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CLIMATE STRATEGY

# *Trying (in vain) to save the world: Jorgen's story 1970 - 2015*

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Green Economics & Science Based Activism  
BI-Nydalen, May 21<sup>st</sup>, 2015

# Summary: My life as a science based activist

♣ Goal:

Sustainability

*(better: a less unsustainable world)*

♣ Method:

Policy analysis

*based on mathematical models*

*(aka: futures research, scenario analysis)*

♣ Implementation techniques:

Participation

*in real world decision making*

*(business, NGO, public debate)*

Indicators

*showing time trends*

**THE LIMITS TO GROWTH**

Erich Zahn Peter Miling  
**Die Grenzen des Wachstums**

Bericht des Club of Rome\* zur Lage der Menschheit

oro

\*Friedenspreis des Deutschen Buchhandels 1973

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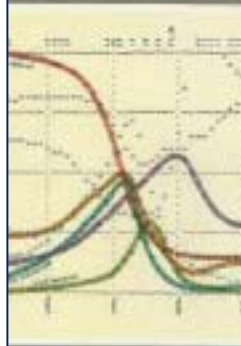
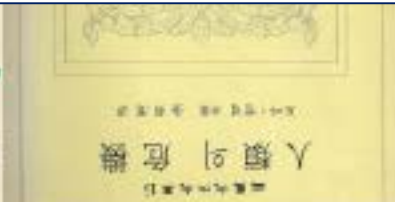
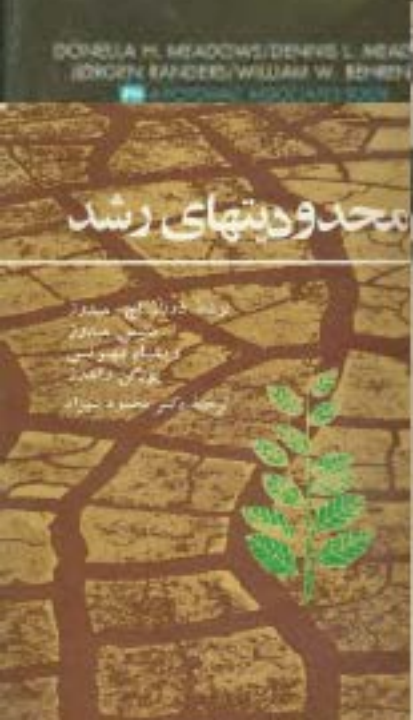
**THE LIMITS TO growth**

Donella H. Meadows  
Dennis L. Meadows  
Jørgen Randers  
William W. Behrens III

A Report for THE CLUB OF ROME'S Project on the Predicament of Mankind

A POTOMAC ASSOCIATES BOOK \$2.75

The Limits to Growth (LTG):  
Twelve scenarios for the 21st century, warning against growth beyond the carrying capacity of small planet Earth.



# My eight attempts at saving the world 1 of 2

- 1.** Explain the global problem (and expect spontaneous behavior change)  
*1970-74: MIT, Cambridge, Mass*
  
- 2.** Illustrate resource constraints at the industry level (and give long term policy advice)  
*1975-80: Resource Policy Group, Oslo*
  
- 3.** Establish a platform for the continuation of the war (in some twenty years)  
*1980-89: BI, Oslo*
  
- 4.** Secure the financial base necessary to remain an independent voice  
*1990-93: Various corporations, Scandinavia*

# My eight attempts at saving the world 2 of 2

- 5.** Organise the sustainability crowd into a strong voice  
*1994-99: WWF International, Geneva*
- 6.** Assist/cajole leading multinational corporations towards sustainability  
*2000-05: US, Europe, Australia, South Africa*
- 7.** Fight for Norwegian climate gas reductions  
*2005-10: Norway*
- 8.** Describe what will happen if people do not follow my advice  
*2011-14: The 2052-book, five continents*

A Global Forecast  
for the Next Forty Years



Jorgen Randers

A REPORT TO THE CLUB OF ROME  
COMMEMORATING THE 40TH ANNIVERSARY OF  
*The Limits to Growth*

2052 – A Global  
Forecast for the Next  
Forty Years

**A forecast of global  
development to 2052,  
predicting that the world  
will follow the *LTG*  
pollution scenario  
See [www.2052.info](http://www.2052.info)**



# My next attempt at saving the world

**9.** Push policy with a short term advantage for a majority of voters.

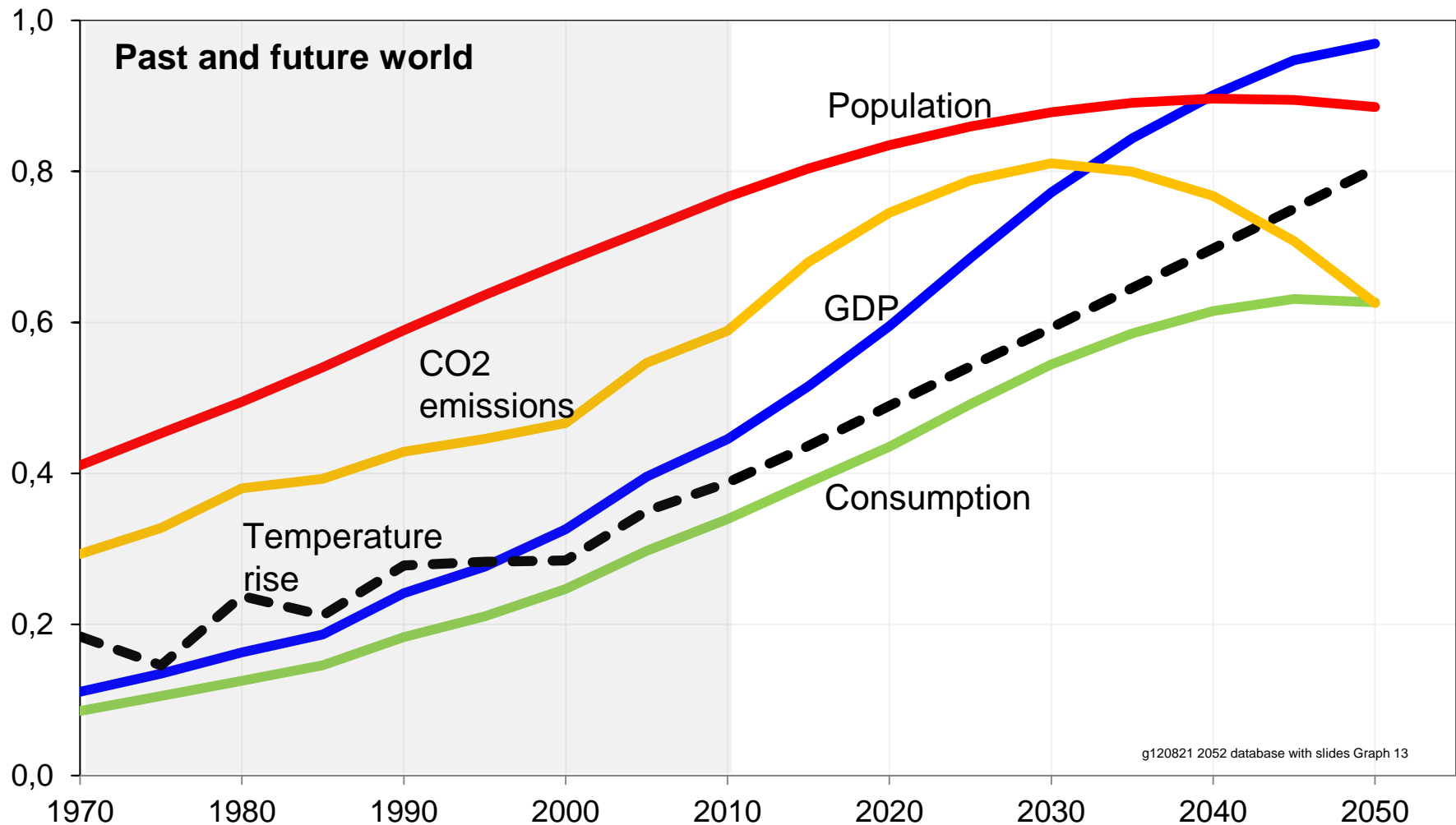
For example “Green growth” and “More vacation”  
*2014-?: Ever talking and travelling professor emeritus, the world*

# It is time to turn!





# Central elements of the 2052 forecast



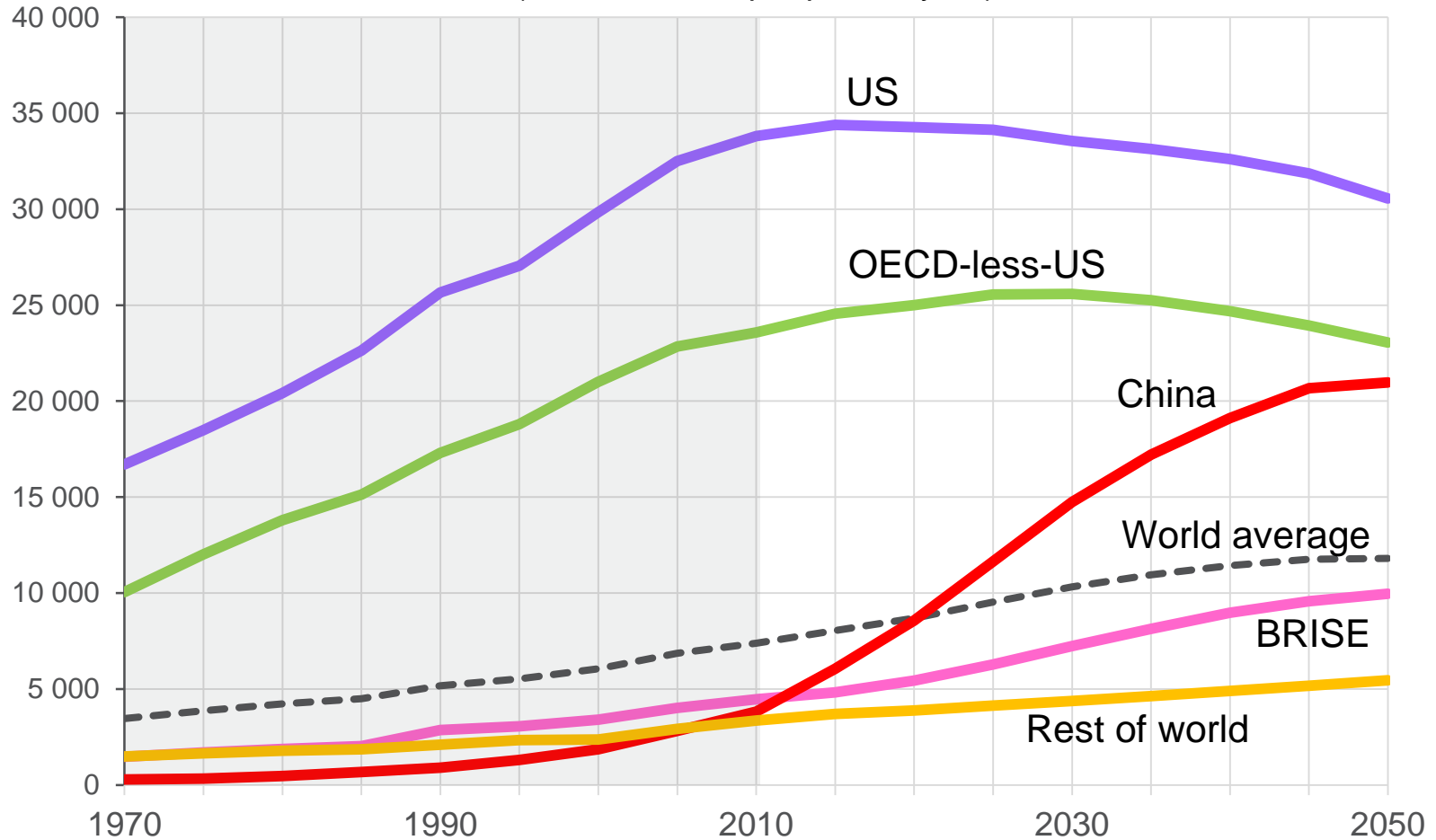
g120821 2052 database with slides Graph 13

Max values **9 Gp**, **150 G\$/yr**, **50 GtCO2/yr**, **150 G\$/yr**, **2.5 deg C**

Figure 9-1a: Past and future World - State of Affairs -1970 to 2050

# There will be huge regional differences

After-tax income per person  
(in 2005 PPP \$ per person-year)



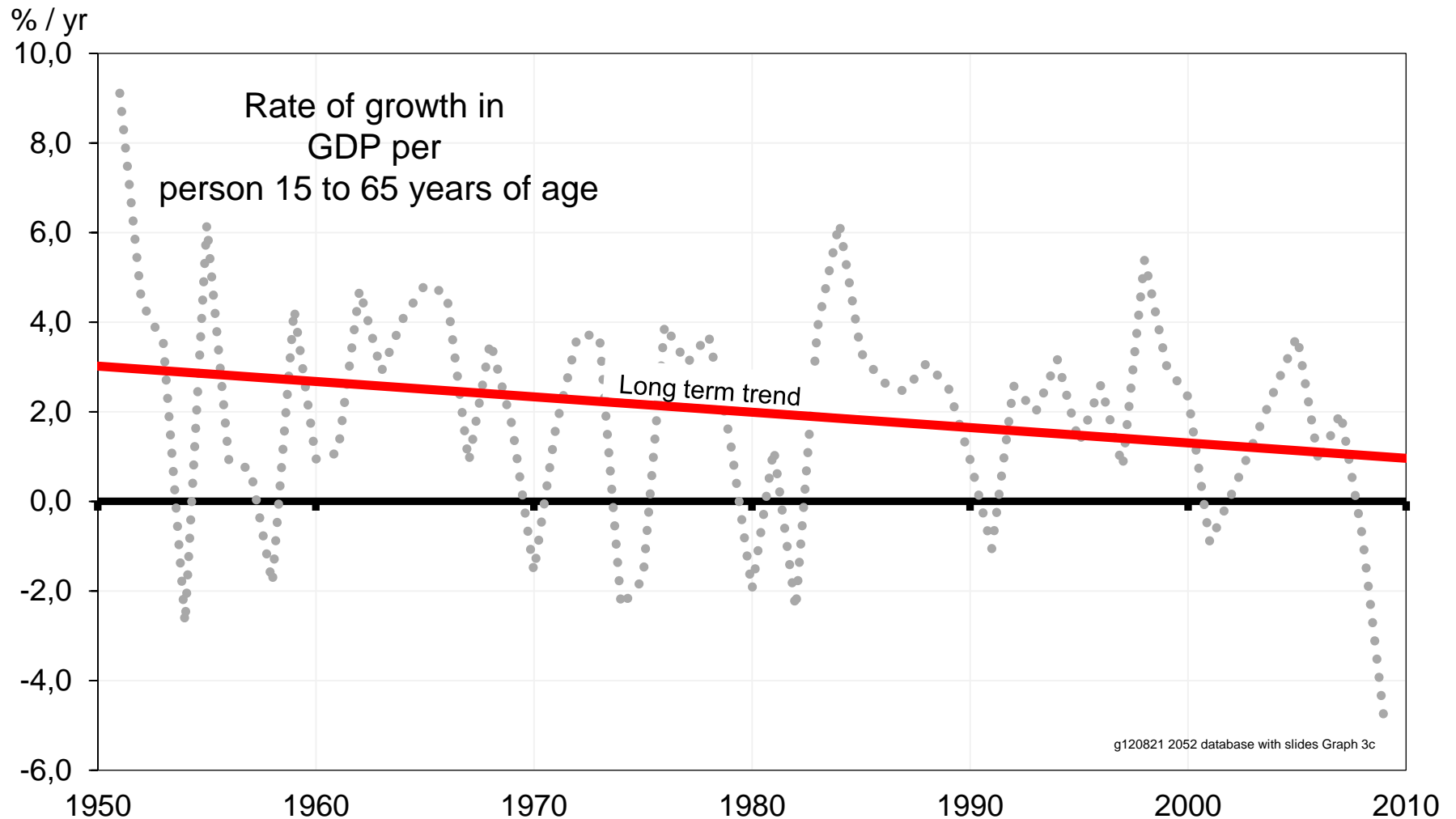
# Main conclusions from the 2052 forecast

♣ World population and economy will grow more slowly towards 2052 than most people expect  
- but still fast enough to trigger a climate crisis

♣ Consumption will stagnate because society will have to spend ever more labour and capital on repair and adaptation

♣ The short-term nature of man  
- reflected in the short term focus of democracy and capitalism -  
is the root cause of this development

# Slowing growth in total productivity - USA



# Fertility decline in EU-15 – 1950 to 2010

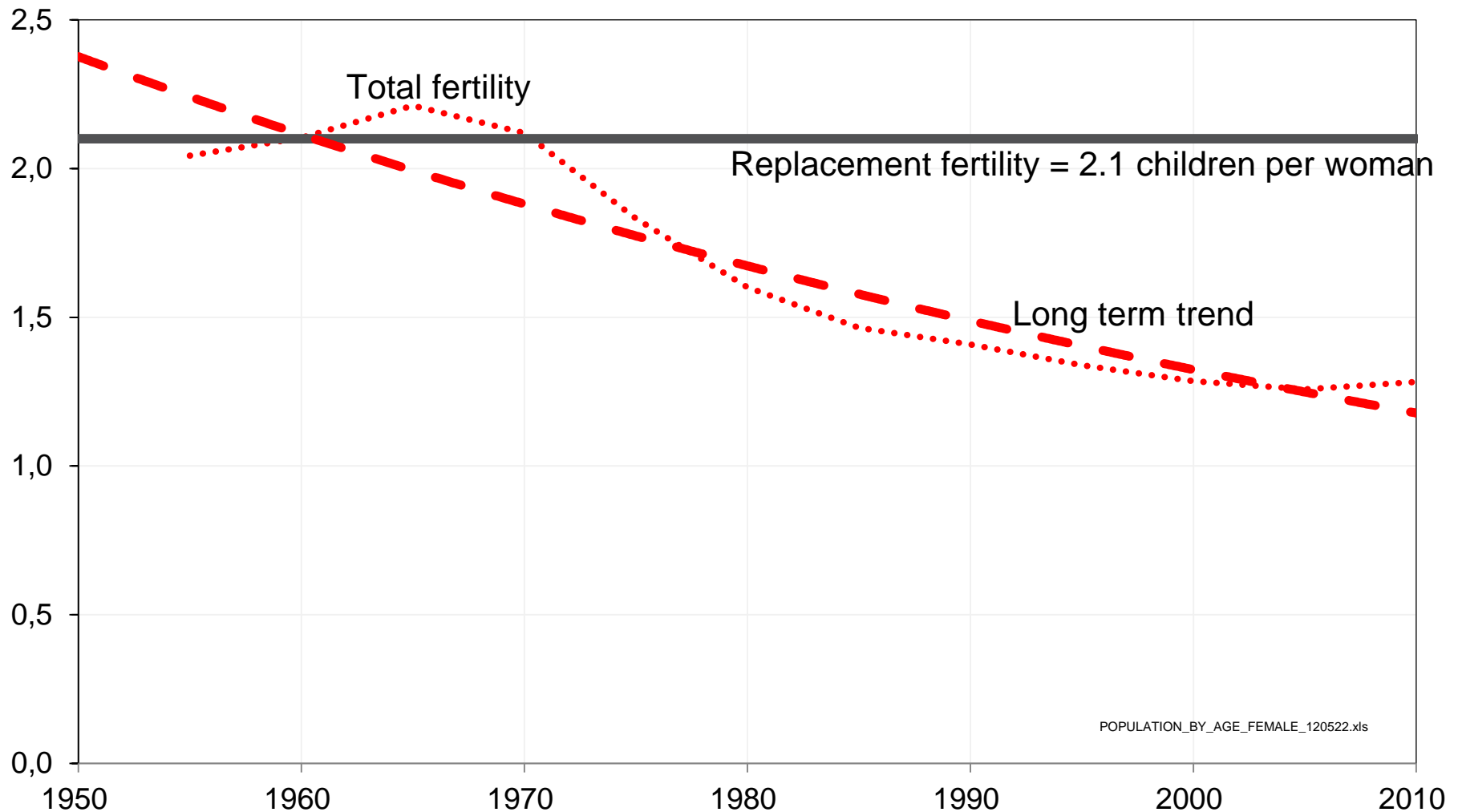


Figure A4-1 Total Fertility – EU15 1950 to 2010

Definition: Total fertility = Number of children per woman during reproductive age