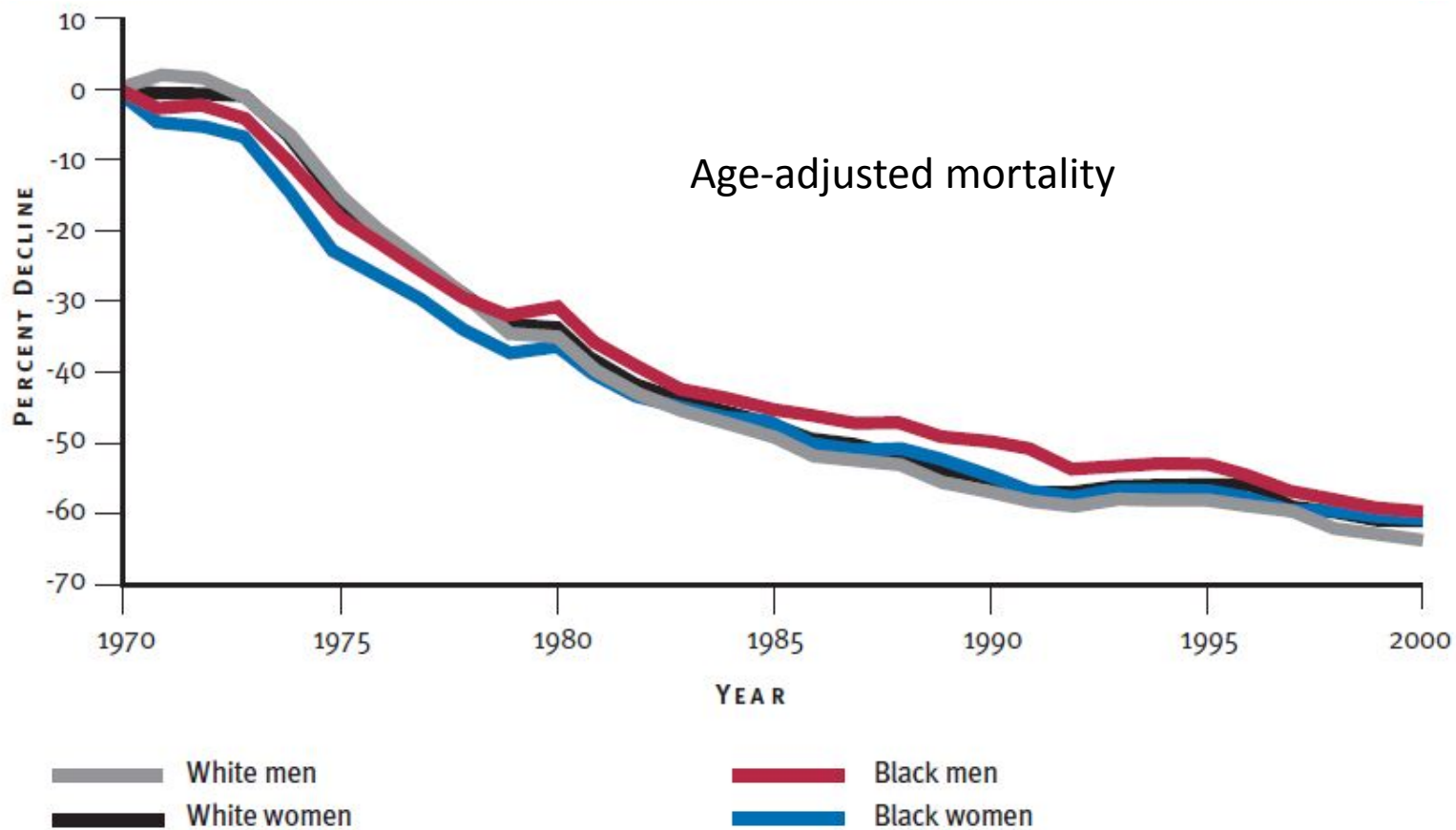
Guinea worm



Tuberculosis

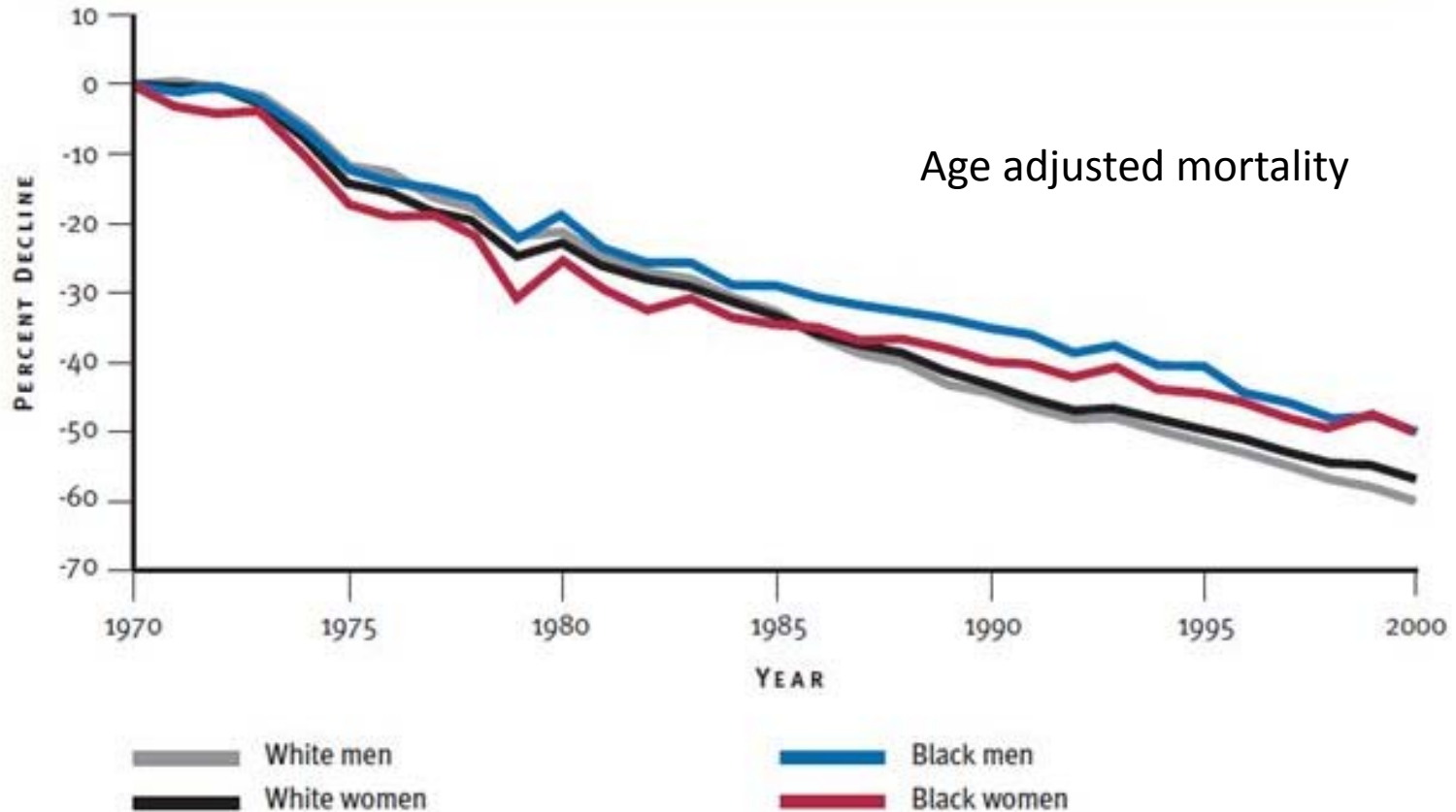


Stroke (US)



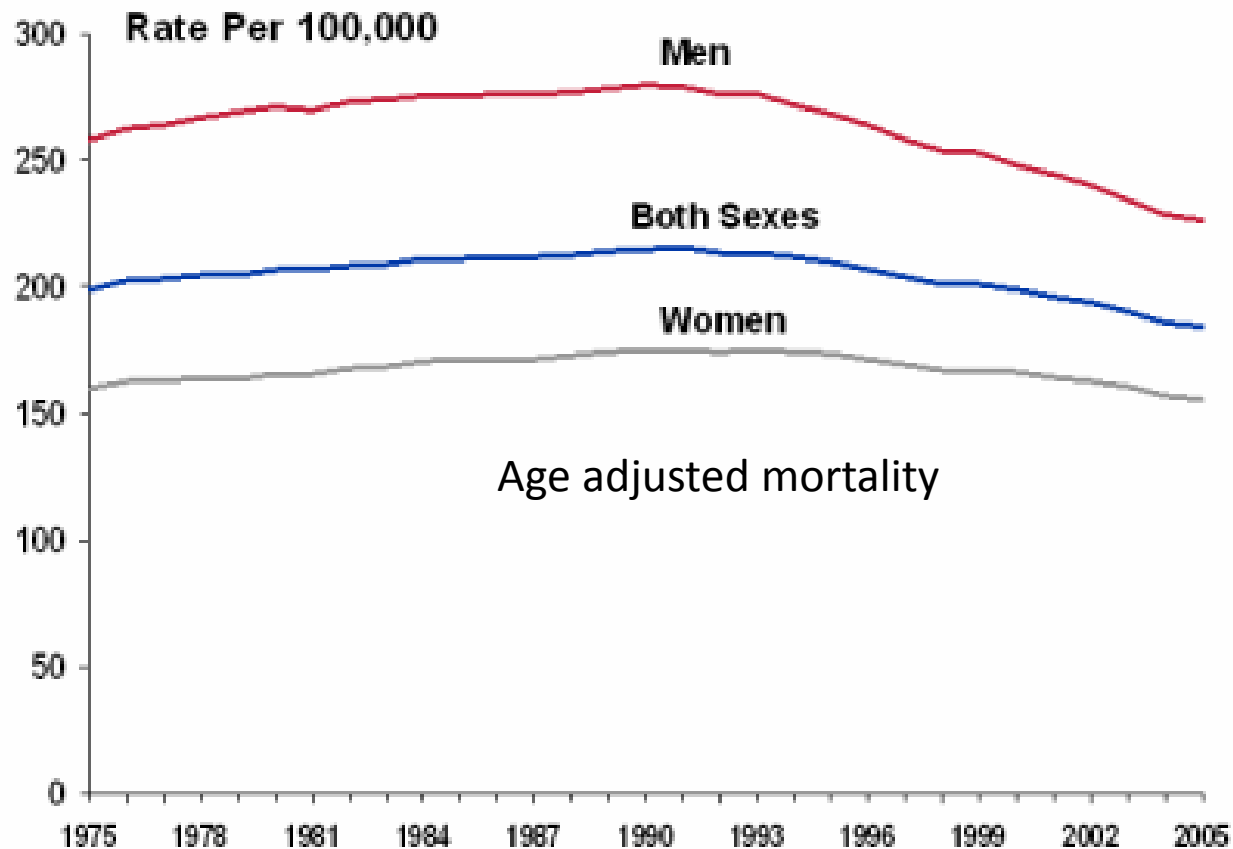
Source: Prepared by Thom T, National Heart, Lung, and Blood Institute from Vital Statistics of the United States, National Center for Health Statistics. Death rates are age-adjusted to the 2000 U.S. census population.

Heart disease (US)



Source: Prepared by Thom T, National Heart, Lung, and Blood Institute from Vital Statistics of the United States, National Center for Health Statistics. Death rates are age-adjusted to the 2000 U.S. census population.

Cancer Mortality (US)

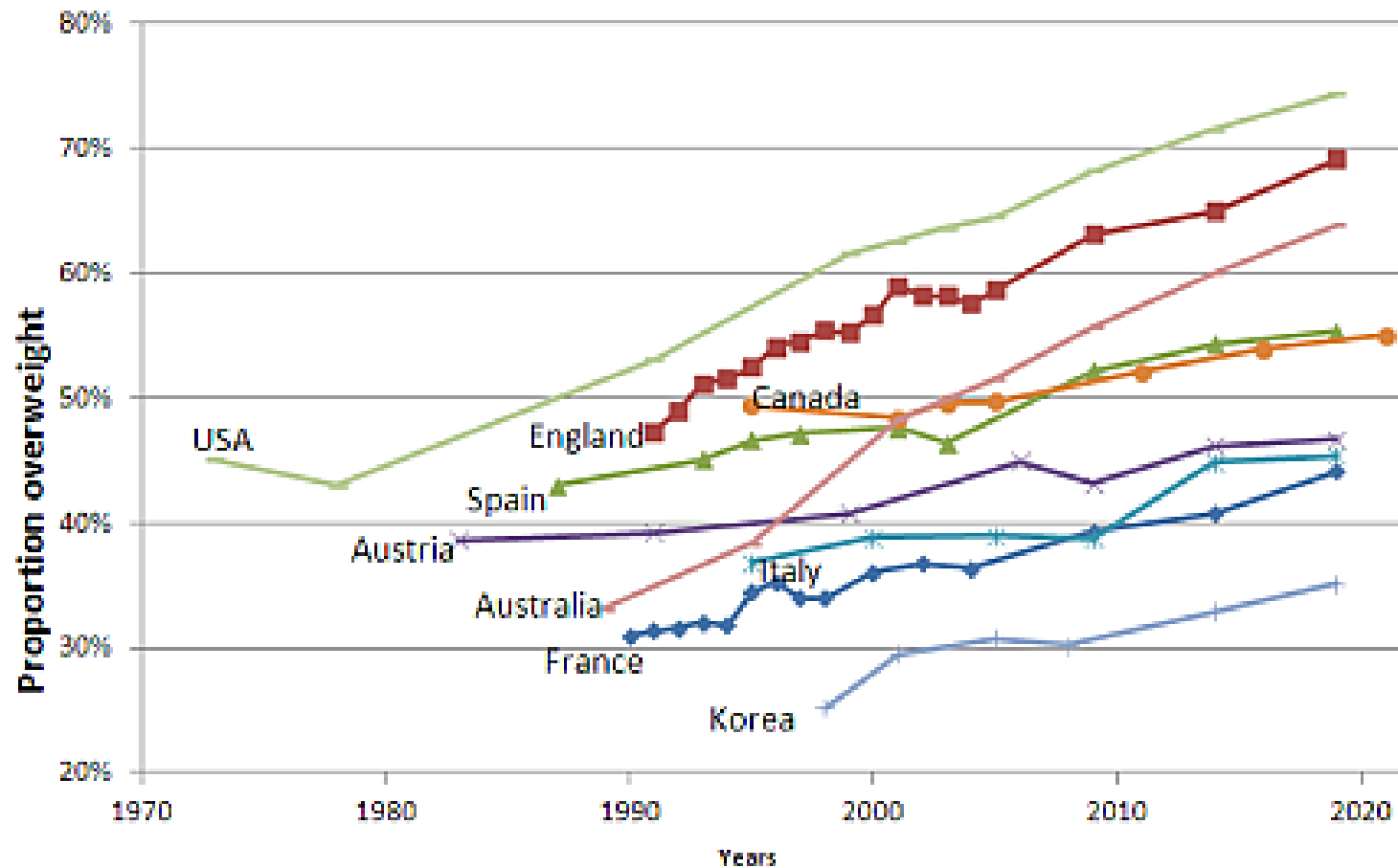


*Age-adjusted to the 2000 US standard population.

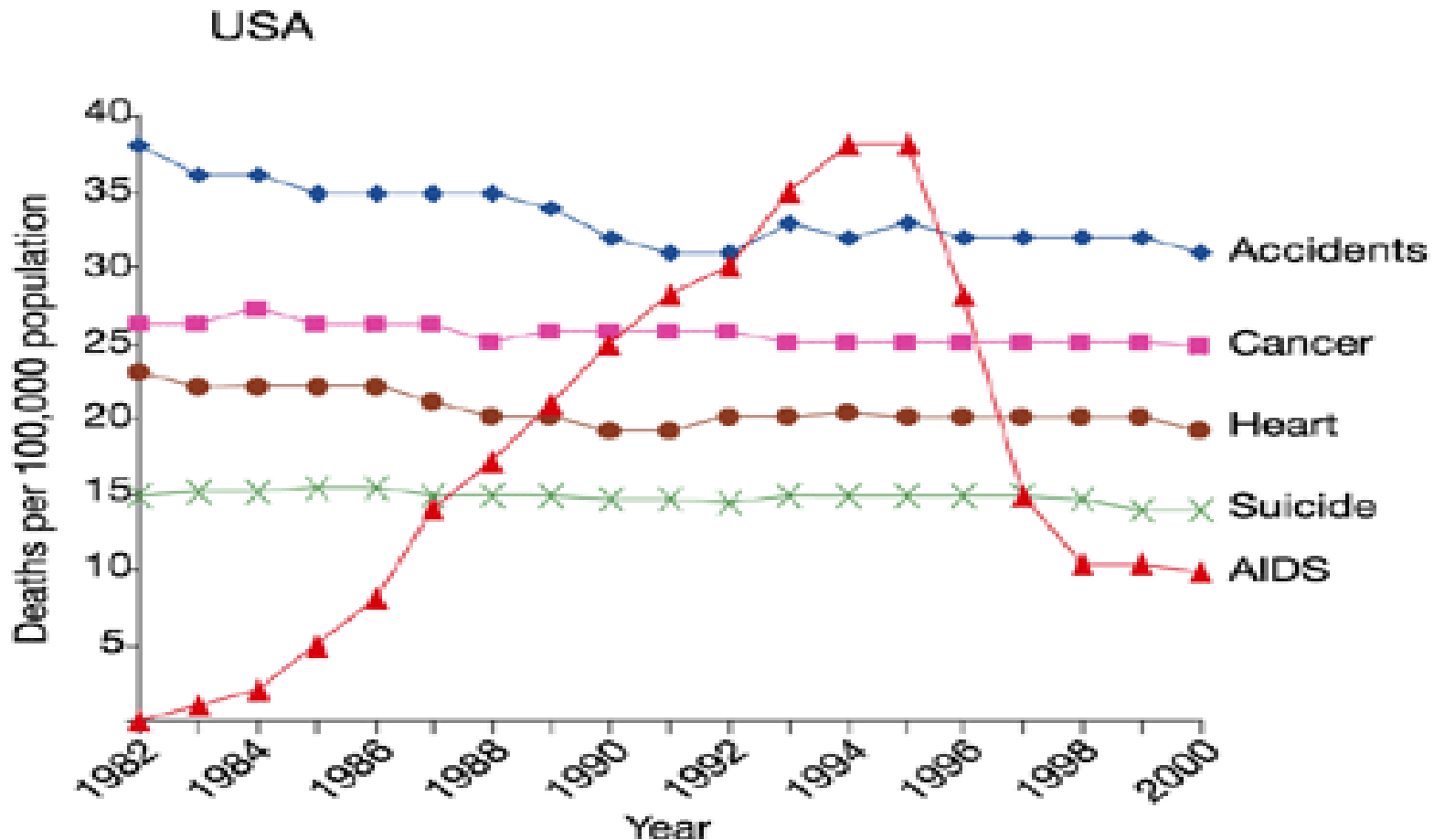
Source: US Mortality Data 1960-2005, National Center for Health Statistics, Centers for Disease Control and Prevention, 2008.

Obesity

Past and projected future overweight rates in selected OECD countries



The AIDS epidemic in America



Pandemics that weren't

Expected death toll

- Ebola, Hanta -- ??
- vCJD – up to 136,000 (UK govt)
- SARS – millions (WHO)
- Bird Flu – 2m-7.4m (WHO)

Actual death toll

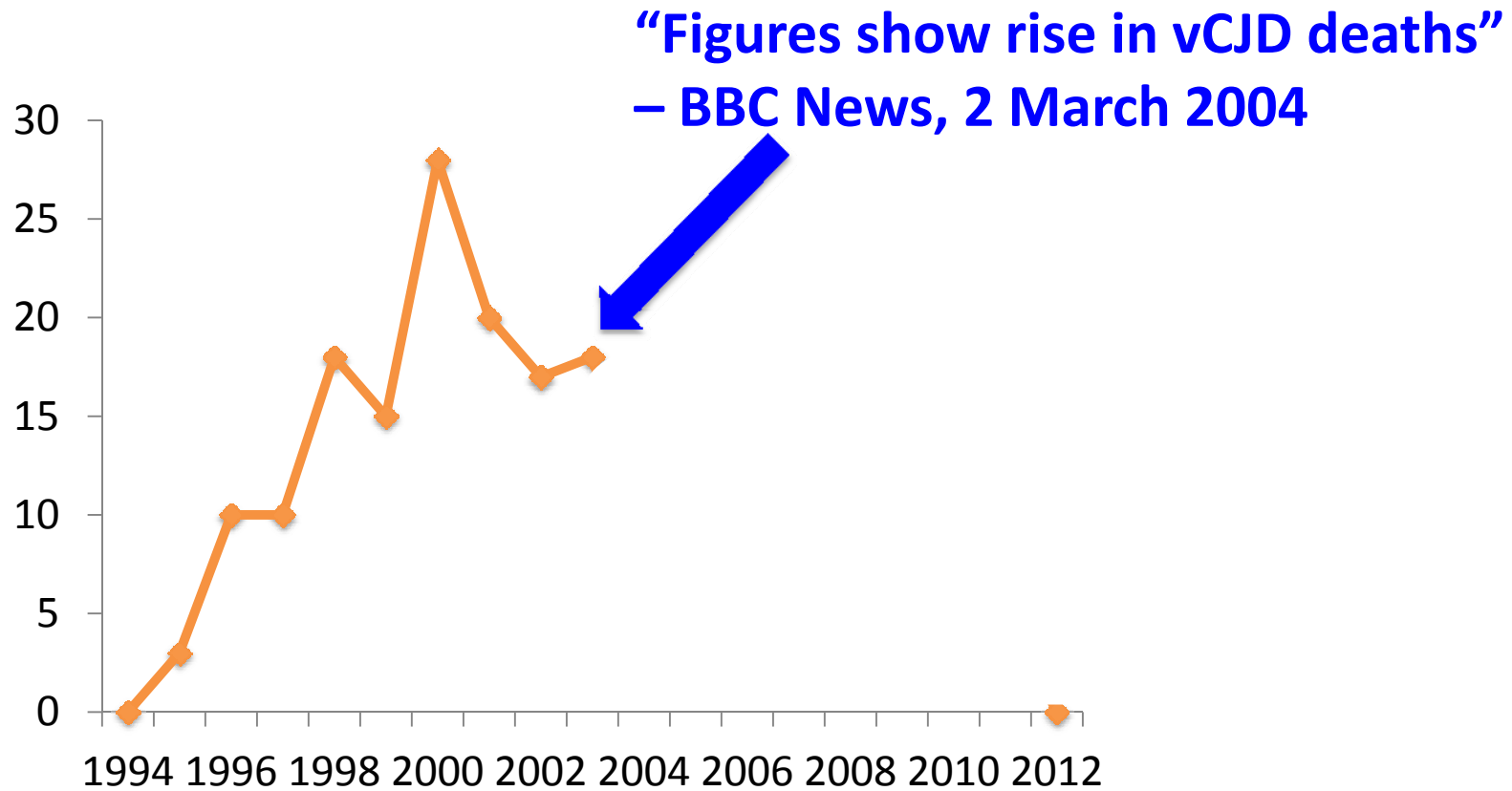
Tens

176

774

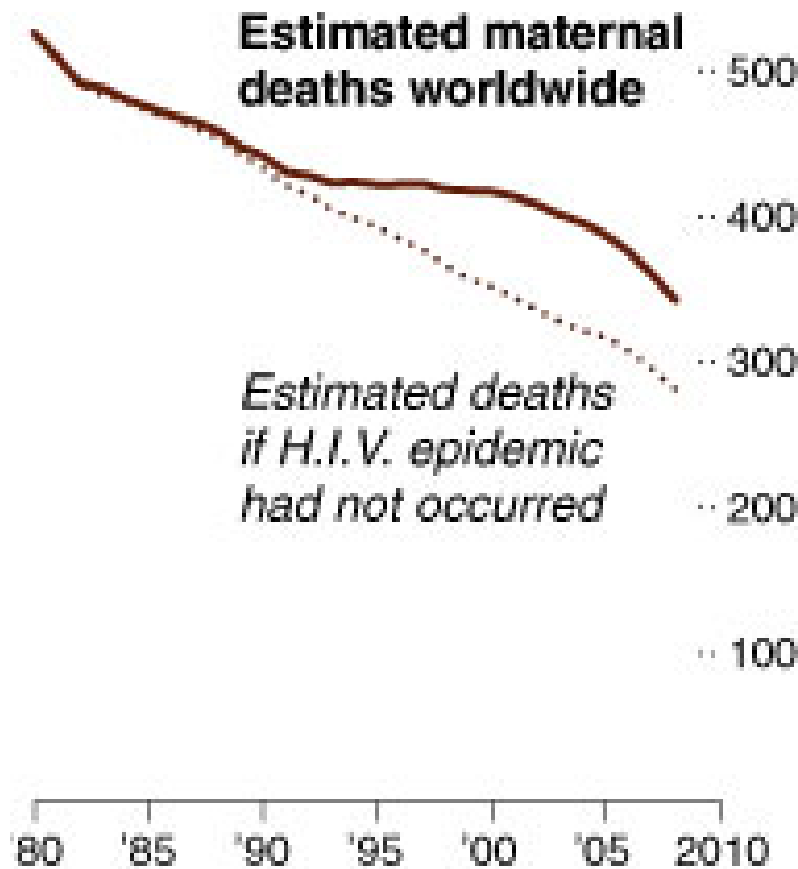
c200

vCJD deaths, UK



A Long-Term Trend

A broad survey of data from 181 countries has found that the number of women dying from childbirth or pregnancy worldwide has been declining steadily.



Source: *The Lancet*

THE NEW YORK TIMES

“But some advocates for women’s health tried to pressure The Lancet into delaying publication of the new findings, fearing that good news would detract from the urgency of their cause, Dr. Horton said in a telephone interview.”

<http://www.nytimes.com/2010/04/14/health/14births.html>

But are we... ?

Happier?

Cleverer?

Cleaner?

Kinder?

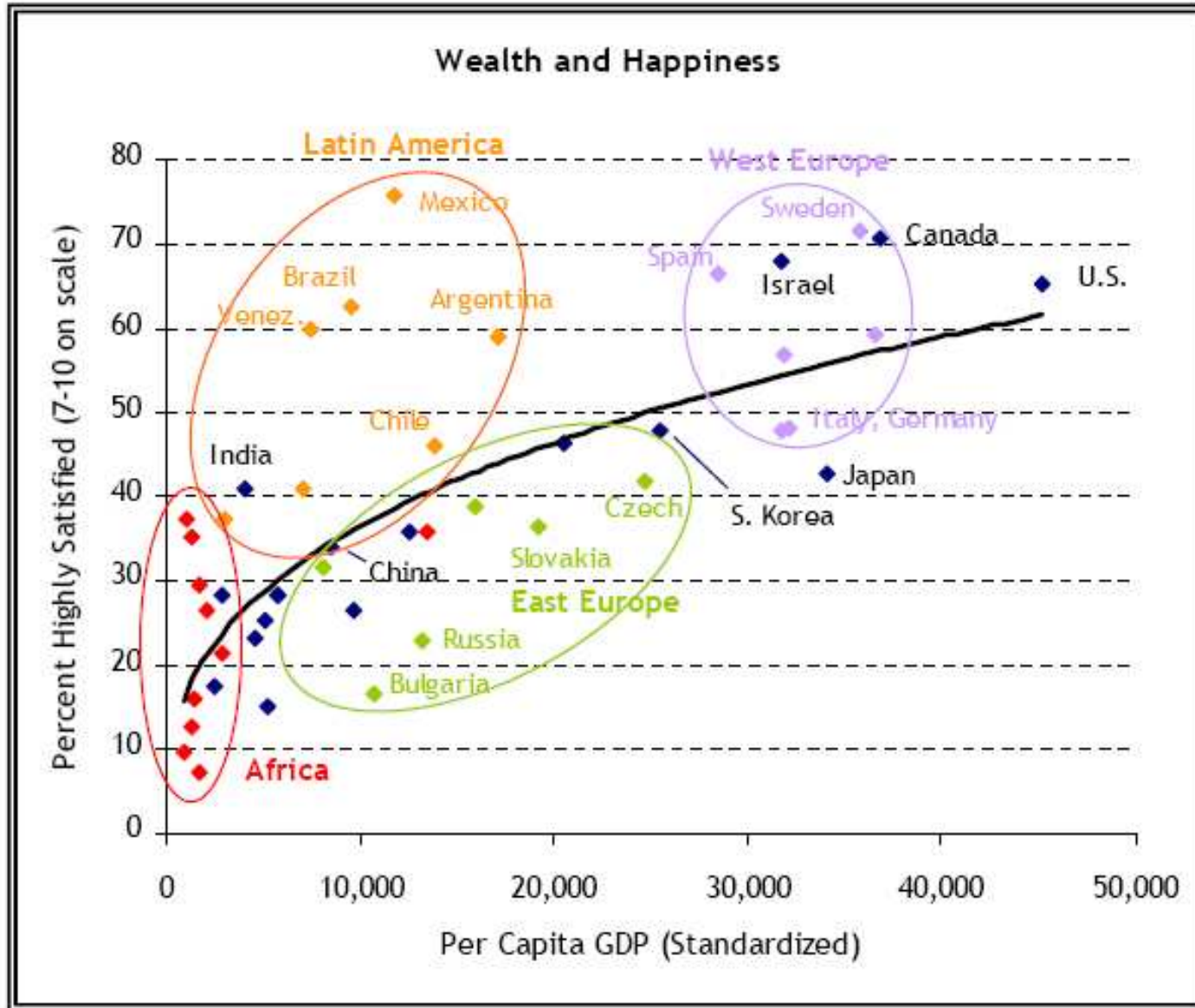
Freer?

More equal?

More peaceful?

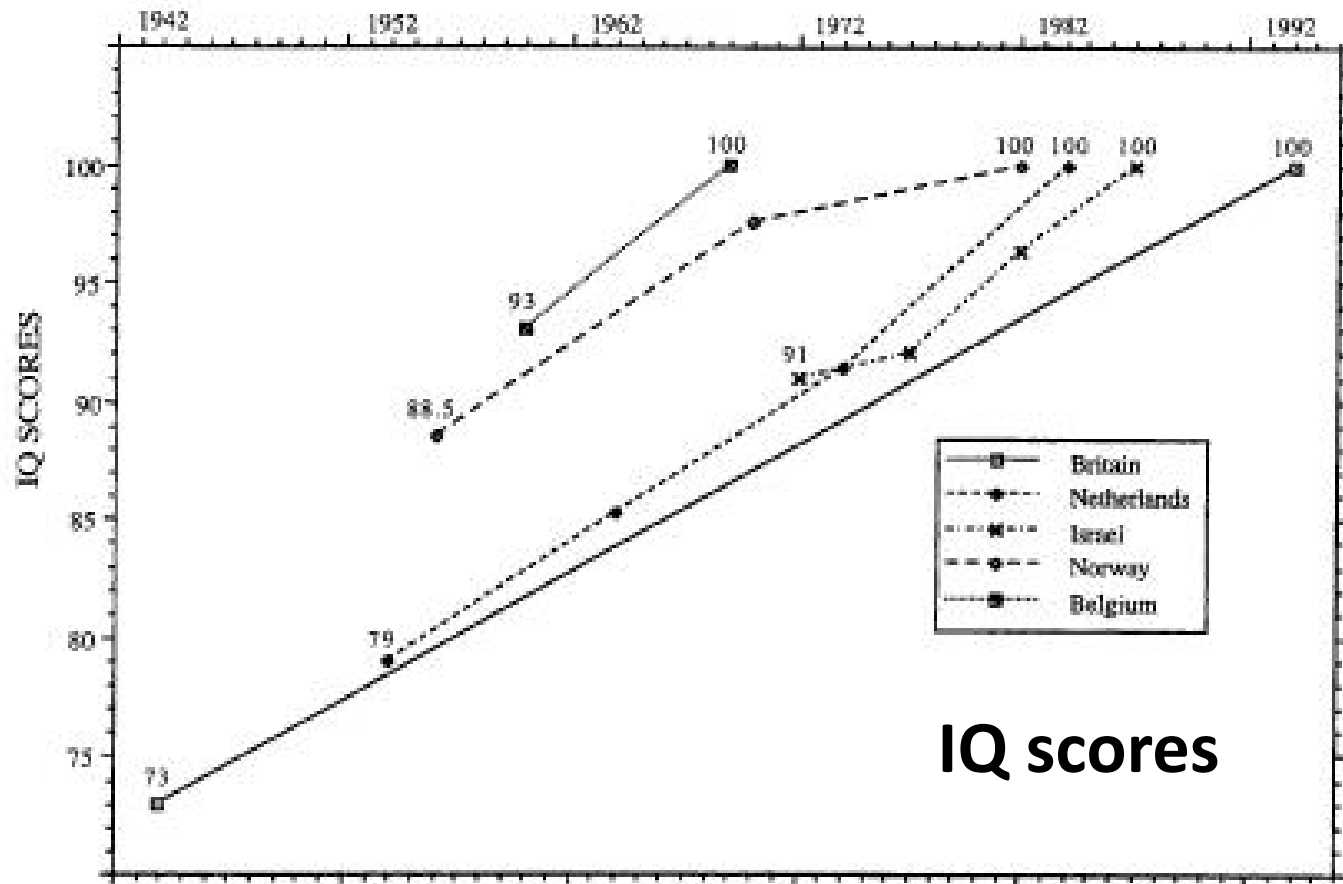
Than 50 years ago?

Happier



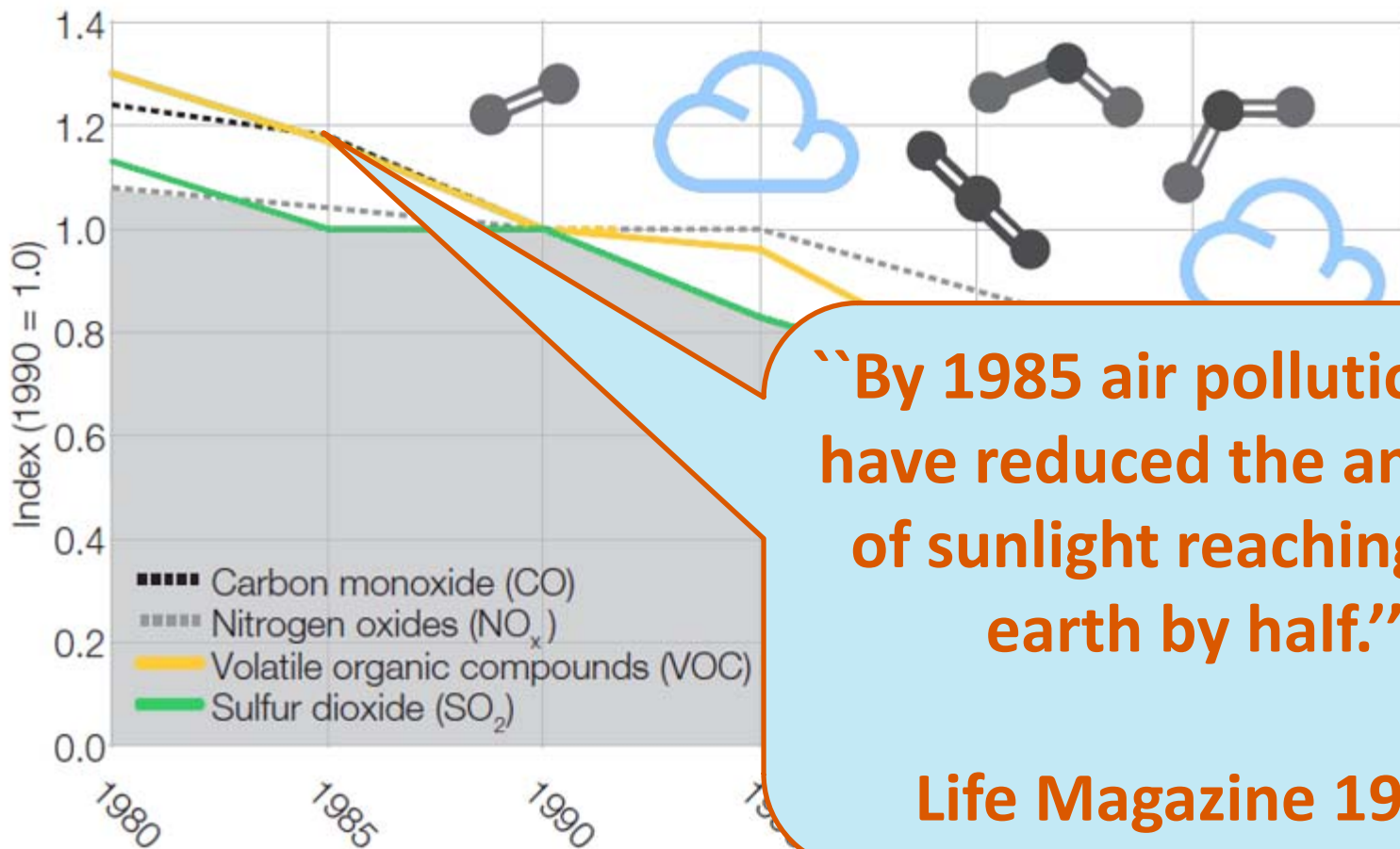
Cleverer

The Flynn Effect



Cleaner

U.S. AIR POLLUTANT EMISSIONS

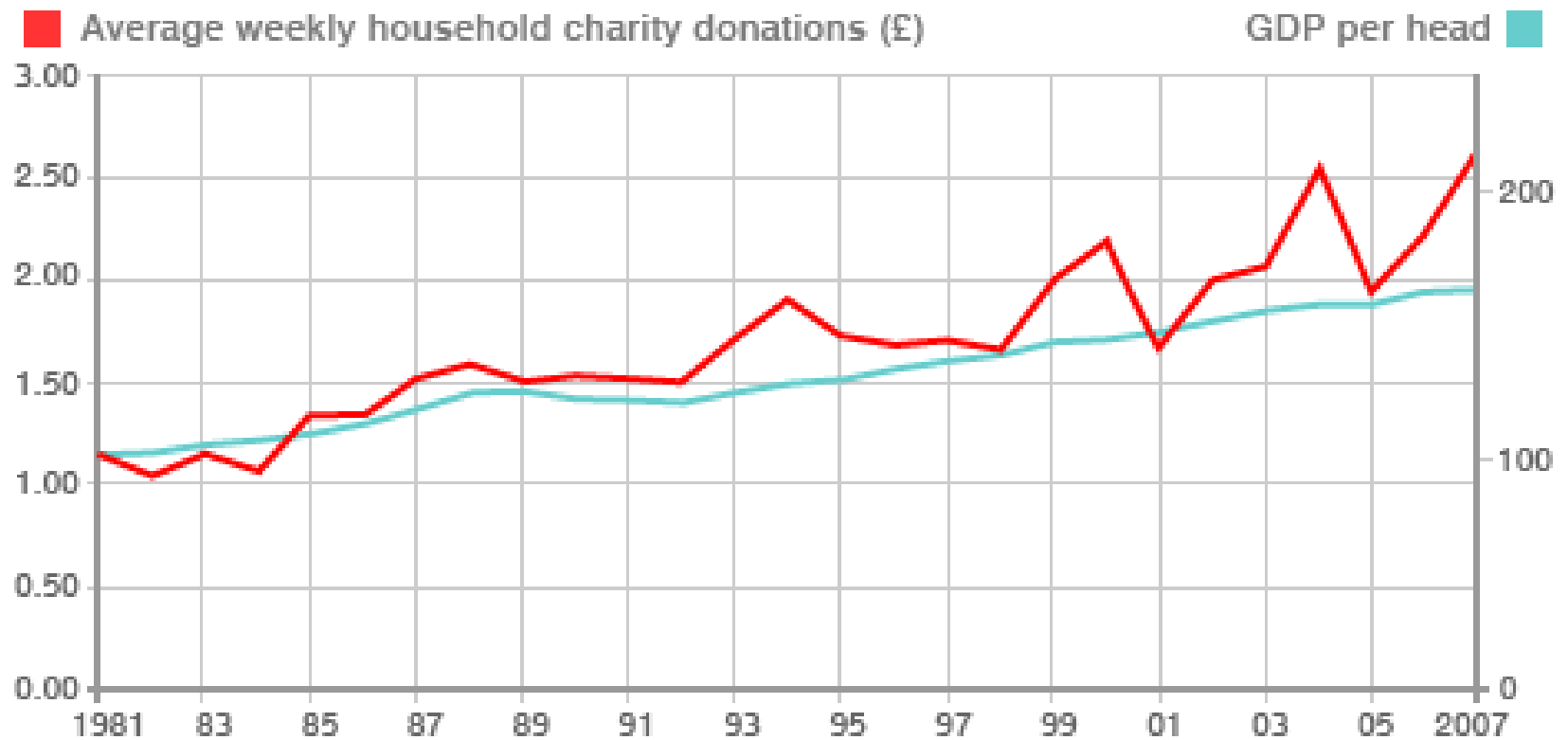


“By 1985 air pollution will have reduced the amount of sunlight reaching the earth by half.”

Life Magazine 1970

Kinder

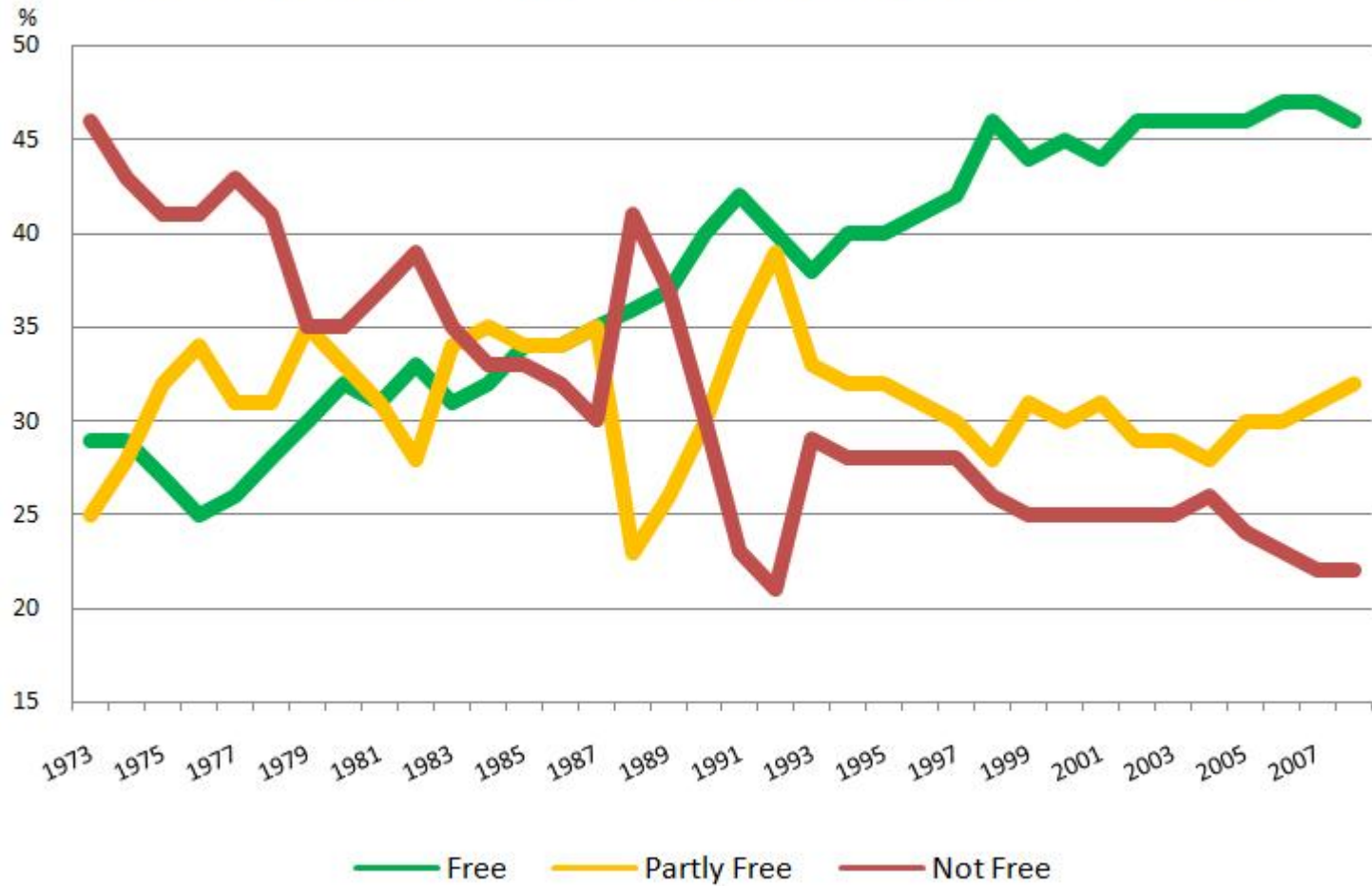
DONATIONS TO CHARITY COMPARED TO GDP



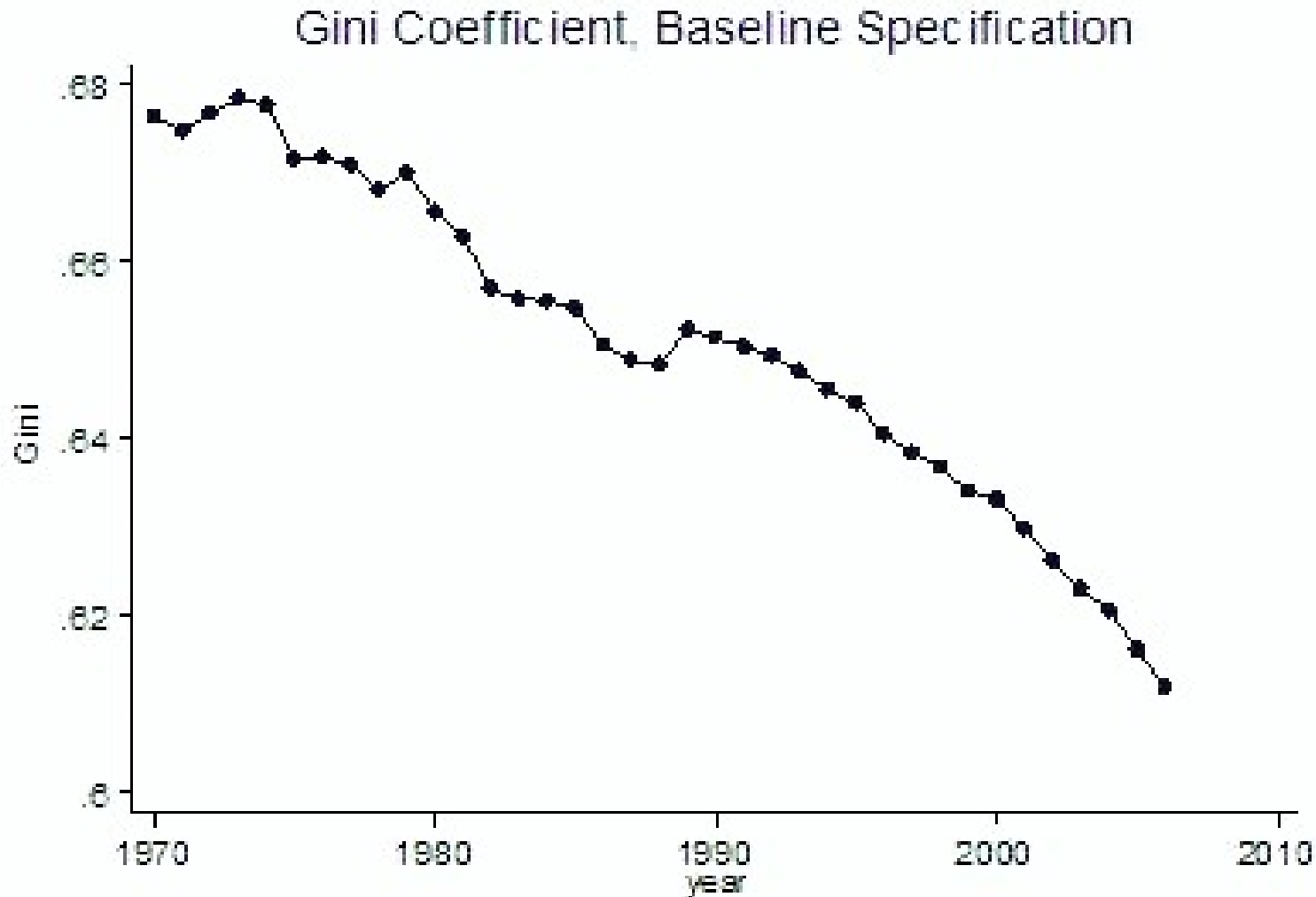
BBC, ONS

Freer

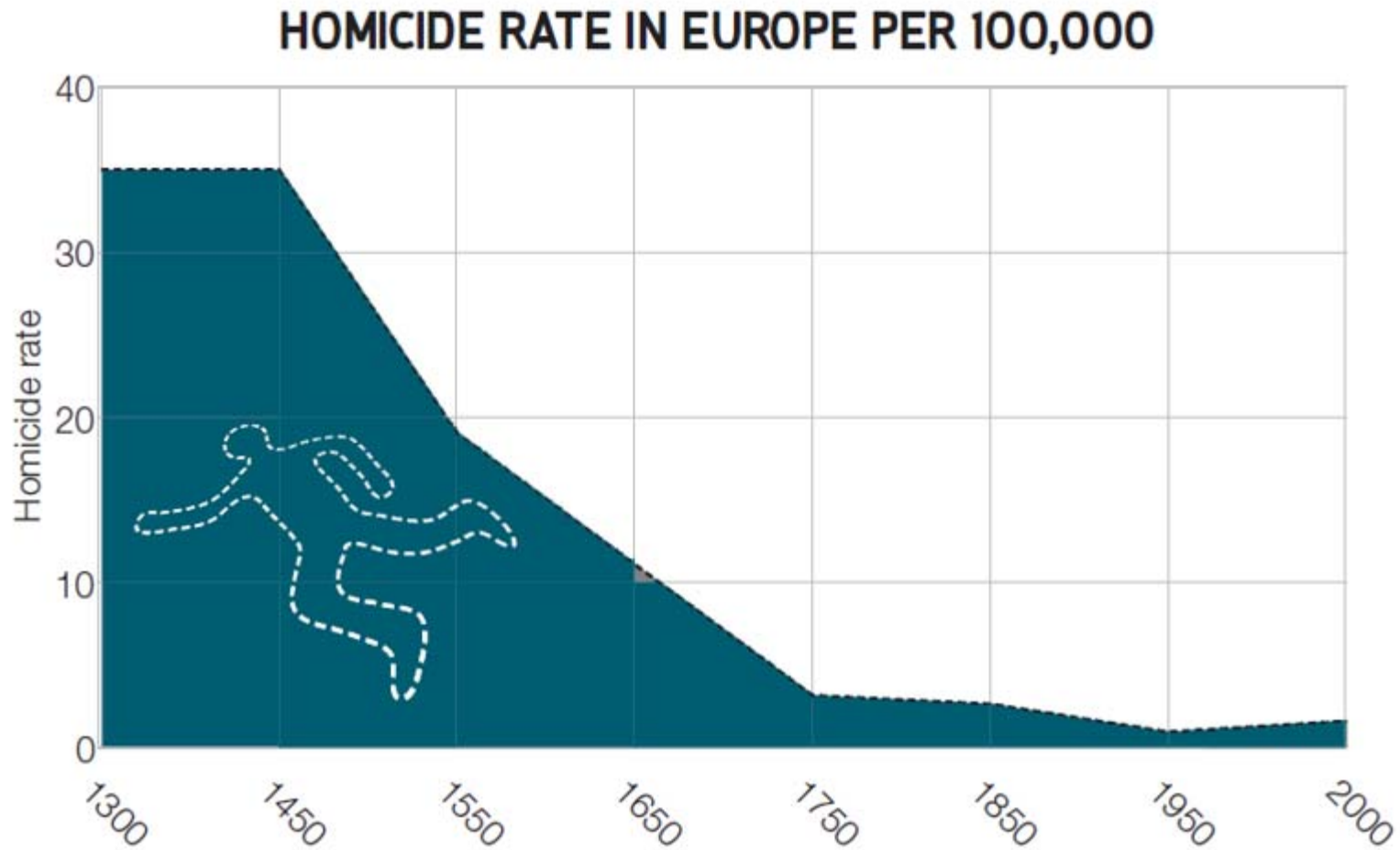
Freedom in the World Country Rankings (1973–2008)



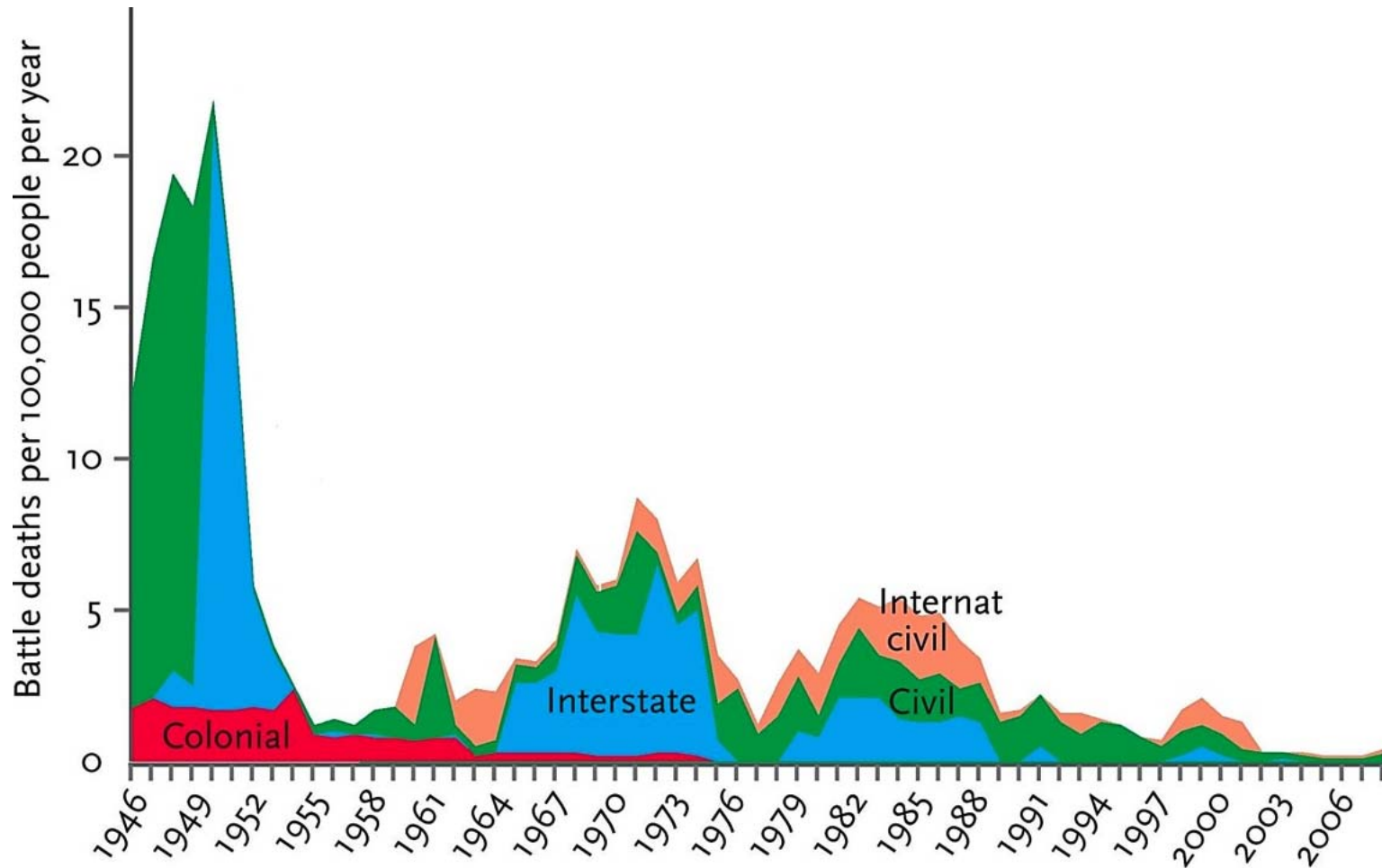
More equal



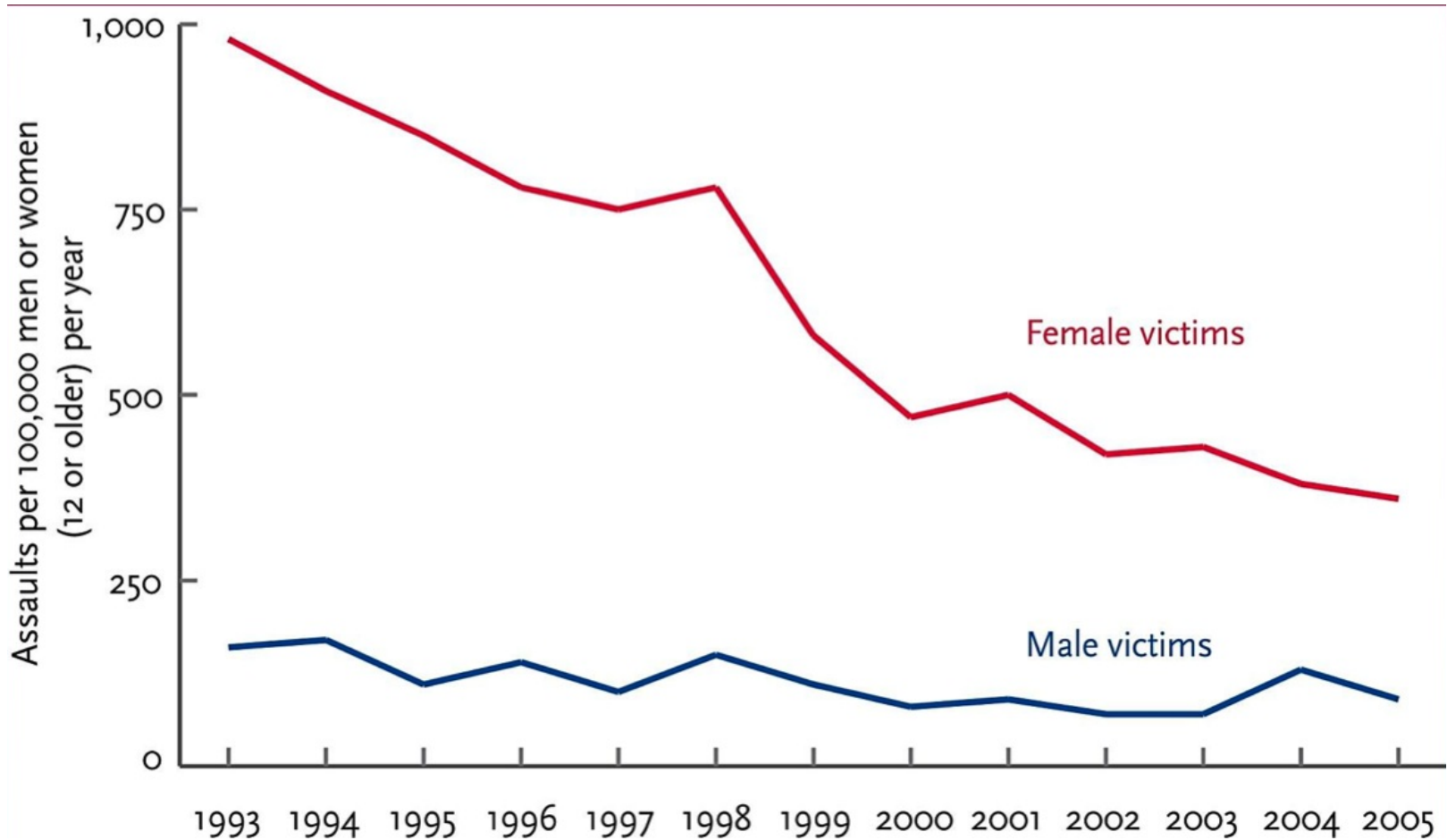
More peaceful



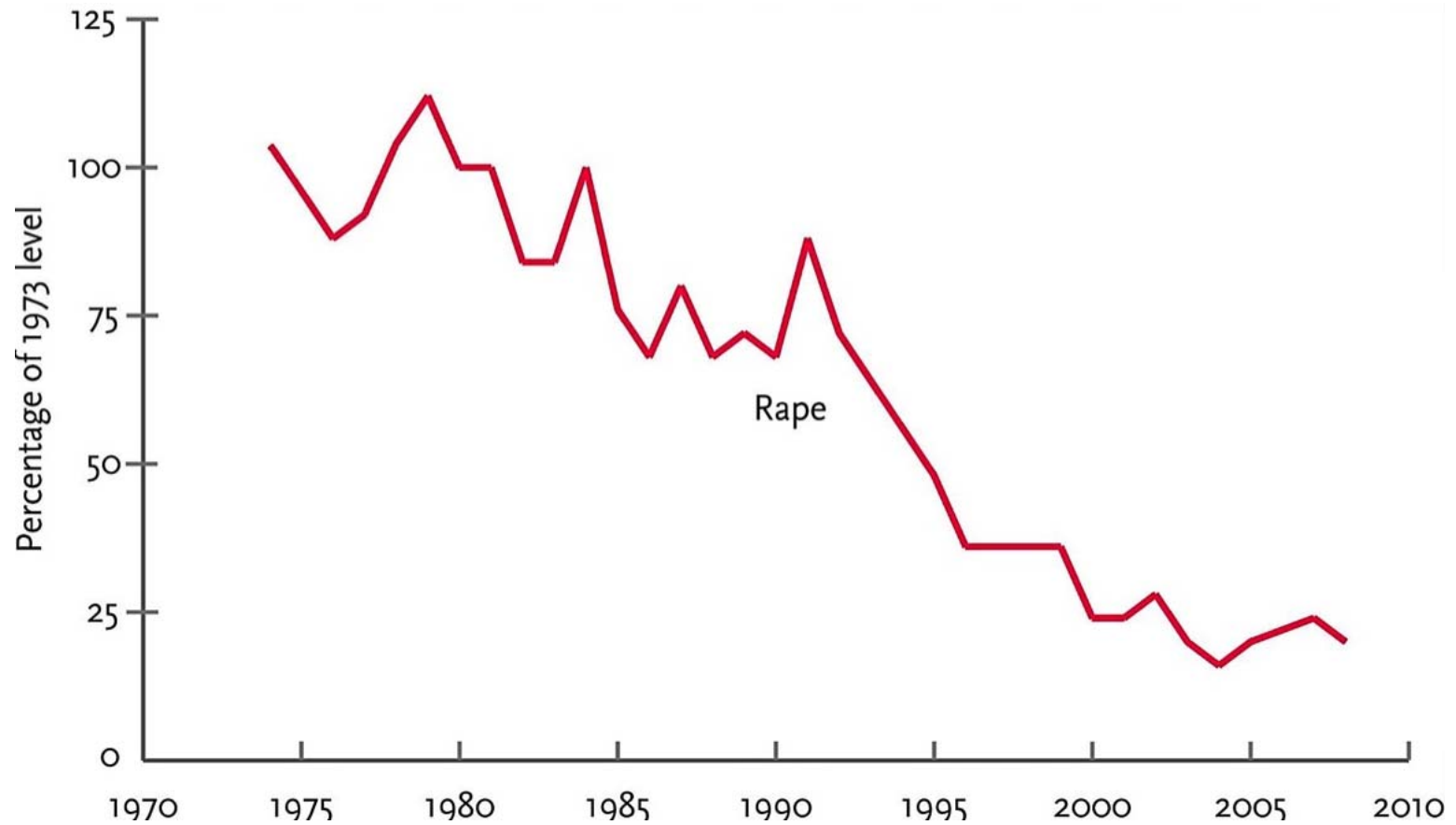
Battle deaths in wars



Domestic violence, US



Rape, US



How is this possible?





**“No man ever saw a dog
make fair and deliberate
exchange of a bone with
another dog”**

Adam Smith 1776



Comparative advantage

Adam takes 4 hours to make a spear and 3 hours to make an axe



Oz takes 1 hour to make a spear and 2 hours to make an axe



If Oz makes 2 spears



And Adam makes 2 axes



And they trade...

Then they each save an hour of work



David Ricardo
1817





Division of labour in nature



The earliest evidence of trade



Neanderthal localism



**Dzudzuana cave,
Georgia**

Cumulative evolution requires sex

Asexual
population



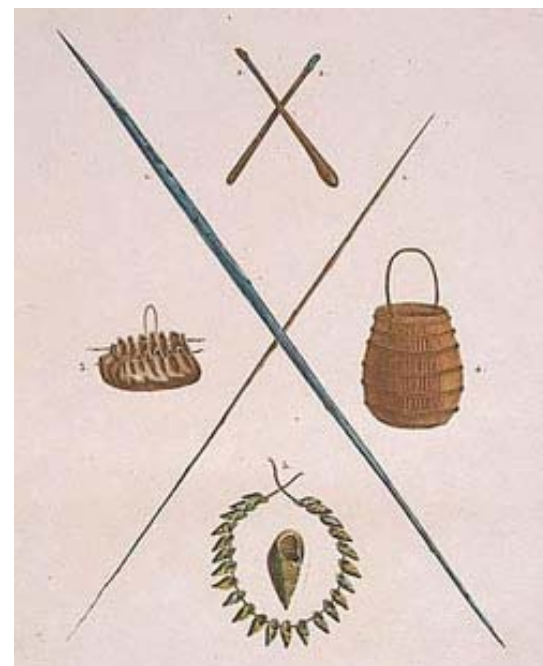
Sexual
population



Hybrid ideas



Tasmania



Two Tasmanians repairing and making spears (B. Duterrau, 1855)

Tierra del Fuego



3713 ALTAZOGA - PERINI

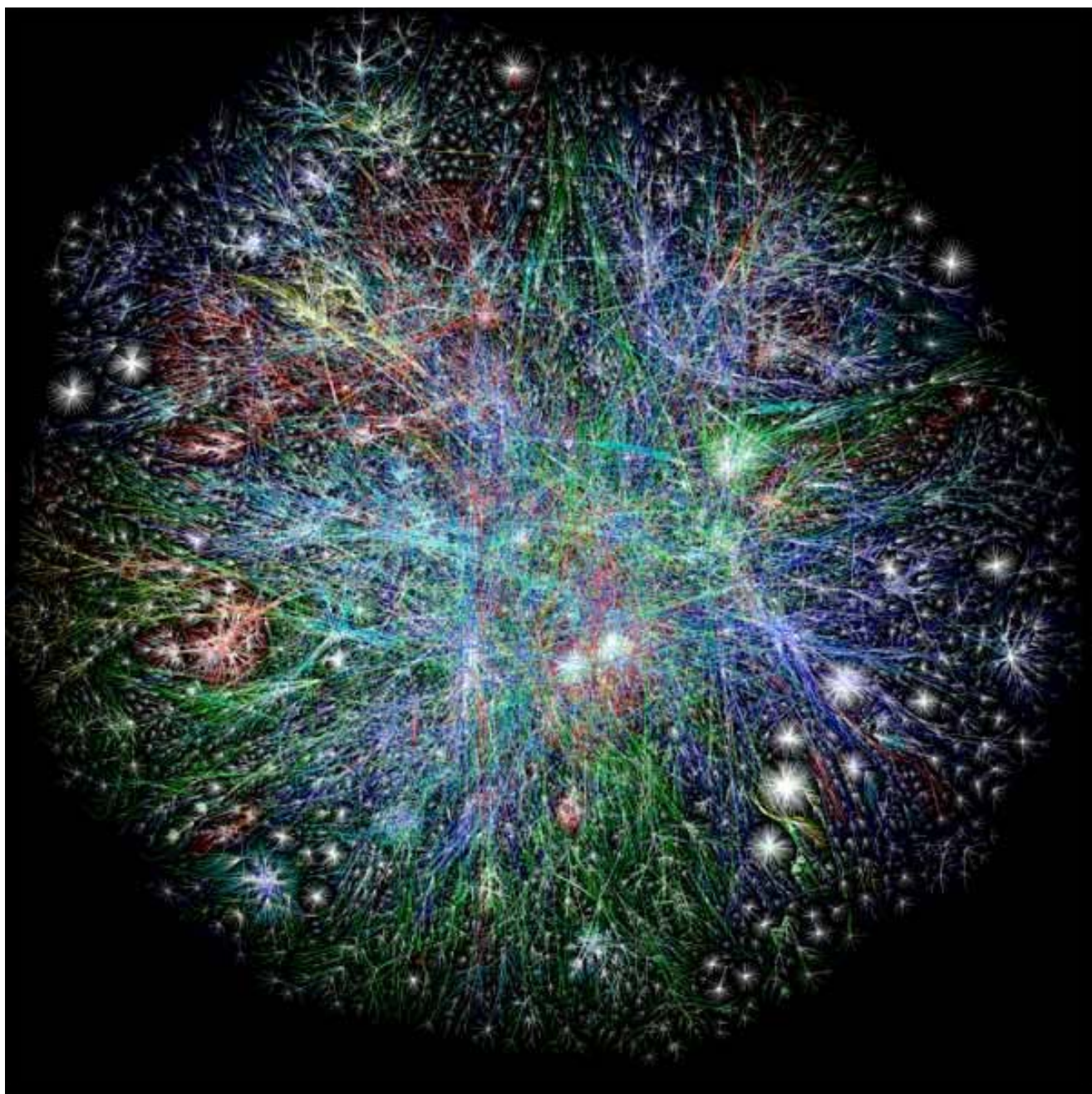
CHILE - Tierra del Fuego - Indio "Ona "

The human cloud



Maori fishing tackle; Kline and Boyd 2010



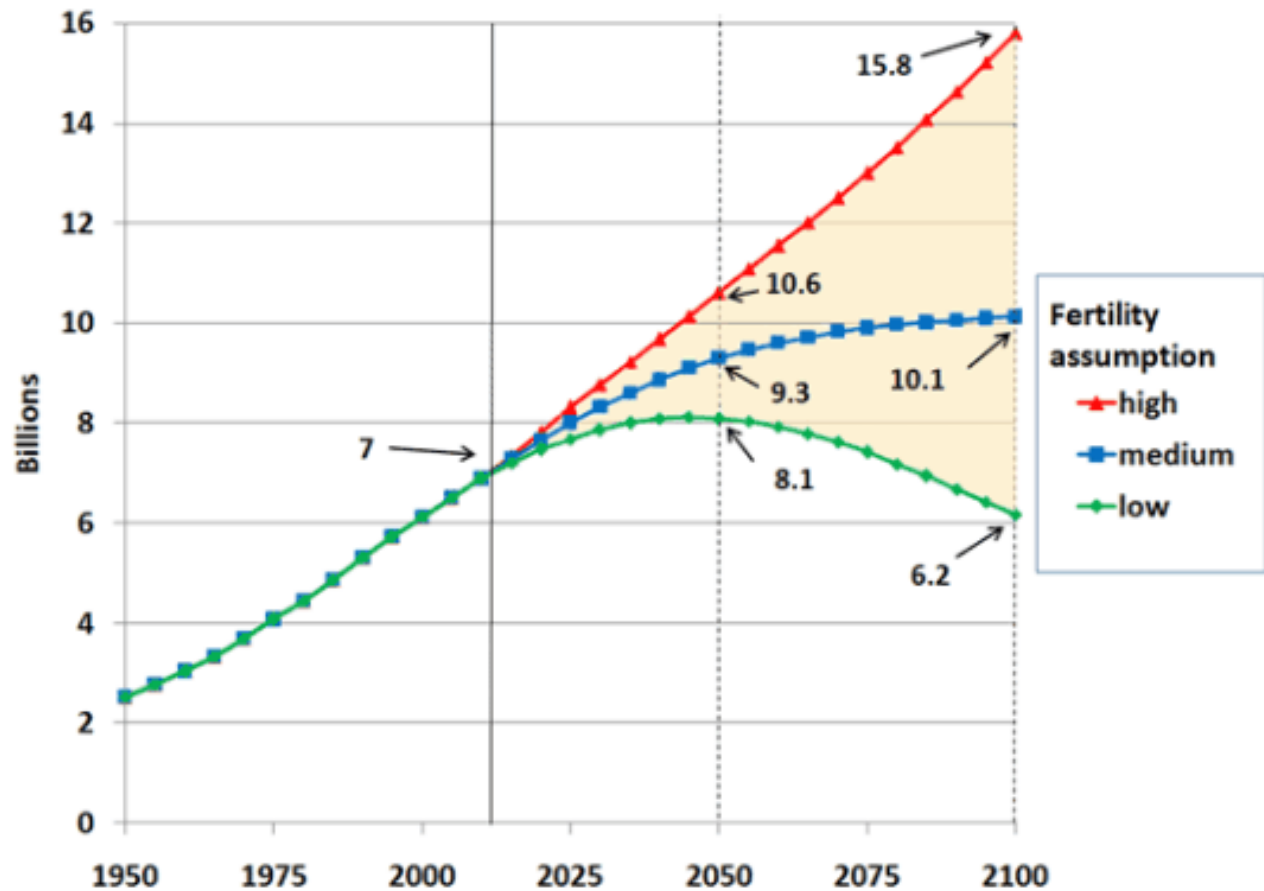


internet traffic : the Opte Project. Licensed under Creative Commons.

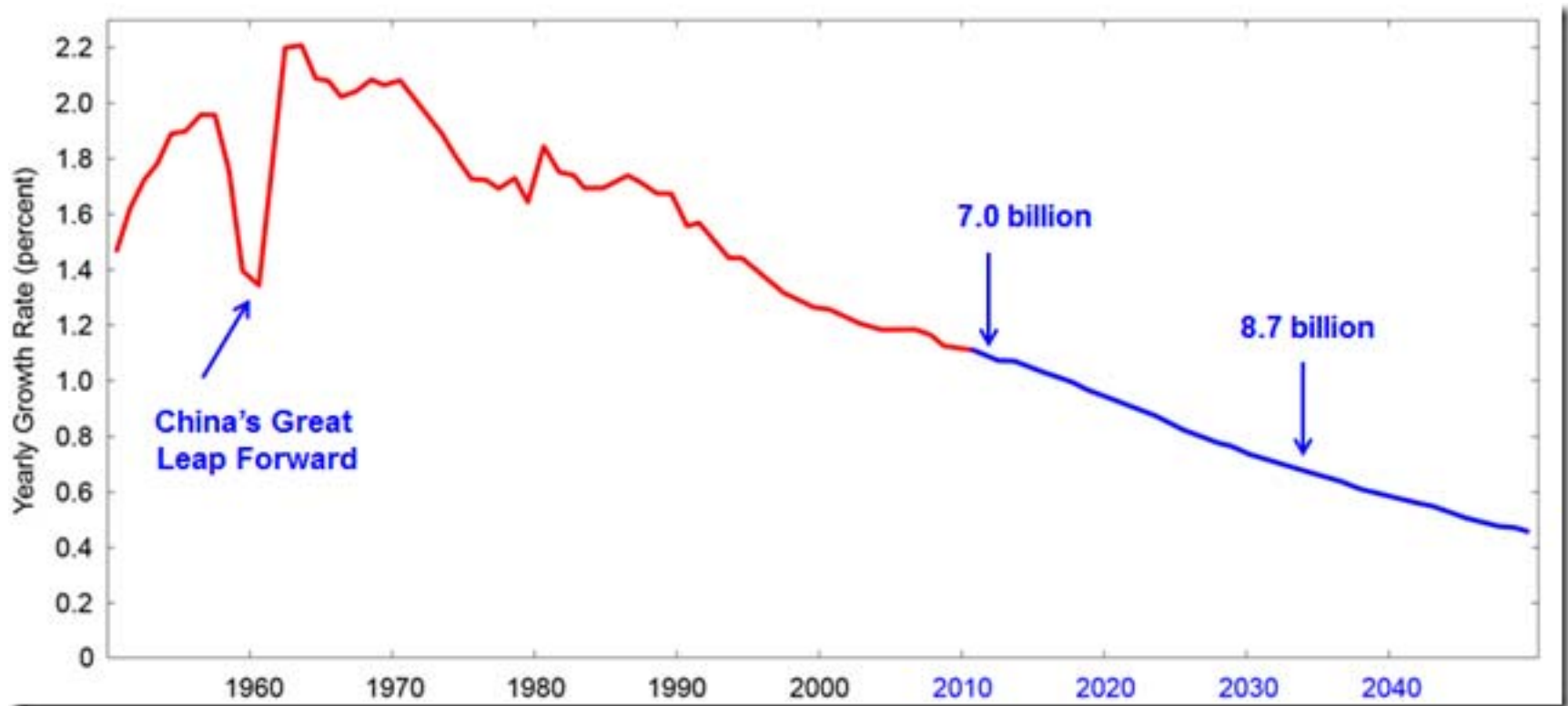
Can it go on?

Population projections

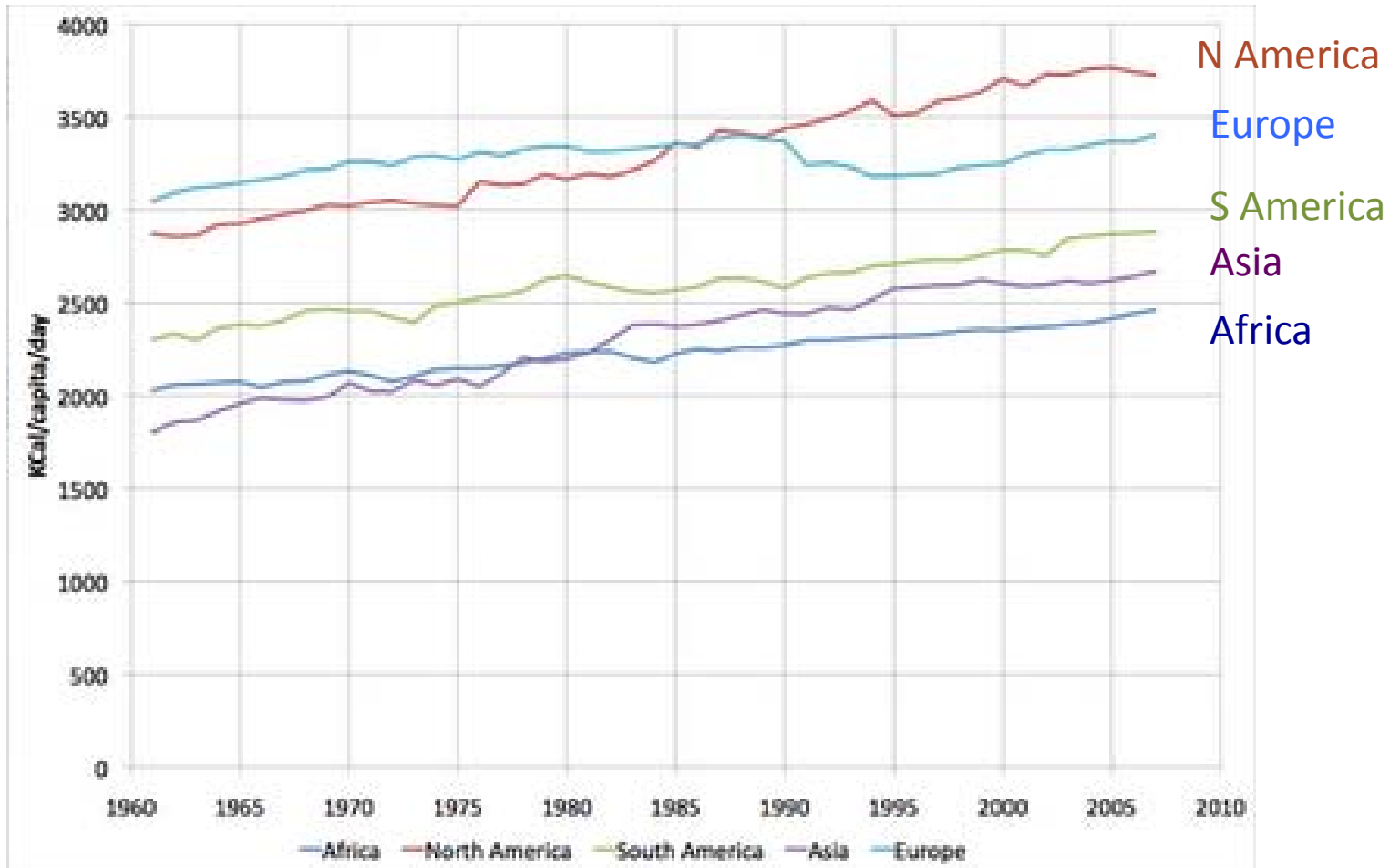
UN Projections of World Population Under Three Fertility Assumptions



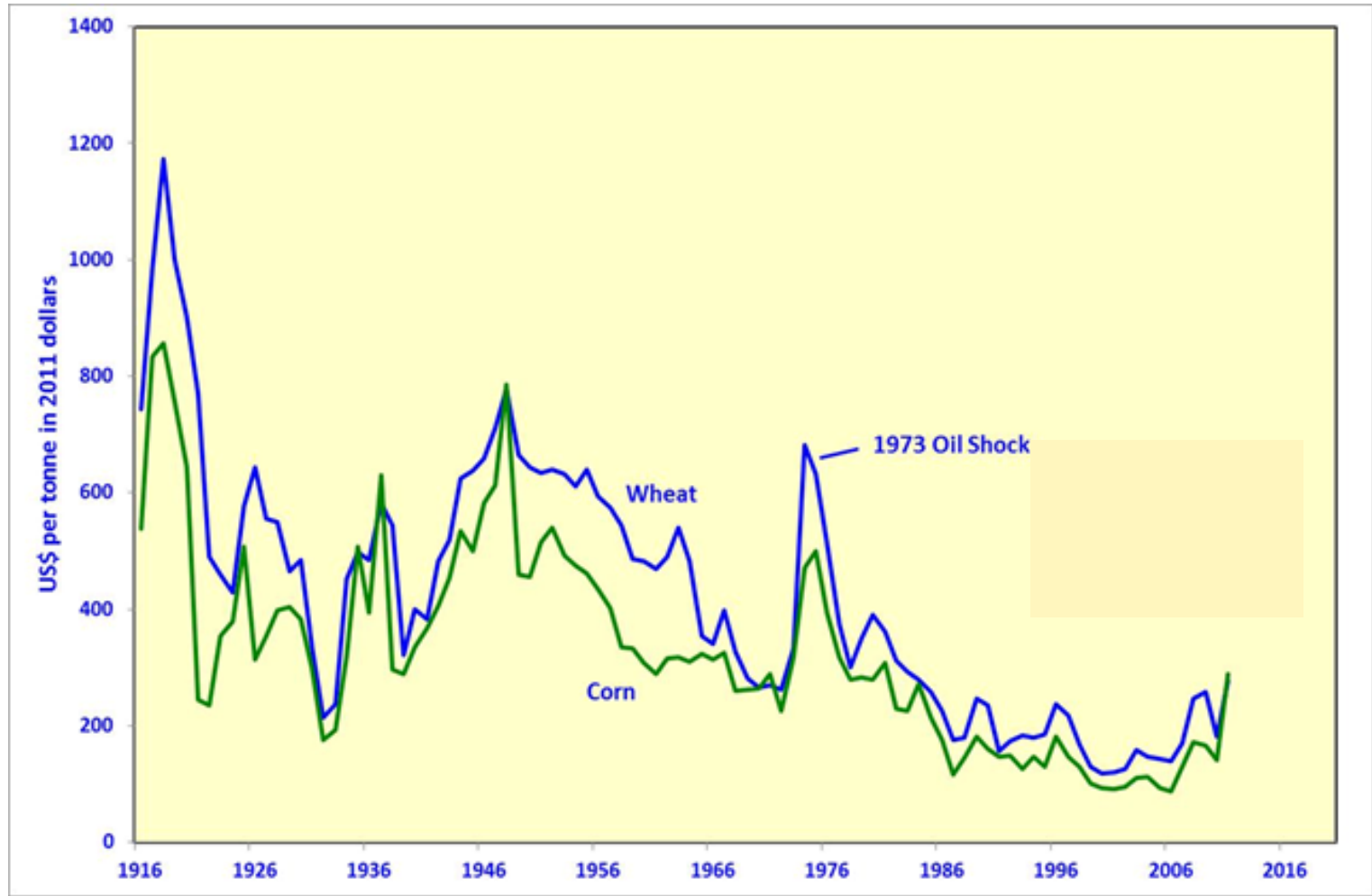
Population growth rate is falling



People have more food

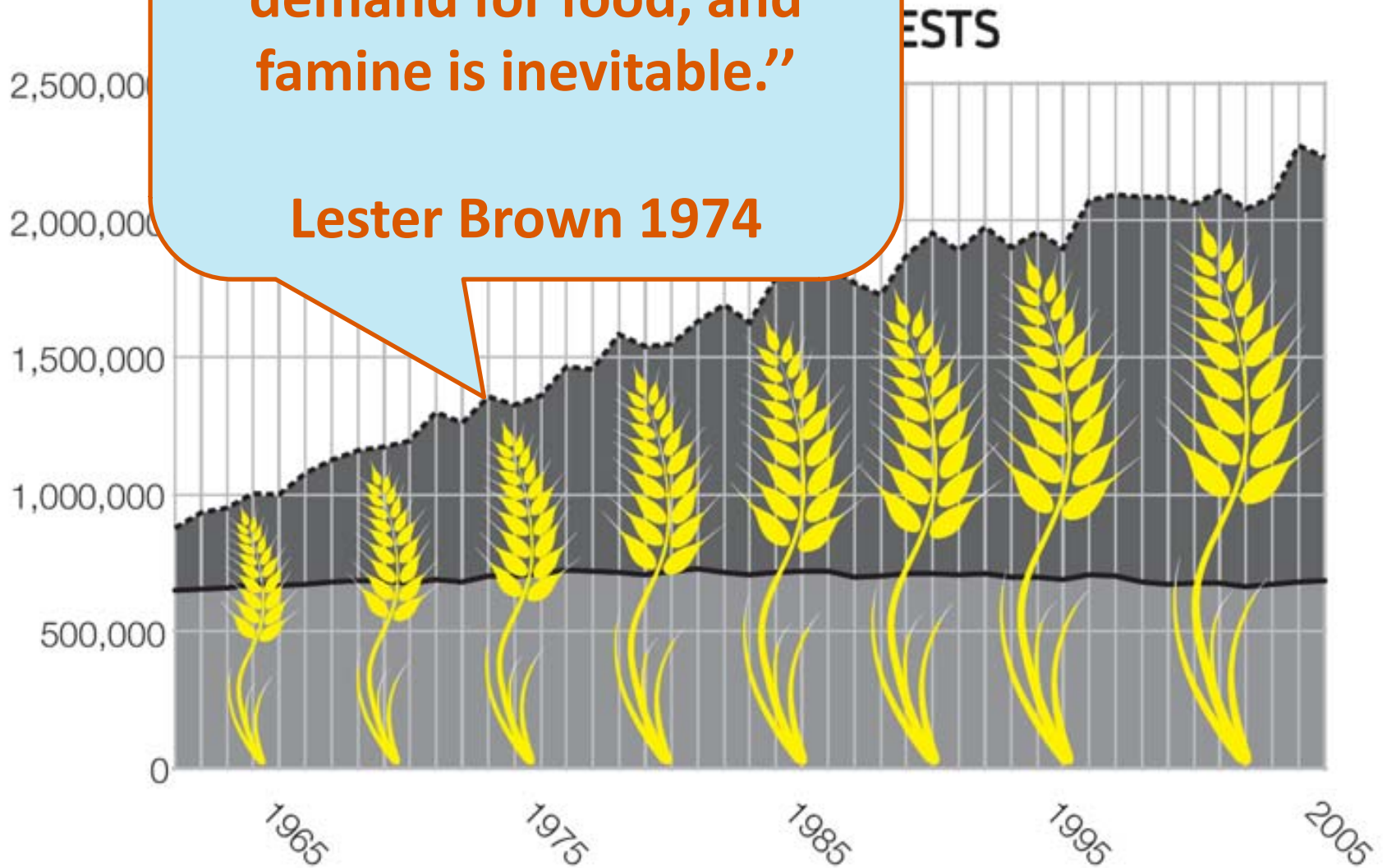


...while crop prices have fallen

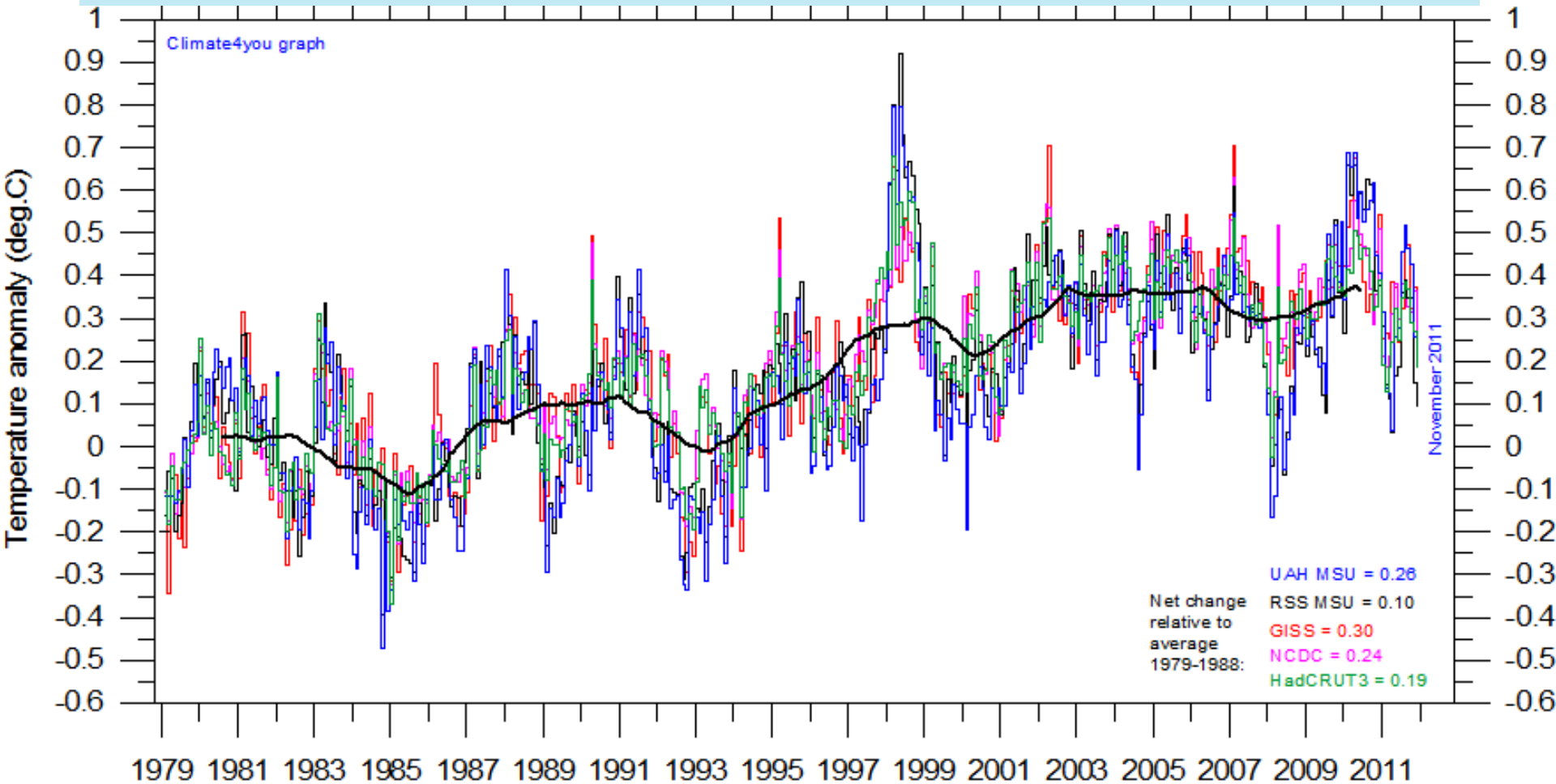


“Farmers can no longer keep up with rising demand for food, and famine is inevitable.”

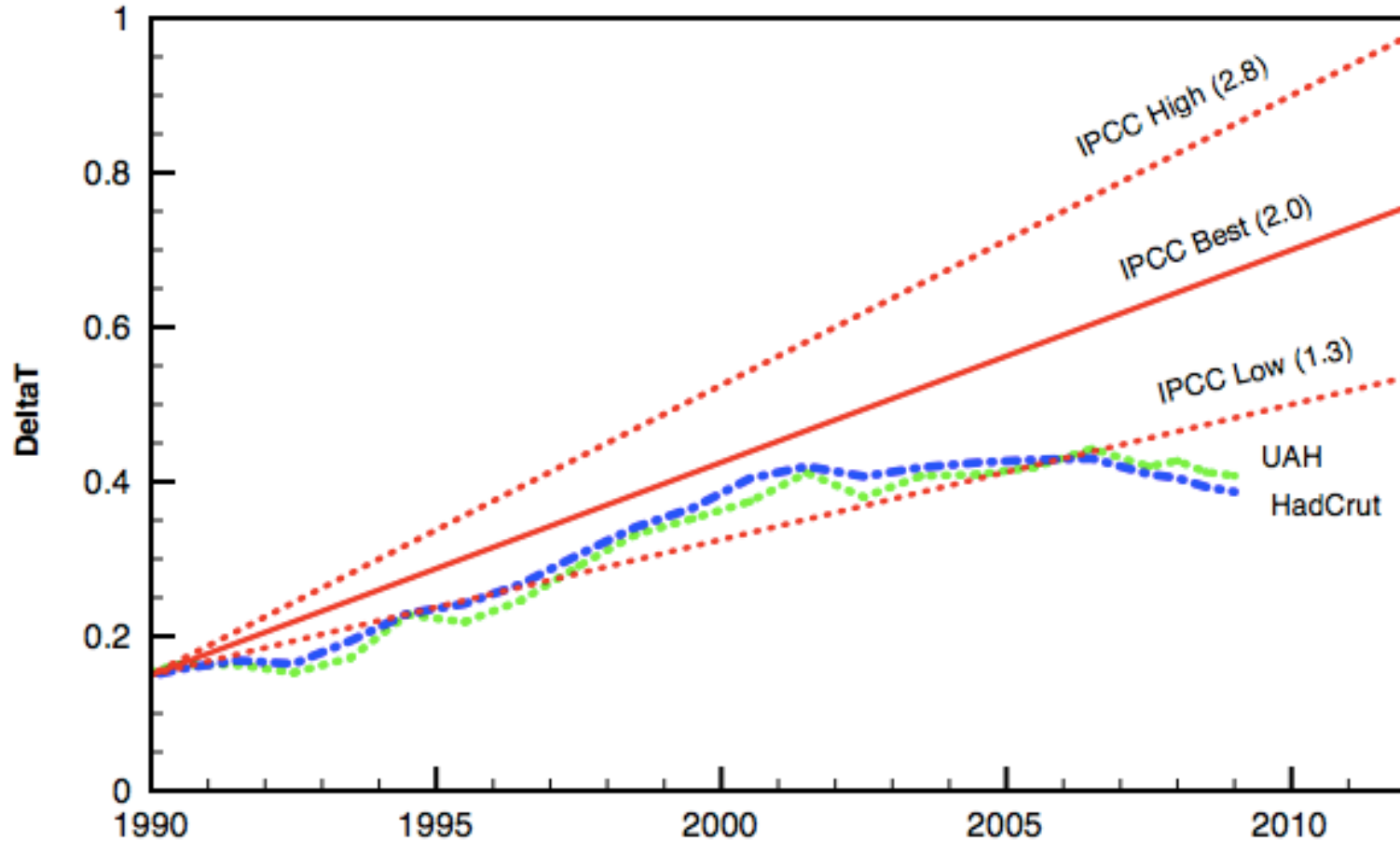
Lester Brown 1974



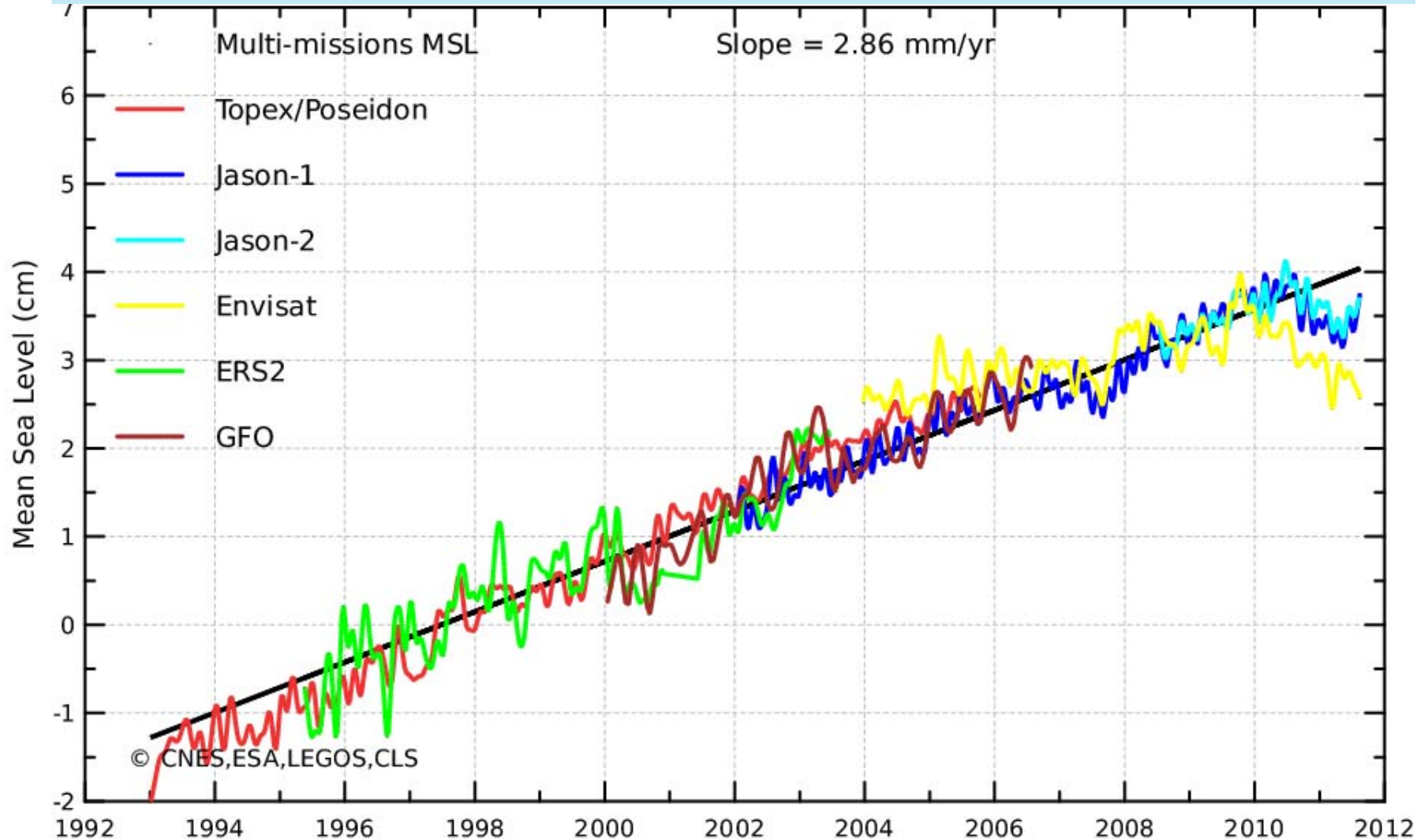
The global temperature has risen...



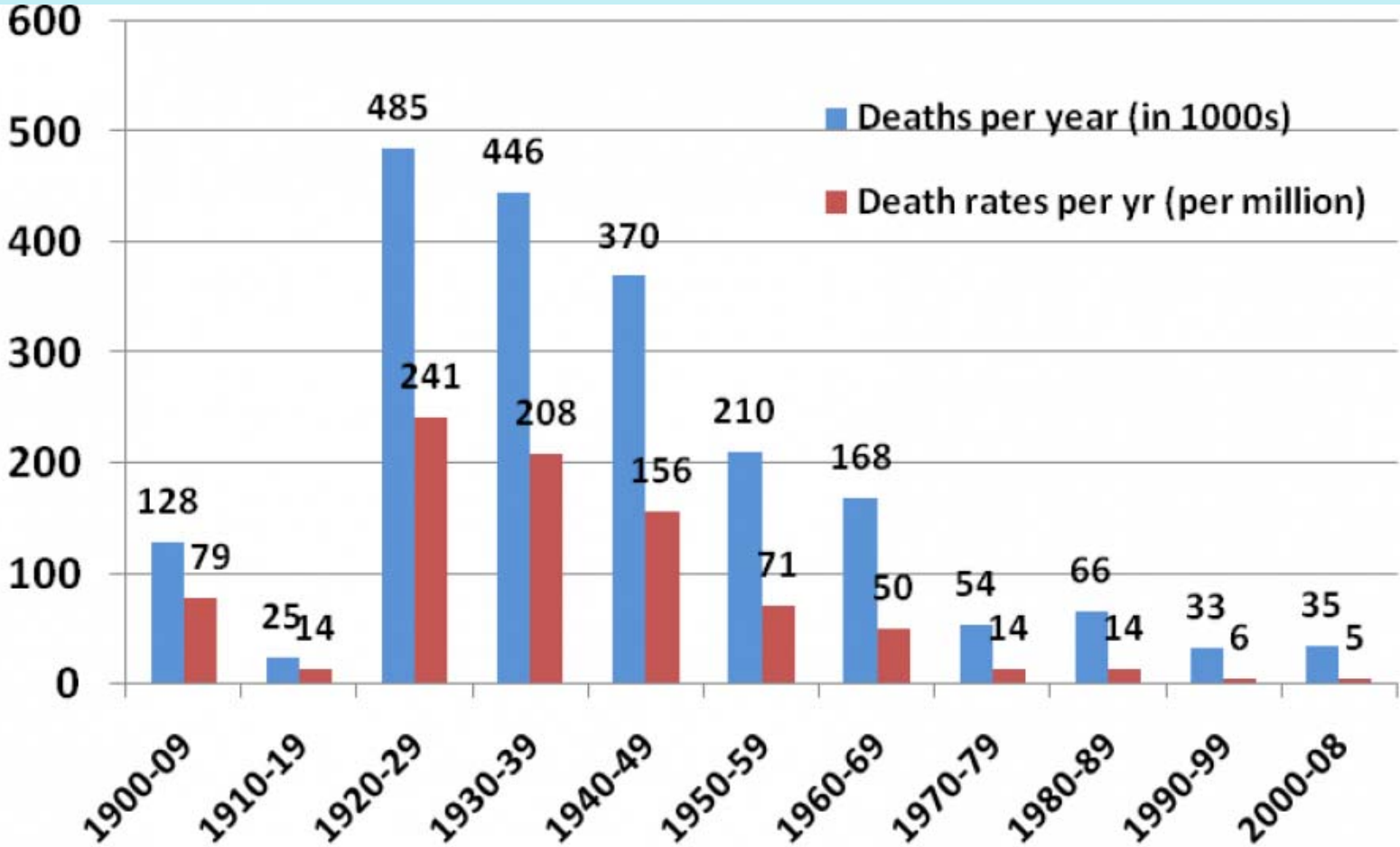
...less than expected



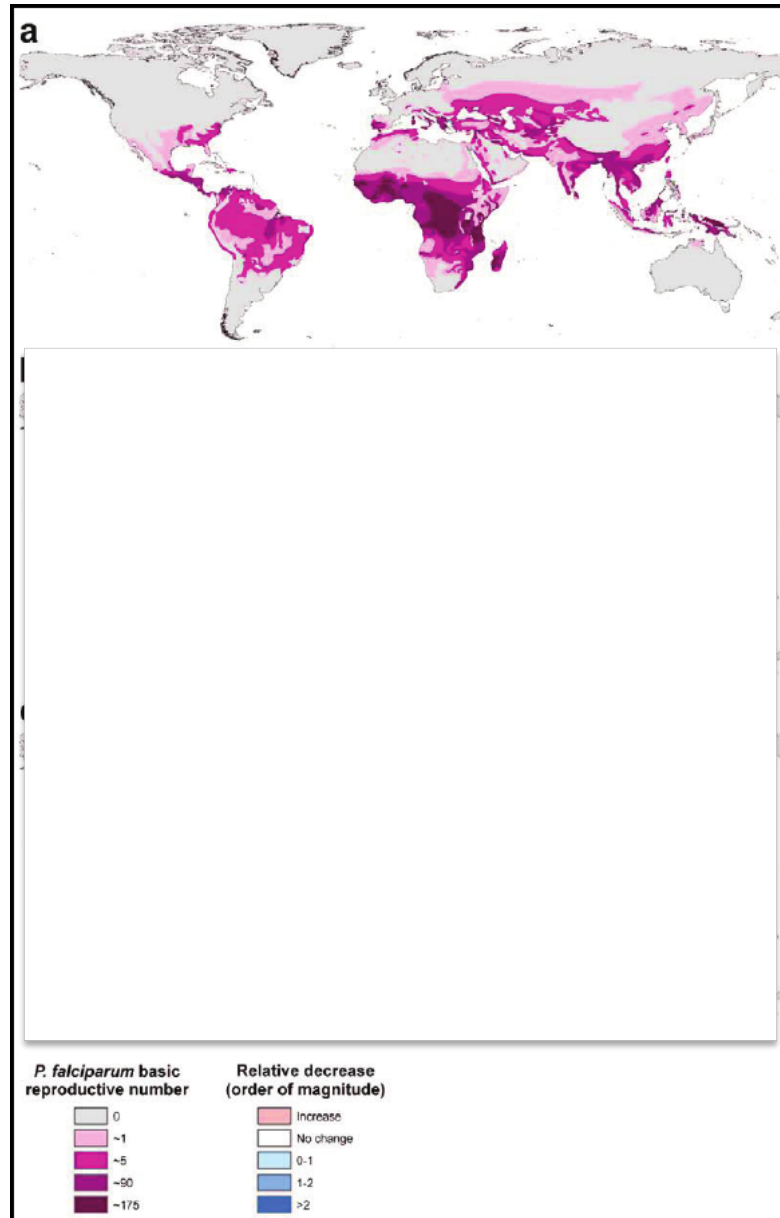
Sea level rise is slow and slowing



Deaths from extreme weather



Malaria

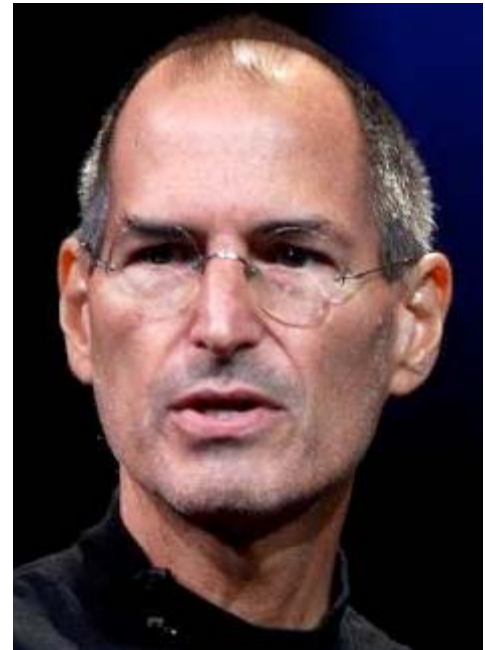
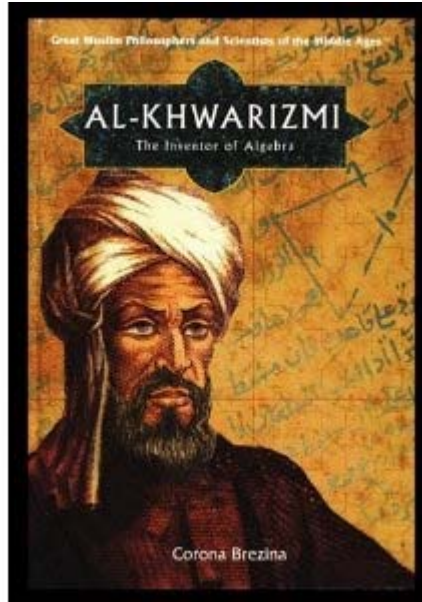
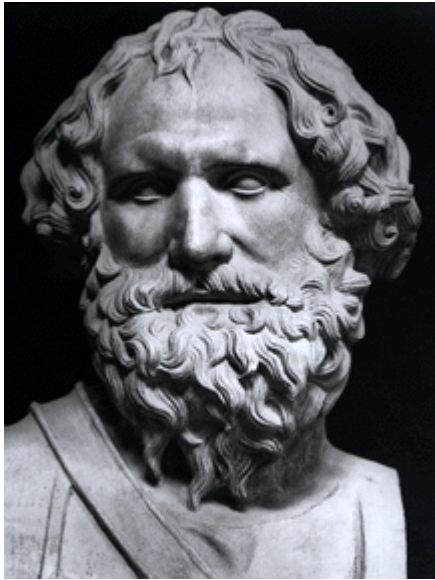


1900

2007

Change

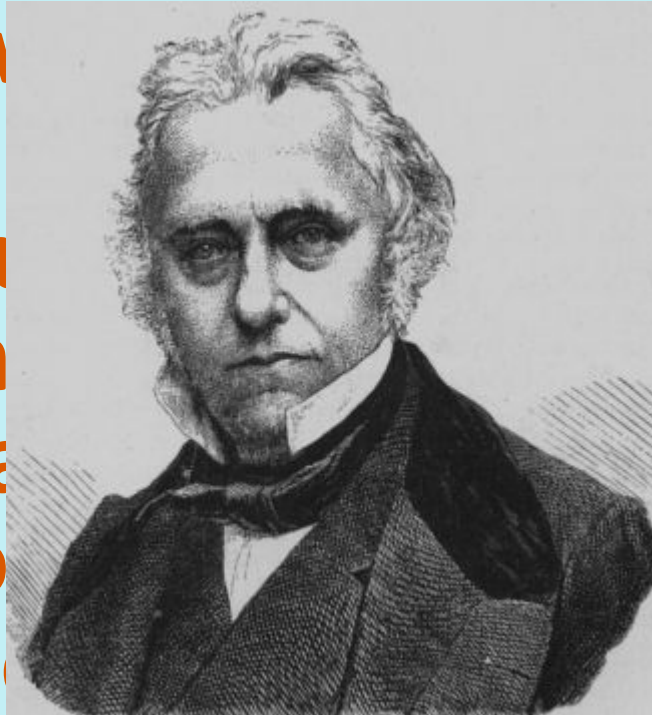
Isn't pessimism necessary?



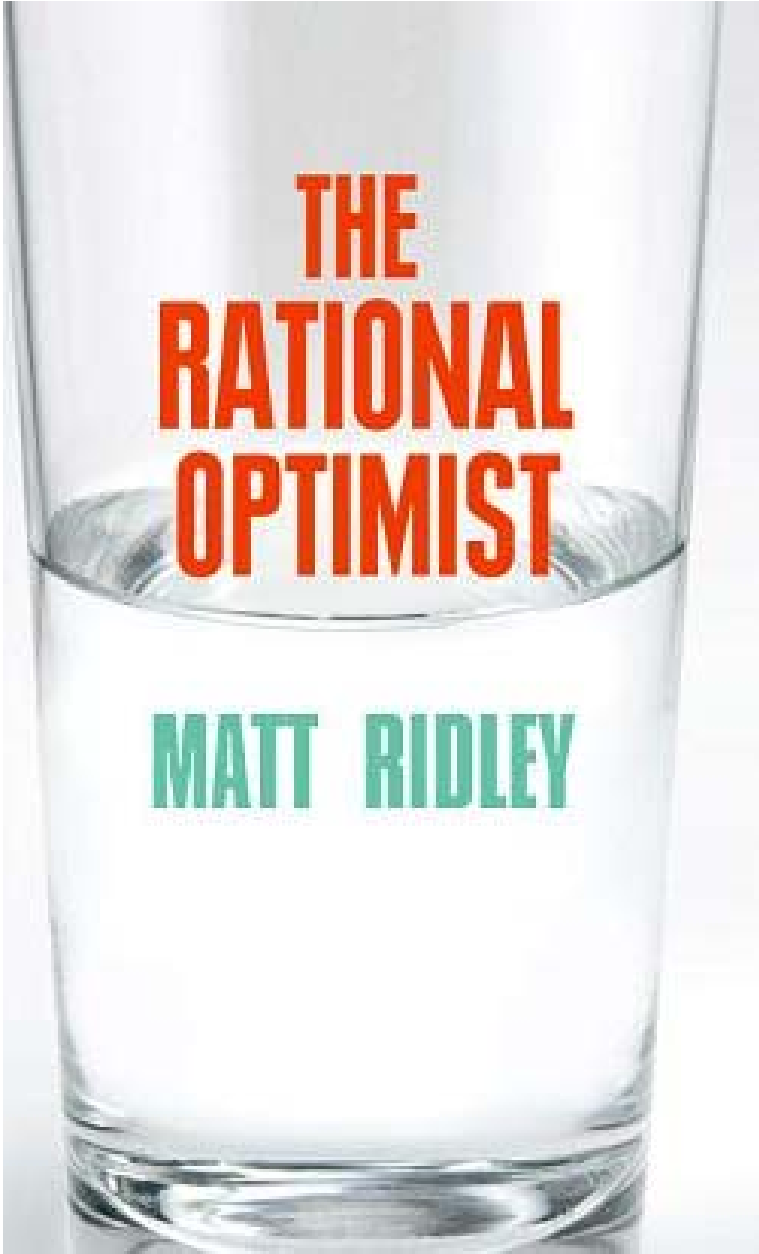
Isn't optimism complacent?



“We cannot absolutely prove that those
are in error who say that we have reached
a turning point in our history. We have seen our
best days, but we have seen no came
before us and we have seen much
apparent reason to believe that the principle is it
that with no other alternative movement
behind us we are facing nothing but
deterioration before us?”







**THE
RATIONAL
OPTIMIST**

MATT RIDLEY