



SVENSKA ARALSJÖSÄLLSKAPET

Swedish Aral Sea Society



12. The dilemmas of our economic system

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1. Economic systems

Economic systems

- Planned economy (e.g. Soviet economy)
- Capitalism (e.g. USA economy)
- Mixed economy (the state has a mixed role)
- Market economy
- Family economy

It is useful to consider which parameters to include in a budget. Not only money but also e.g. CO2 emissions, biodiversity, health etc.



Private property



Limited government



Freedom of choice



Motive of self-interest



Competition



System of markets and prices

CHARACTERISTICS OF A MARKET ECONOMY

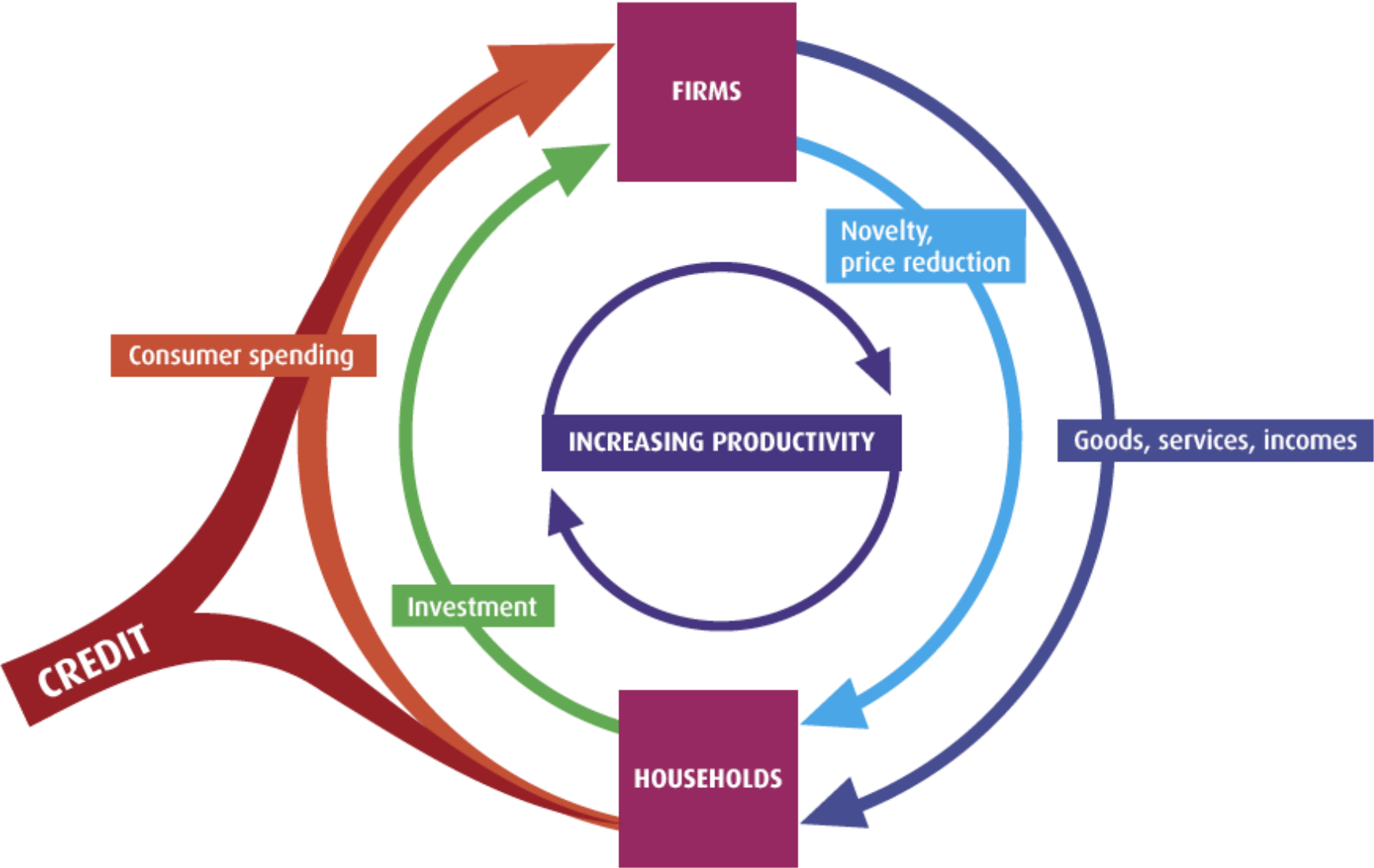
“The neoliberal projektet”

(Ross Jackson, 2012)

- Started with Margret Thatcher and Ronald Reagan 1980.
- Supports big business with deregulation, reduced taxes and privatisation.
- Leads to increased consumption and a loan-based economy, as well as uneven distribution of income and wealth.
- Leads to requirements of increased progress marginals and short term economy.
- Banks: trading with derivatives and speculation economy

Figure 18 **The 'Engine of Growth' in Market Economies**

Source: Tim Jackson
Prosperity without growth



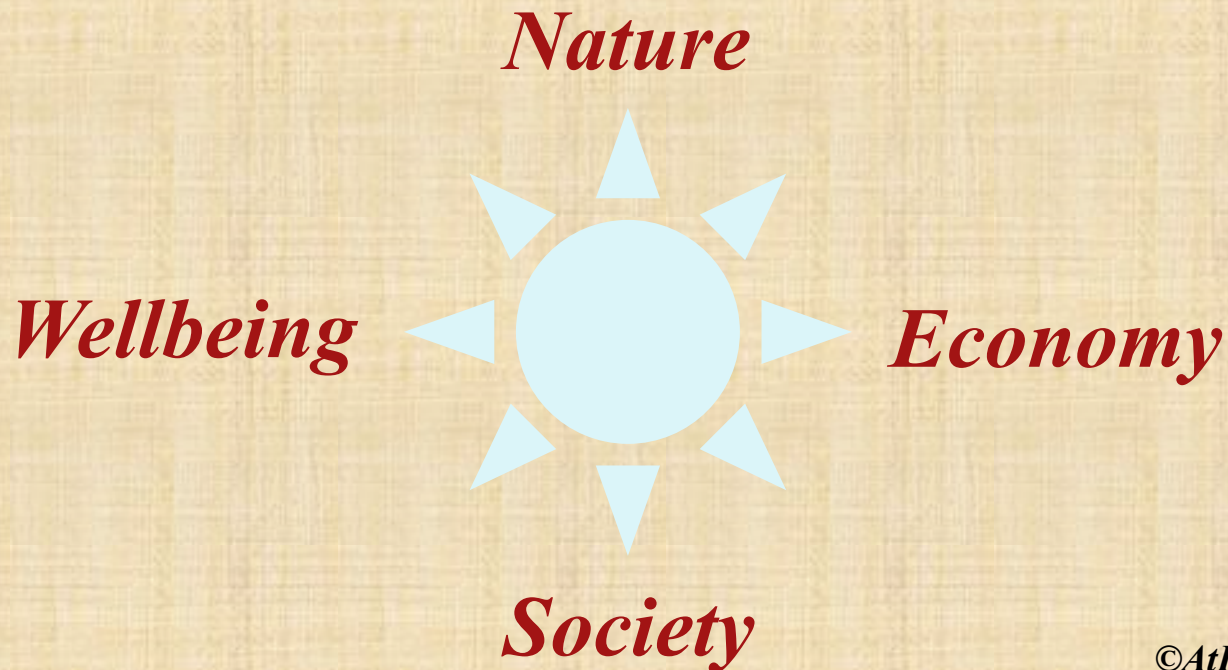
The frames of the system

- The classical system description has **3 dimensions** - ecological, social and economic dimensions, **the triple bottom line**.
- The compass with **4 dimensions**, is better, especially for the social dimension.

The Compass:

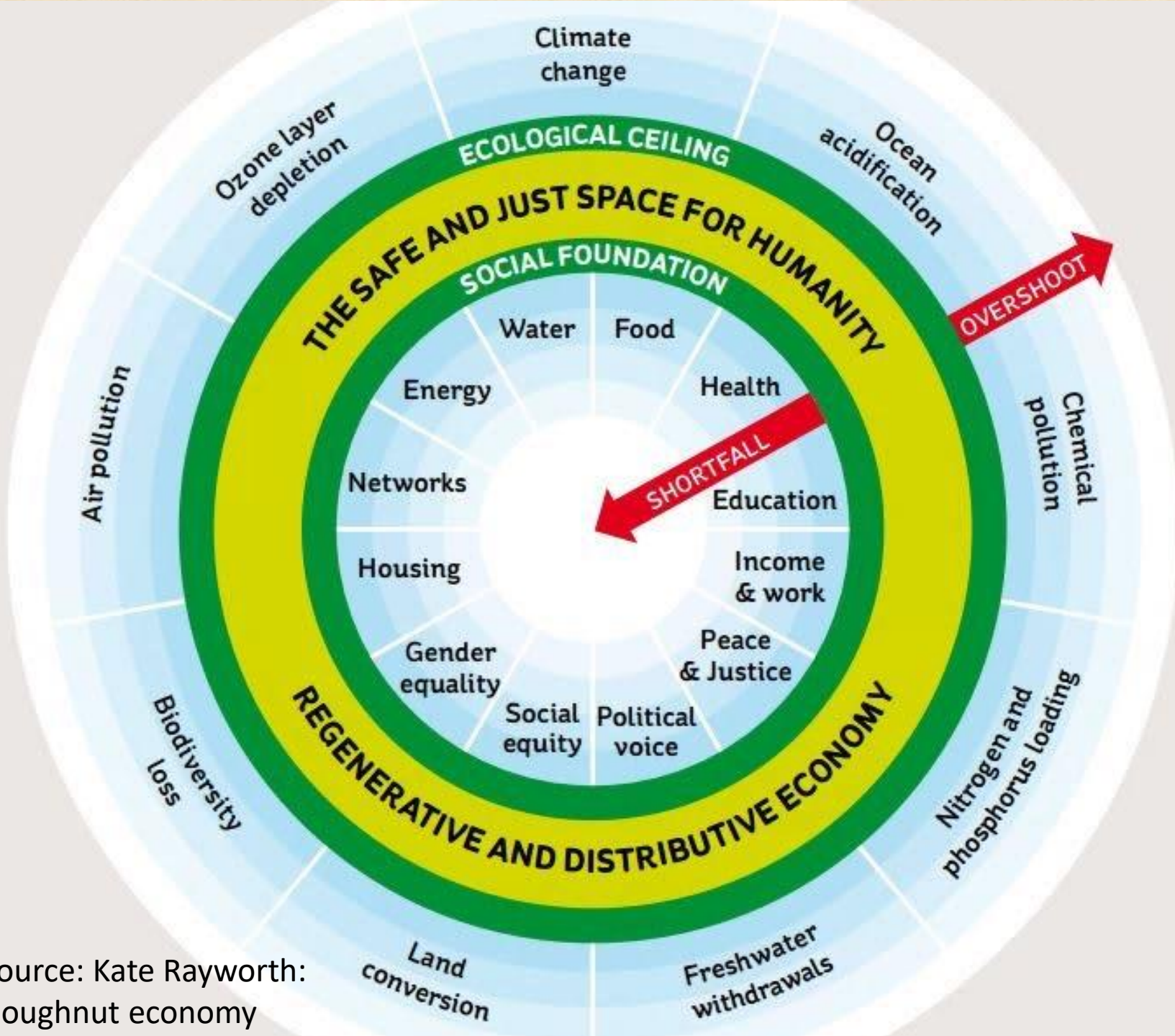
A Sustainability Framework

Alan AtKisson, 2004



©AtKisson, Inc.

Uses: Introduce sustainability ... assess it ...
develop sustainability indicators ... communicate results ...



Source: Kate Rayworth: Doughnut economy

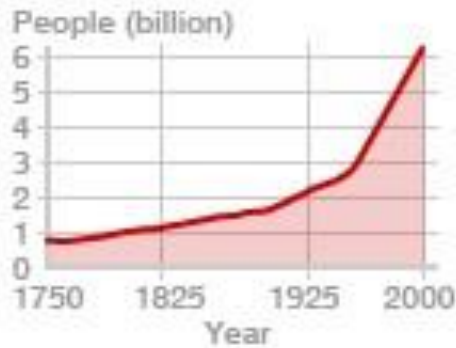
2. Economic growth

Economic growth

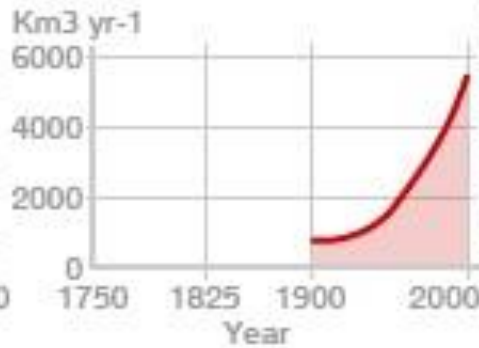
- The economy in the world, as GDP, has increased ca 14 times from 1900 to 2000, and is still increasing.
- BNP per capita has increased ca 4 times during this period.
- The increase is measured in procent. In absolute terms 3 % means a doubling after 24 years (exponential growth).
- Economic growth has been and still is the most important policy in all countries since (about) 1950s.
- Economic growth is strongly correlated with flow of resources, both for products and services.
- Growth can not continue forever on a limited planet!

Exponential Growth

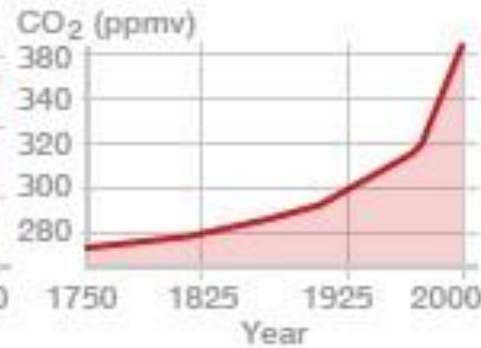
POPULATION



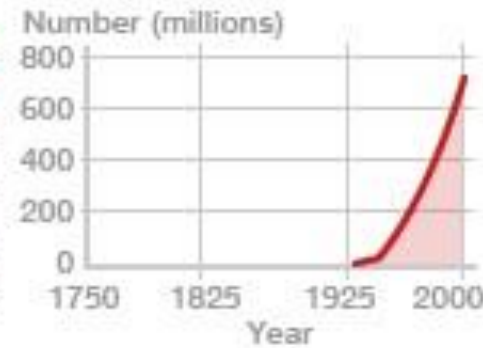
WATER USE



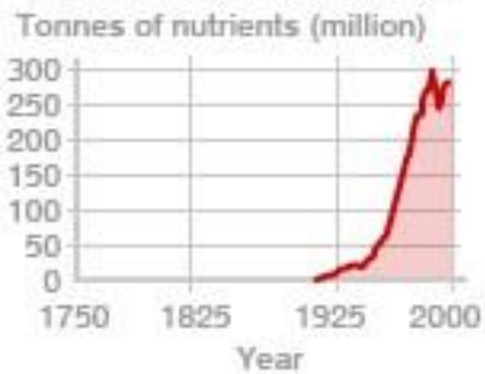
CO₂ CONCENTRATION



NUMBER OF CARS



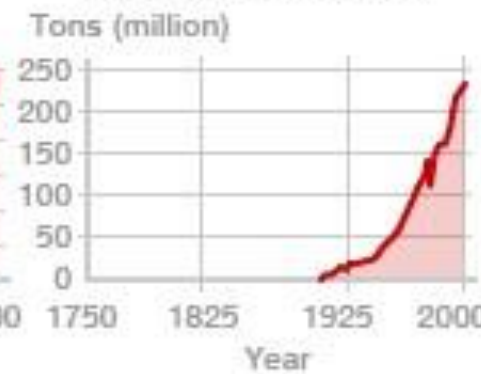
FERTILISER CONSUMPTION



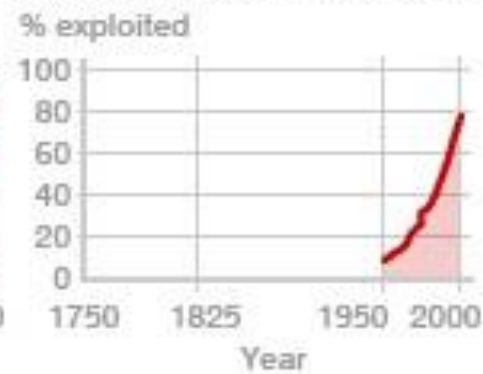
LOSS OF RAINFOREST



PAPER CONSUMPTION



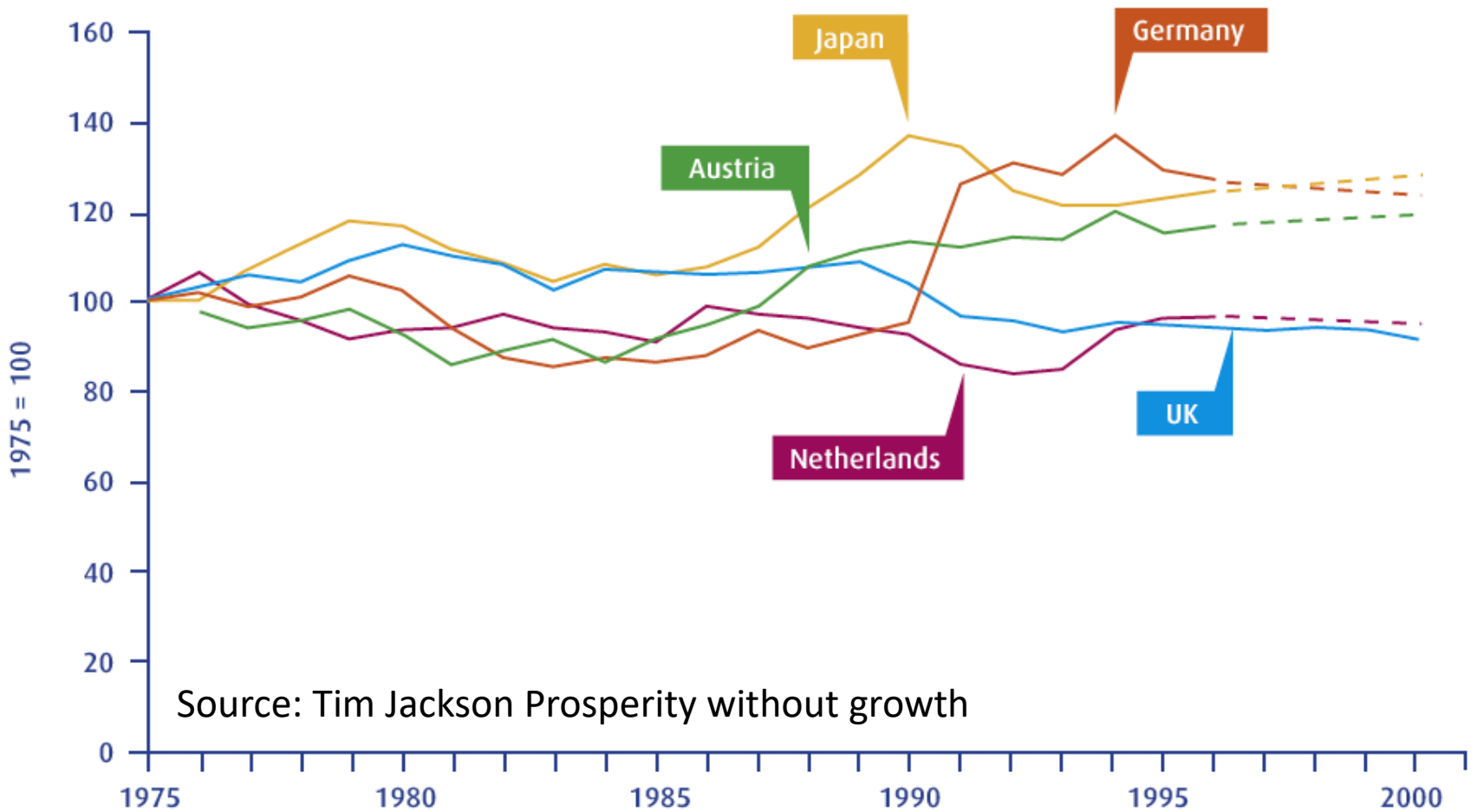
FISHERIES FULLY EXPLOITED



SOURCE: International Geosphere-Biosphere Programme (Steffen et al 2004)

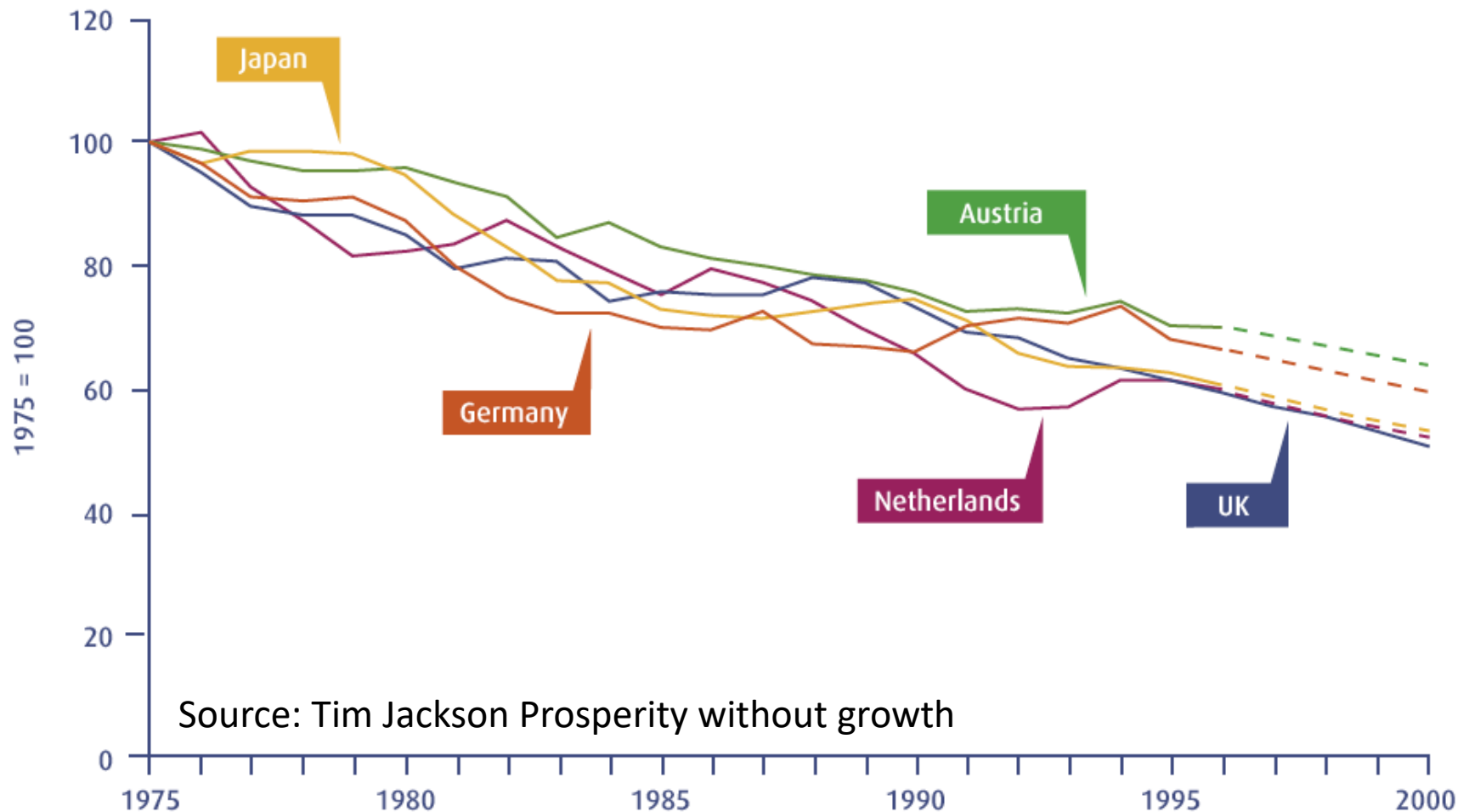
Decoupling ?

Figure 15 **Direct Material Consumption in OECD Countries: 1975–2000**¹⁰



Relative decoupling

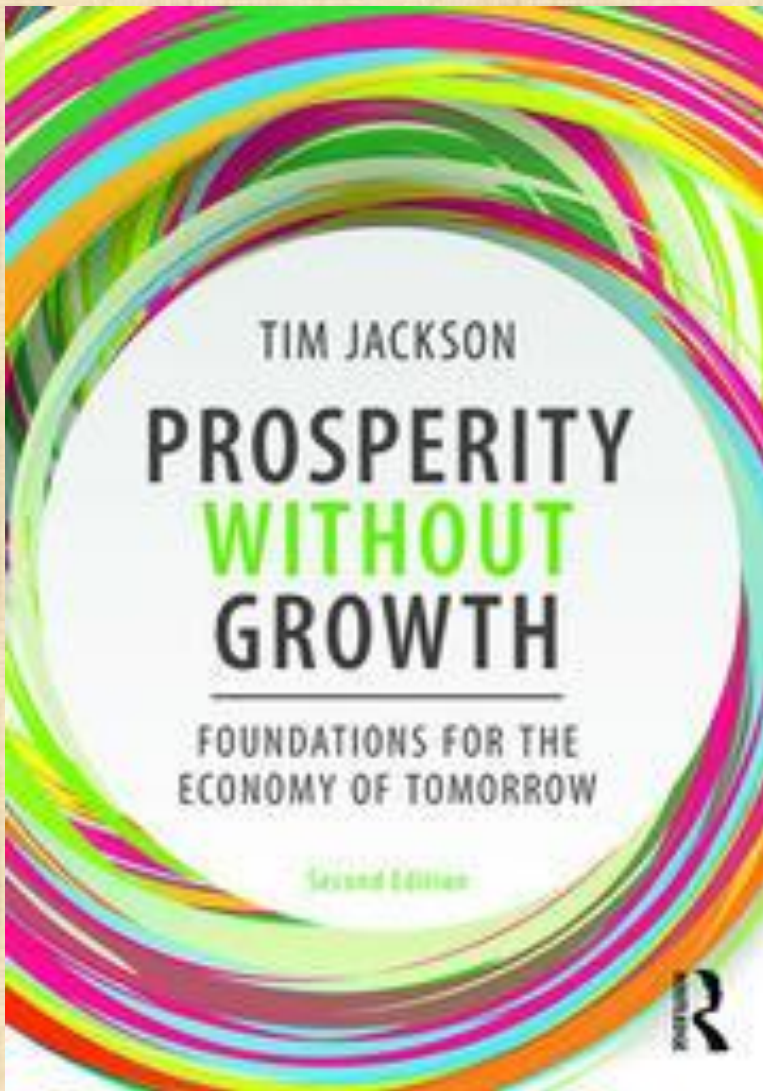
Figure 12 **Relative Decoupling in OECD countries 1975–2000**⁷



The rebound effect

Relative decoupling is counteracted by a fast increase in consumption.

Absolute decoupling we did not see so far.



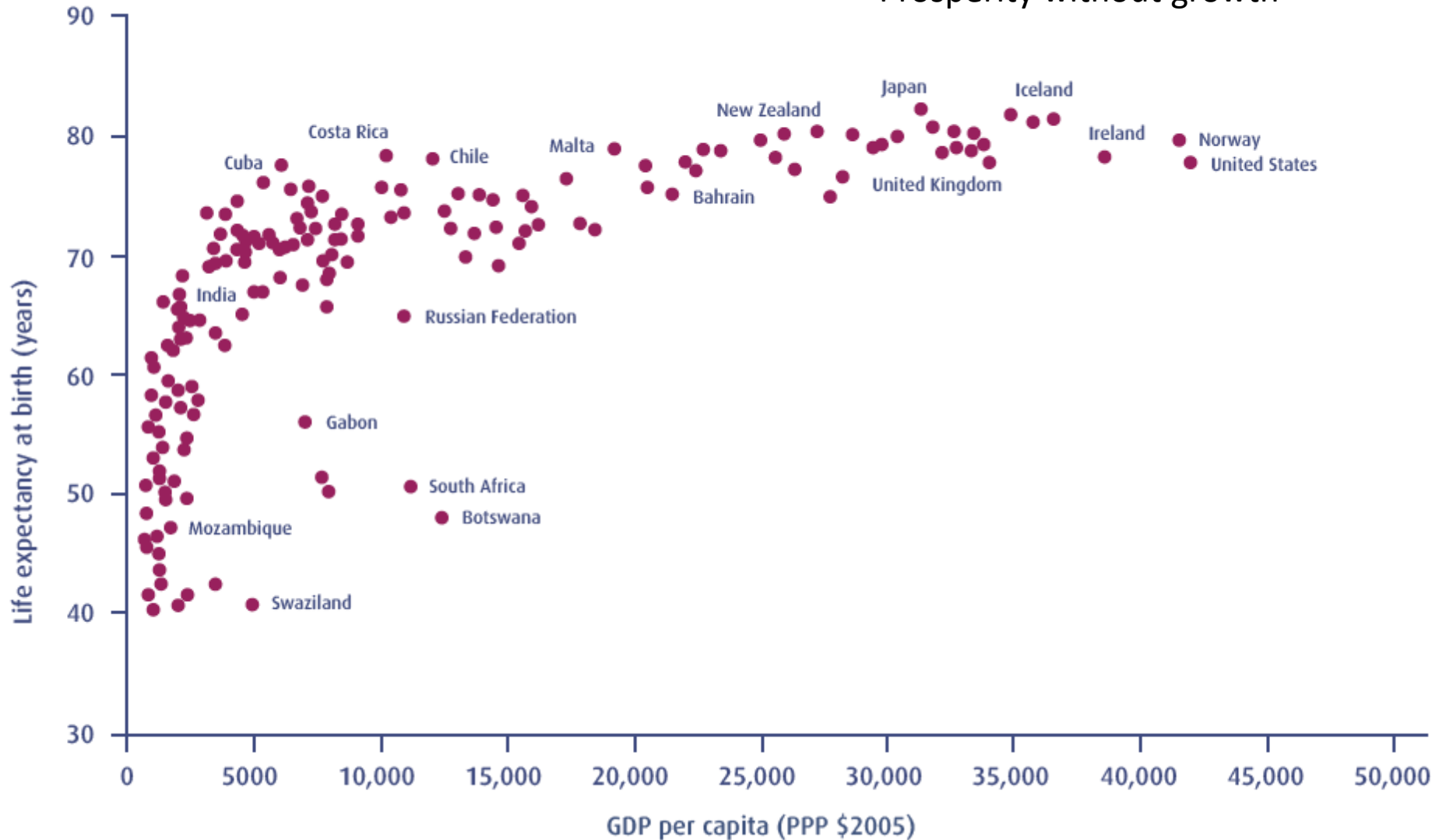
First released as a report
by the Sustainable
Development
Commission in 2009
By [Tim Jackson](#)

2nd Edition Copyright 2017
Prosperity without Growth
Foundations for the Economy of Tomorrow

Life expectancy vs income

Figure 8 **Life expectancy at birth vs average annual income**¹⁶

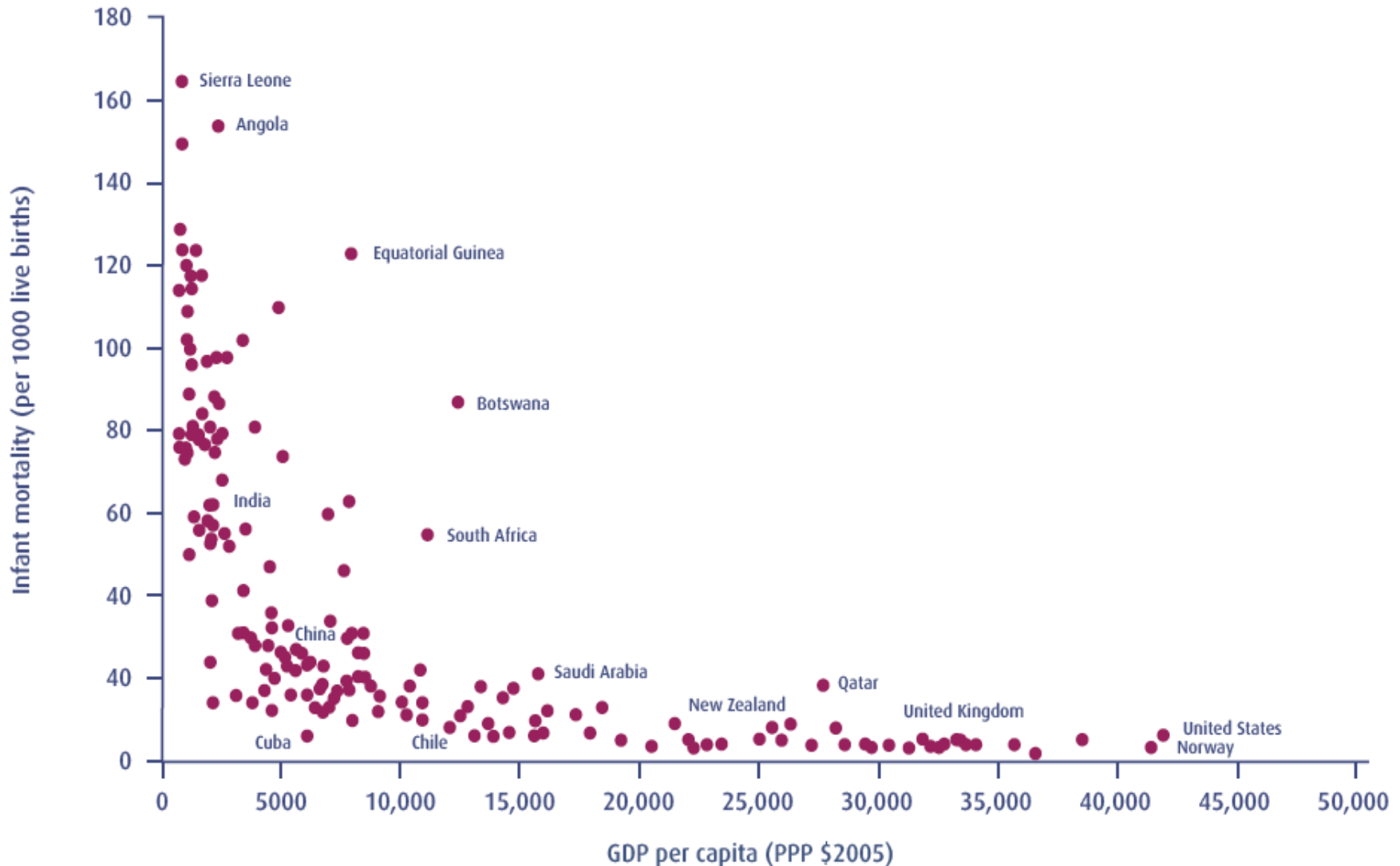
Source: Tim Jackson
Prosperity without growth



Infant mortality vs income

Figure 9 Infant mortality vs per capita income¹⁷

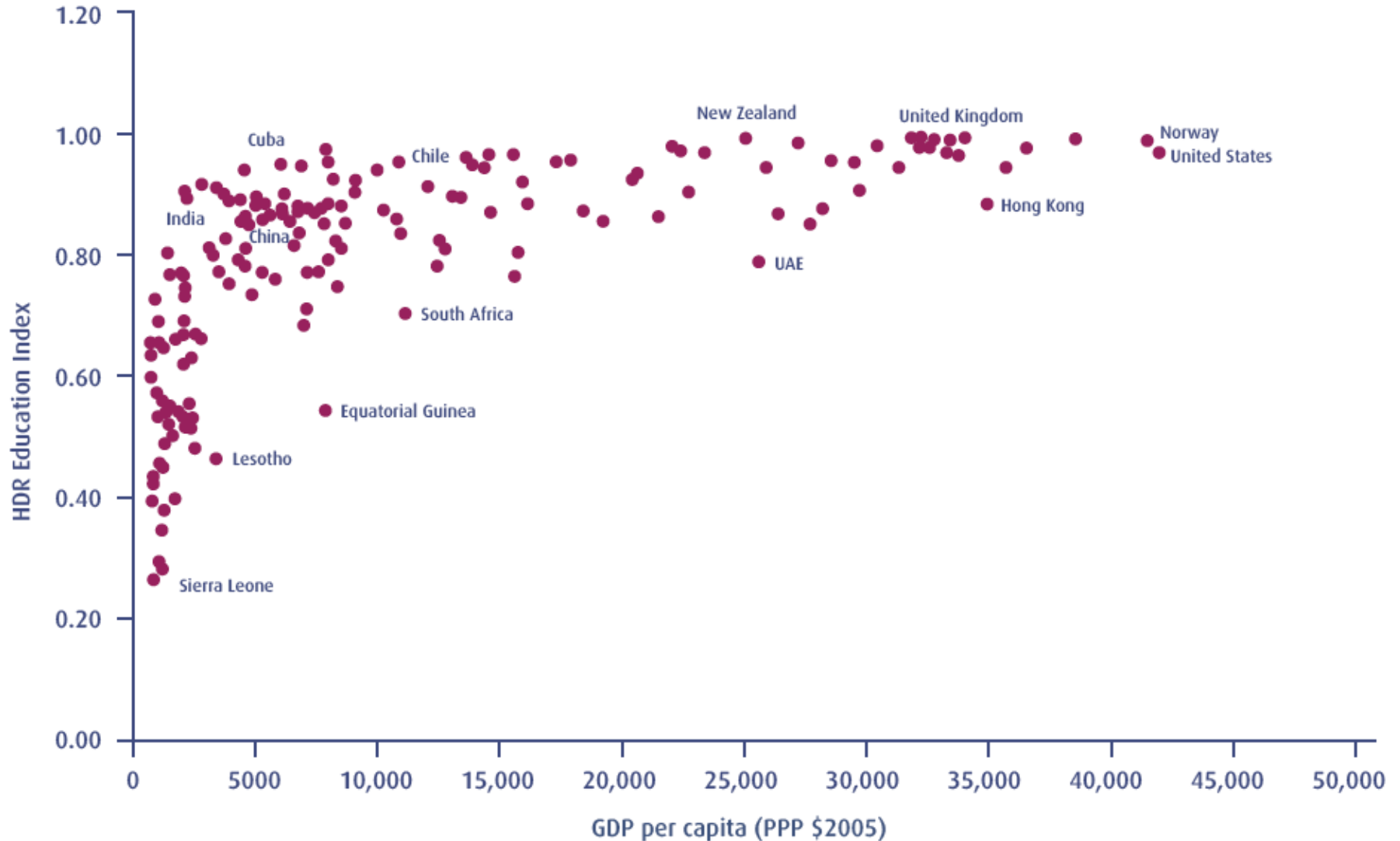
Source: Tim Jackson Prosperity without growth



Education vs income

Figure 10 Participation in education vs income per capita¹⁸

Source: Tim Jackson
Prosperity without growth



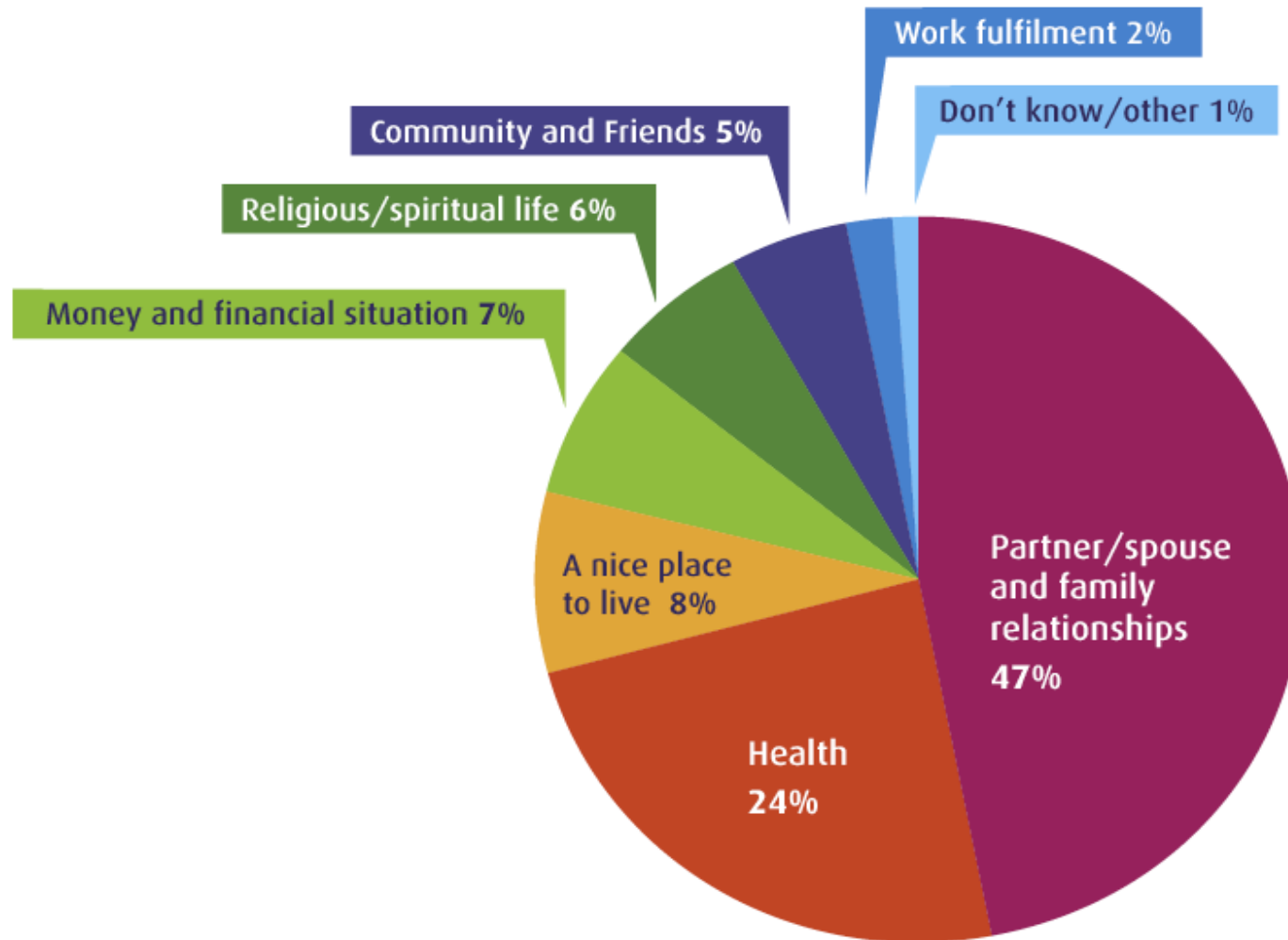
Happiness vs income

Figure 6 Happiness and average annual income¹⁵

Source: Tim Jackson Prosperity without growth



Figure 5 **Factors influencing subjective wellbeing (happiness)**⁷



Source: Tim Jackson Prosperity without growth

**Why then do
we want to be
richer instead
of happier?**

Alternatives to Growth Economy

- Green growth
- Degrowth
- Postgrowth
- etc
- Personal growth and community development

Ref. Post Growth: Life after capitalism Tim Jackson 2021

3. Measures of progress

How to measure the progress of a country?

- Today GDP (Gross Domestic Product) is the norm. But it only measures the total economic activities, good as well as bad.
- We need a measure of welfare, happiness or development.
- Examples include Genuin Progress Indicator, Social Development Index, others.

World Happiness Report 2023

<https://worldhappiness.report/>

- Trends in Conceptions of Progress and Well-Being
- Chapter three of the World Happiness Report 2022 surveys the growing interest in the measurement and understanding of happiness and what makes societies happy. Interest in happiness and subjective well-being is rising, while interest in income and consumption is falling.



If only
economy
matters

Dimensions of development

| Dimensions | Means | Goals |
|-------------------|--------------|--------------|
| Human rights | + | +++ |
| Environment | + | ++ |
| Governance | ++ | + |
| Economic growth | +++ | 0 |
| Education | ++ | + |
| Health | + | ++ |
| Culture | + | +++ |

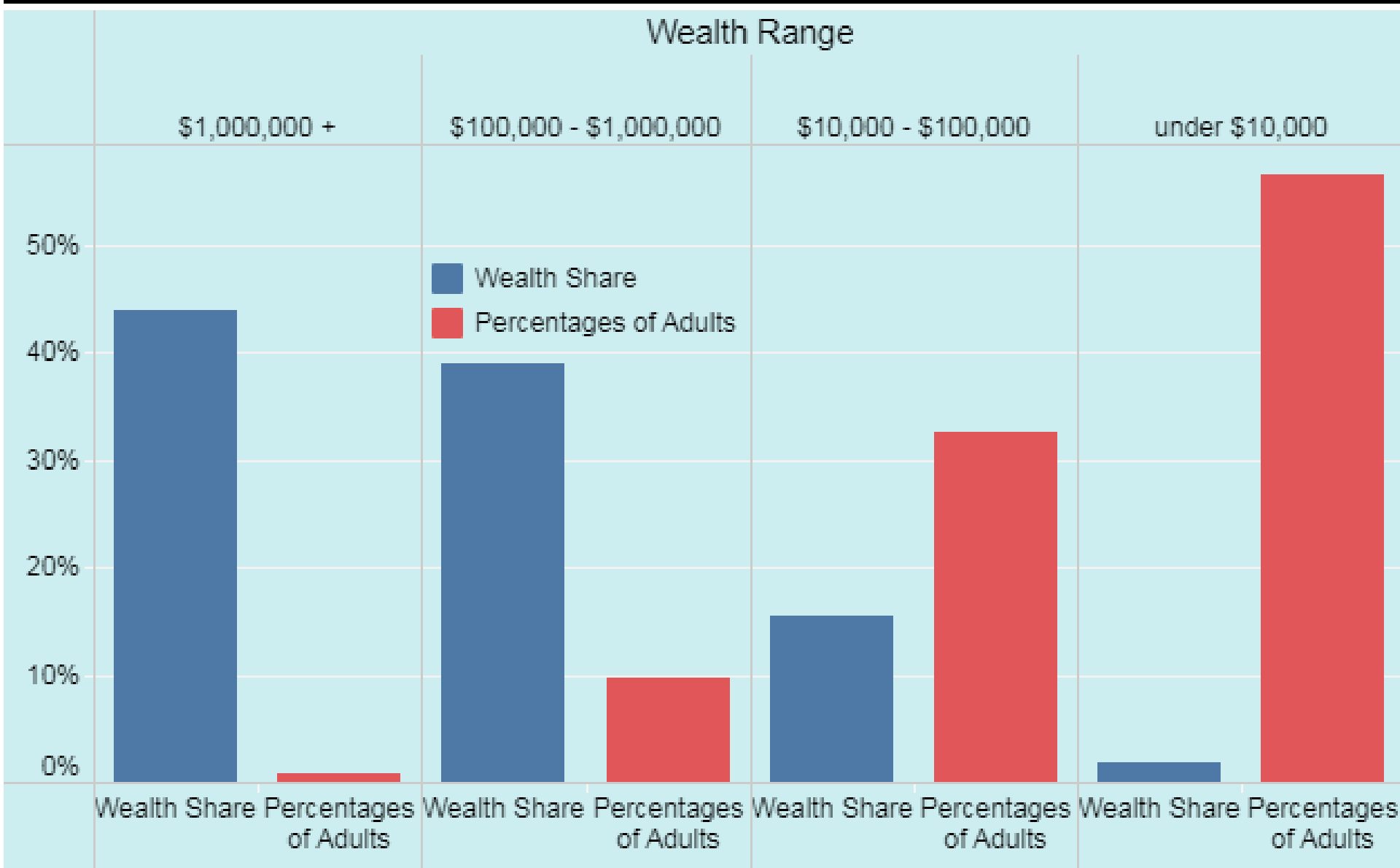
4. Inequality – distribution of wealth

Unequal Wealth distribution

- The richest 1% owned 40% of global assets in the year 2000 (*World Institute for Development Economics*)
- The wealthiest 1% owns 46% of the world's wealth (*Los Angeles Times*).
- A January 2014 report by claims that the 85 wealthiest individuals in the world have a combined wealth equal to poorest 3.5 billion people (*Oxfam*).

The Richest 1% Own 44% of the World's Wealth

Global adult population and share of total wealth by wealth group, 2019



Sources: Credit Suisse Global Wealth Report, 2019



SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

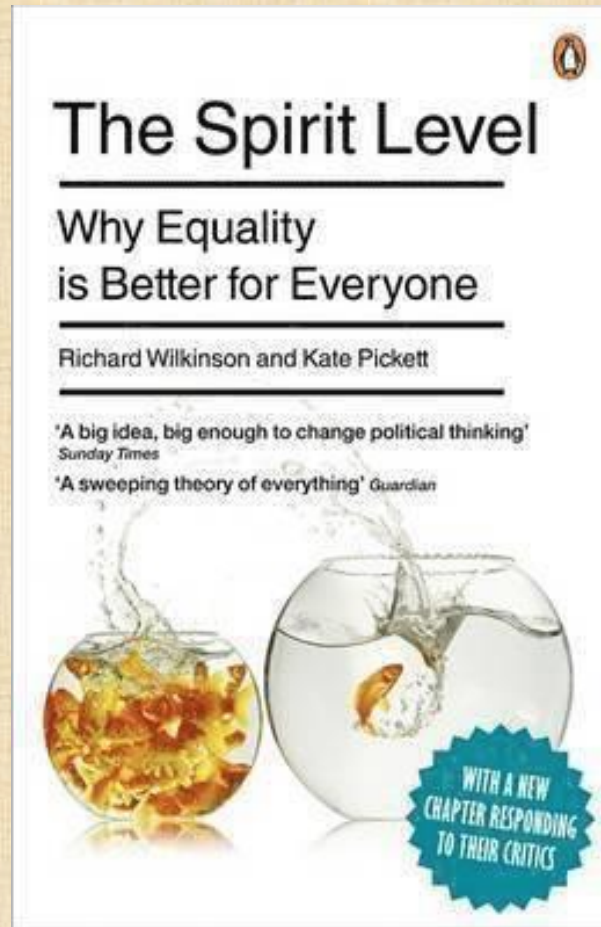
16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS



10 REDUCED INEQUALITIES

REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

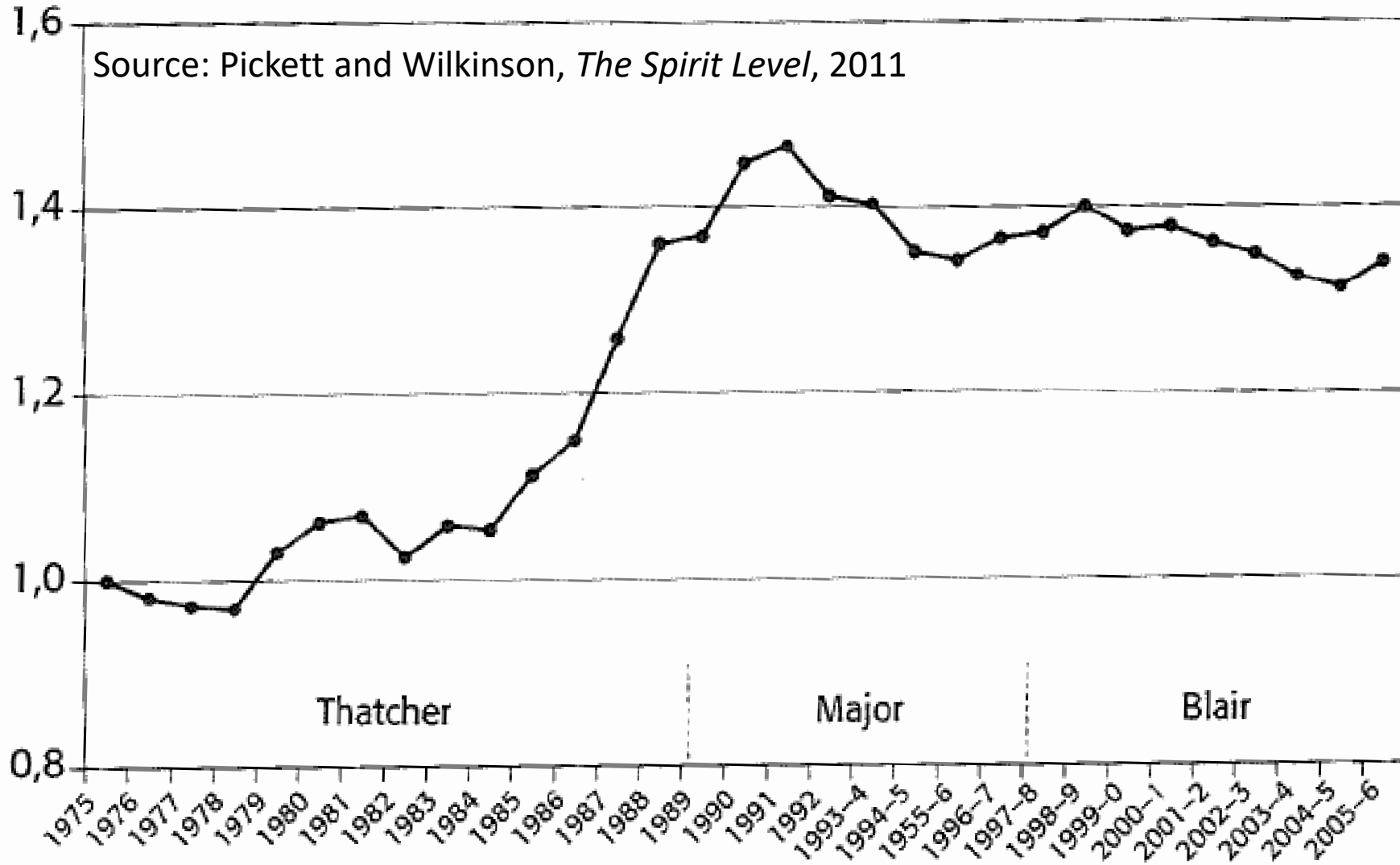


The Spirit Level:

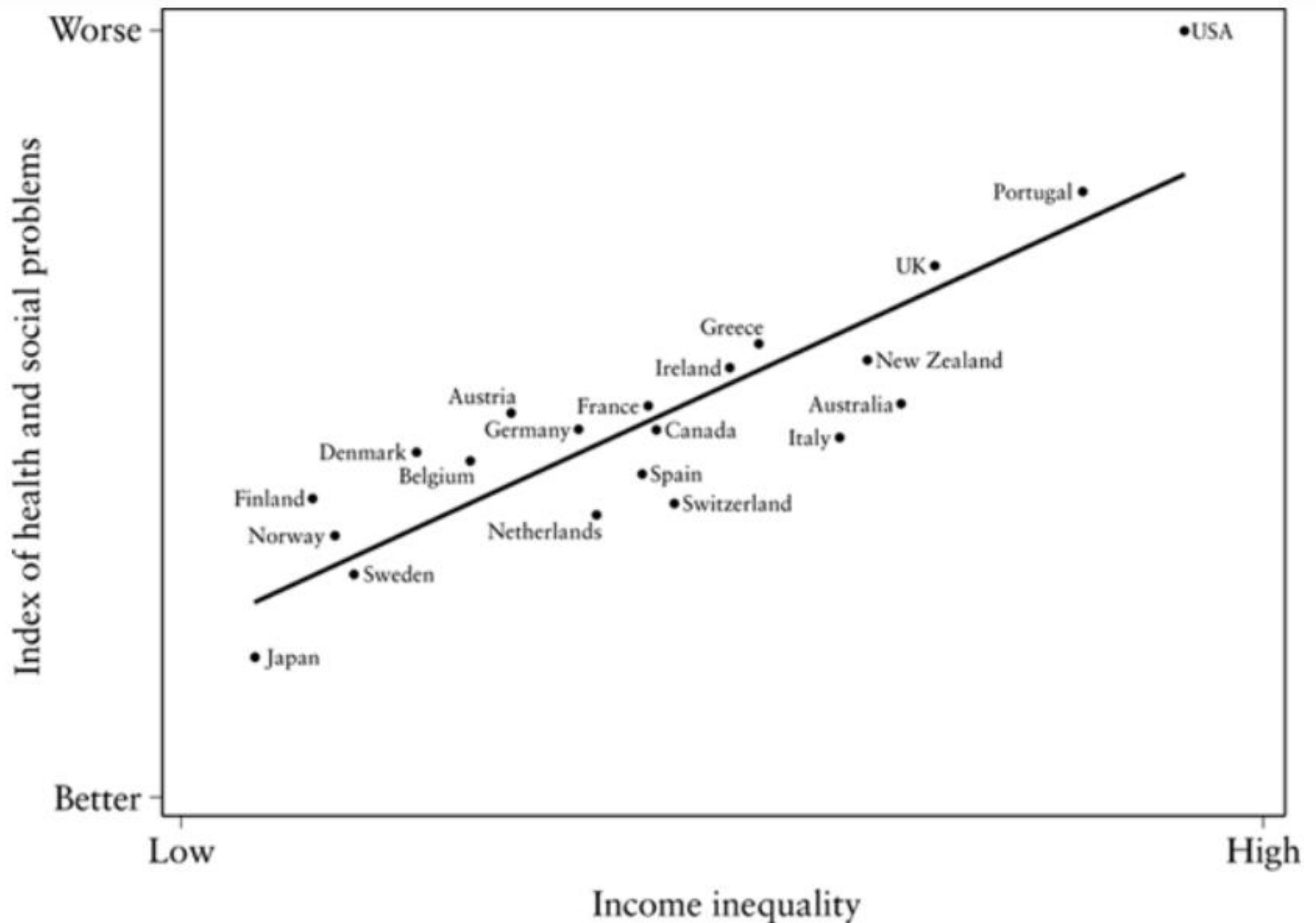
Why More Equal Societies Almost Always Do Better.

Wilkinson, R., & Pickett, K. (2009). London: Allen Lane.

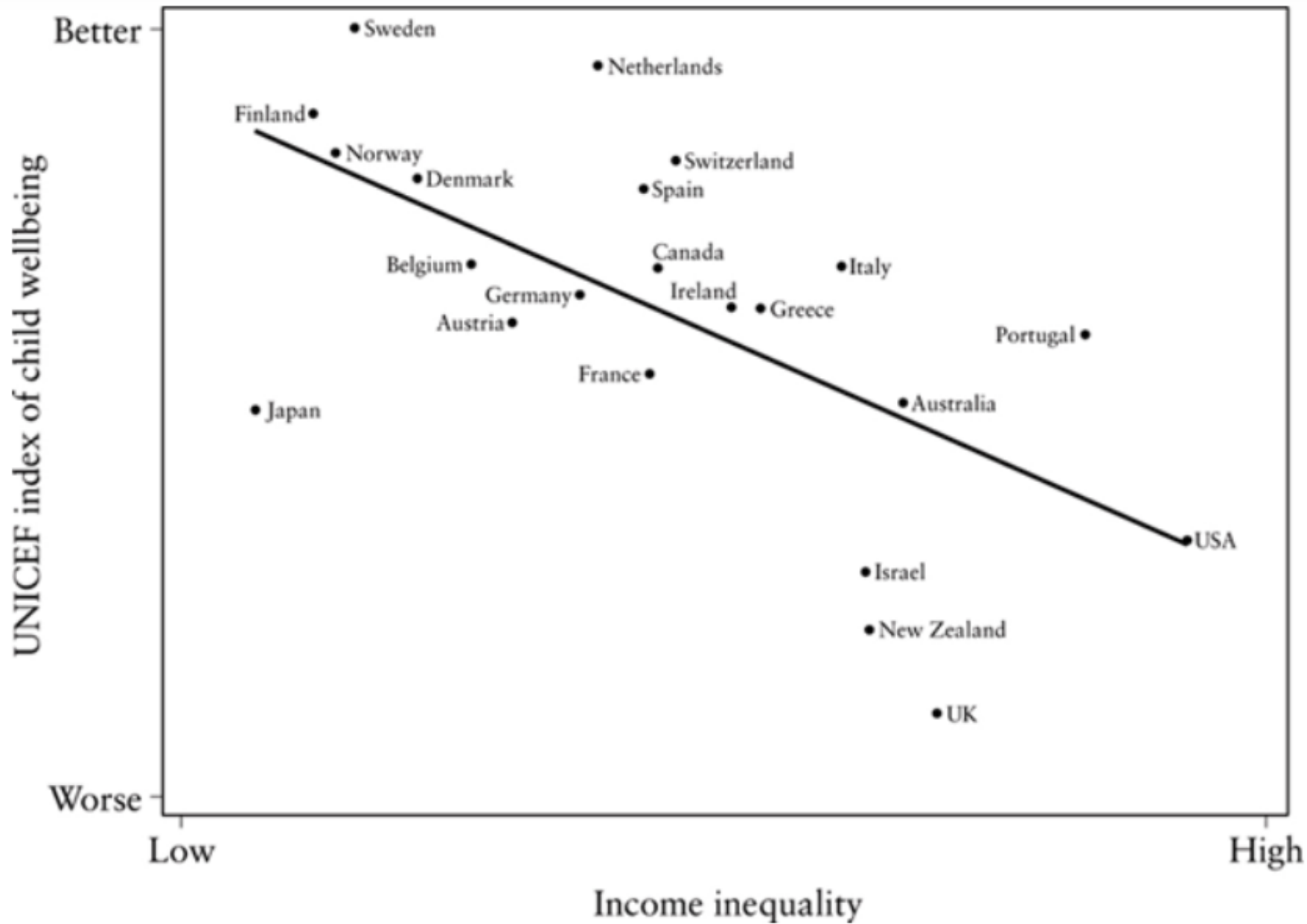
Den vidgade klyftan mellan rika och fattiga, jämfört med 1975



FIGUR 16.1. Den växande klyftan mellan inkomsterna för de rikaste och fattigaste tio procenten i Storbritannien från 1975 (= 1) till 2005-2006.



Source: Wilkinson, R., & Pickett, K. (2009). *The Spirit Level*



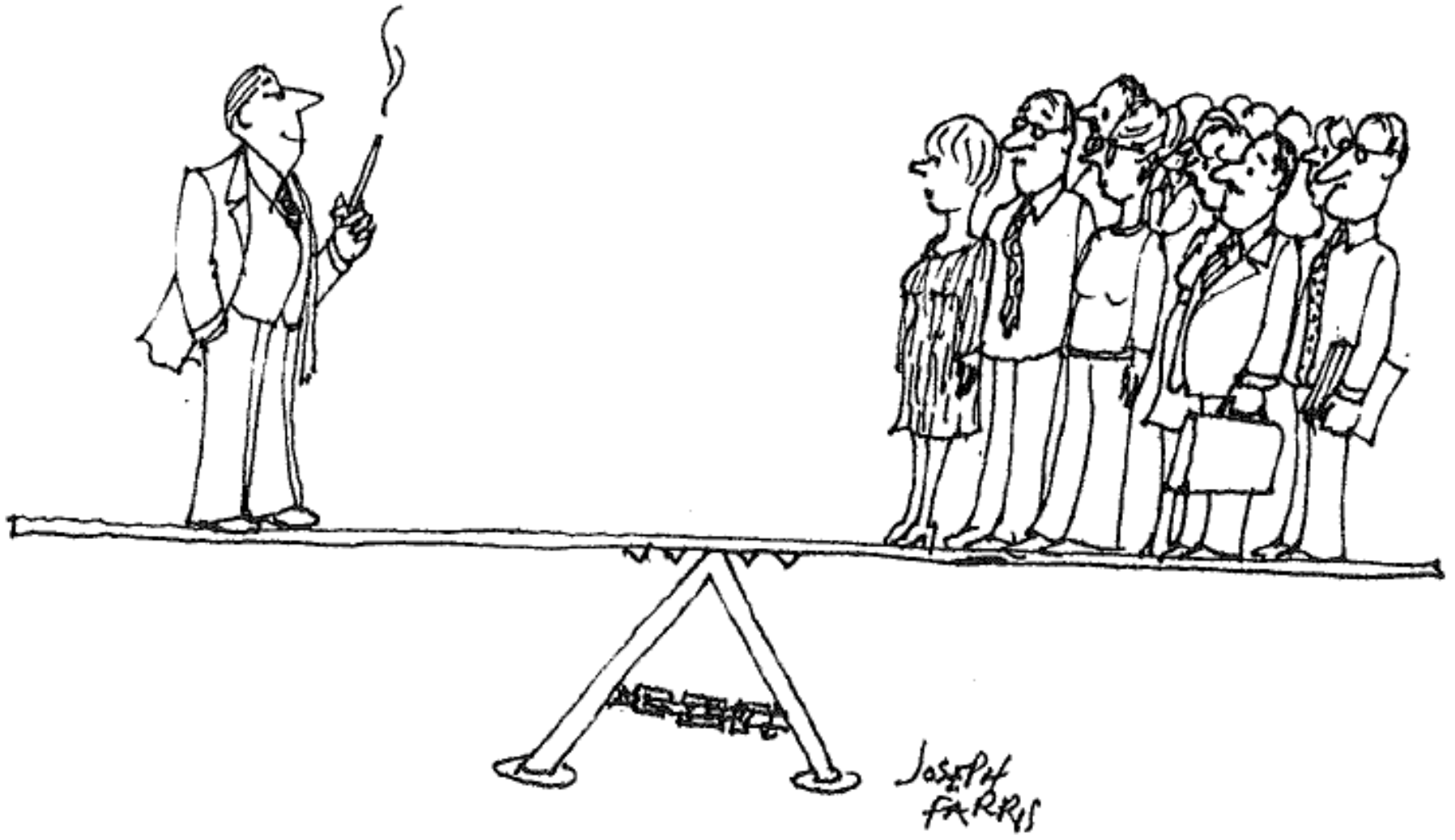
Source: Wilkinson, R., & Pickett, K. (2009). *The Spirit Level*



Source: Wilkinson, R., & Pickett, K. (2009). *The Spirit Level*



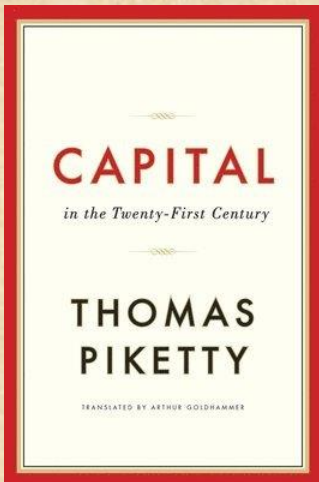
Source: Wilkinson, R., & Pickett, K. (2009). *The Spirit Level*



Source: Pickett and Wilkinson, *The Spirit Level*, 2011

Inequality is increasing

- The richer get even richer
- They have many possibilities to tax evasion
- Corruption is increasing with inequality
- Democracy is decreasing



Capital in the Twenty-First Century
Thomas Piketty 2014

Our financial system is incompatible with sustainability in several ways

1. It causes boom and bust cycles in the economy
2. It produces short-term thinking
3. It requires unending growth
4. It concentrates wealth
5. It destroys social capital
6. It is 98% speculative
7. It lacks monetary diversity



<http://www.clubofrome.org/cms/wp-content/uploads/2012/05/Money-and-Sustainability-the-missing-link-Executive-Summary.pdf>

Complete works of Bernard Lietaer

<https://bernard-lietaer.org/library-intro/>

Between 1970 and 2010 there were 145 banking crises, 208 monetary crashes and 72 sovereign-debt crises-in other words, a staggering **total of 425 systemic crises**. These crises have hit more than 150 countries.

'Discounted cash flow' is standard practice in any investment evaluation. Because **bank-debt money carries interest**, the discounting of all future costs or incomes inevitably leads to short-term thinking.

The process of compound interest or interest on interest imposes **exponential growth** on the economy. Yet exponential growth is unsustainable in a finite world.

The middle class is disappearing worldwide, with **wealth flowing to the top and increasing poverty at the bottom**. It generates social problems are detrimental to economic growth and democracy.

Social capital is built on mutual trust and results in collaborative action, but money tends to promote **selfish and non-collaborative behaviours**.

In 2010, the volume of foreign exchange transactions reached \$4 trillion *per day*. One day's exports or imports of *all* goods and services in the world amount to about 2% of that figure. Which means that **98% of transactions on these markets are purely speculative**.

We have a **worldwide monetary monoculture** in which the same type of exchange medium is put into circulation in every country: a single national currency created through bank debt. Such a monoculture tends to spawn a brittle and unsustainable system.

BREAK

- How much growth was there in your economy last years?
- What about unequal distribution of wealth and poverty in your country?
- Do you have personal experience of corruption?

5. Ways to a sustainable economy

Ways to a sustainable economy

1. Out-phase non-renewable resources
2. Pay for environmental impacts
3. Recycle all resources
4. Use renewable resources within their reproduction rate

It is all profitable!

Four models of a sustainable economy

**Economy of
sharing**

**Economy of self
production**

**Economy of
automation**

**Circular
Economy**

The first steps

- **Green tax reform**– tax resources instead of work; resources are limited, work “unlimited”.
- **Exchange GDP** as a measure of national progress – instead use welfare, happiness or similar.
- **Protection of the environment** is much more important than economic growth – no growth on the expense of environmental degradation.
- From consumption of things to the **consumption of services**

Tools for transition to a green economy:

- pricing externalities
- eliminating perverse subsidies
- enforcing regulatory standards
- redirecting investment flows
- promoting equity and social protection
- fulfilling oft-repeated pledges about international co-operation and assistance
- recognizing common but differentiated responsibilities

Investments

- 1. Individual** – irredeemably myopic. We favour today too much over tomorrow, in ways which, to an economist, appear entirely inexplicable under any rational rate of discounting of the future.
- 2. Companies** – at most five years horizon, payback time is minimized, investment options carefully avoid risks.
- 3. Public sector** – long term, pay back time may be 50 years, risks are taken.

Which are the differences between the current (brown) economy and a future (green, inclusive) economy?

| Current economy | Green economy |
|---|--|
| GDP growth: more economic activity the aim | 'Beyond GDP': prosperity the aim |
| Focus on the near future (short-termism) | Long-termism |
| Maximisation of return | Safeguarding of long-term incomes |
| Shareholder value | Stakeholder value: benefit to society |
| Extraction of natural resources | Management of natural resources |
| Linear production systems | Circular production systems |
| Short-life products for sale | Long-life services: the 'performance economy' |
| Efficiency measured in monetary terms (e.g. cost-benefit analysis, CBA) | Multidimensional efficiency (e.g. multi-criterion analysis, MCA) |
| Micro- and macrorationality highly divergent | Micro- and macrorationality highly congruent |

Pricing externalities

- *All environmental costs* should be included.
- *Polluter Pays Principle* should be used.
- There are methods for converting them into monetary values.
- *The state* is acting to collect the payments.

Eliminating perverse subsidies

- Today much state money is invested into fossil fuels in sectors with bad economy.
- These include fisheries and agriculture.
- Another sector is commuting support.
- (Much) less money is used for mitigation of greenhouse gases.

Redirecting investment flows

- Investments should support a sustainable development.
- Large sums are presently used for e.g. new oil fields, instead of renewable energy.
- Financing: risk capital, pension funds etc are important actors.

To read

Sustainable lifestyles and the dilemma of economic growth

- The Baltic University Programme Sustainable Development Course. *10a. Economy and ecology – a single system. 10b. The dilemma of economic growth. 10c. Tools for approaching a sustainable economy.*