

Work in a sustainable economy

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FMM Conference

Berlin, 24-26 Oct 2013

Plenary session II: Employment in a low growth economy

Ignore nature – how long?



Limits to Growth model runs

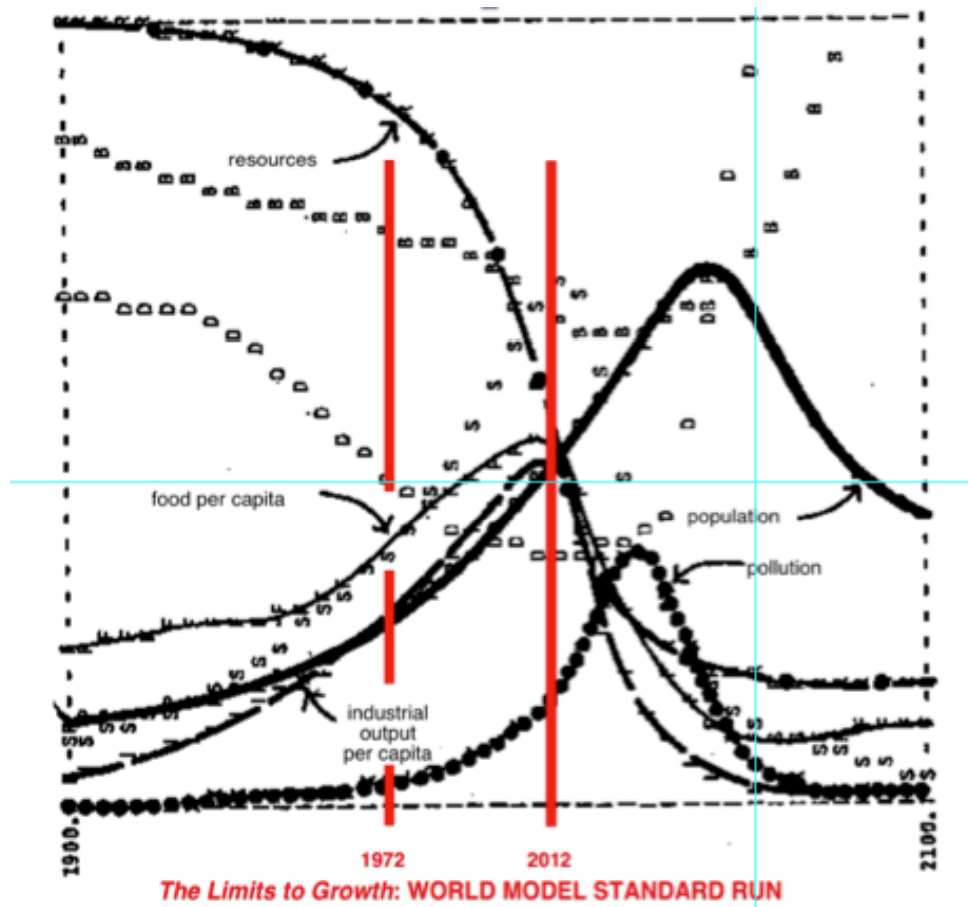
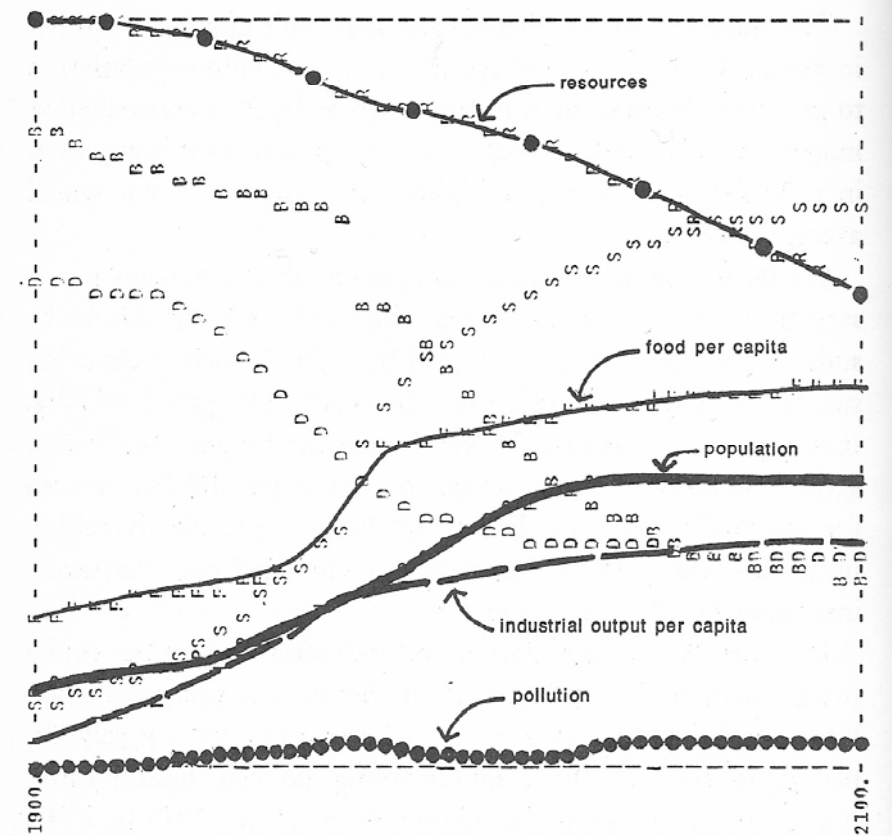


Figure 47 STABILIZED WORLD MODEL II

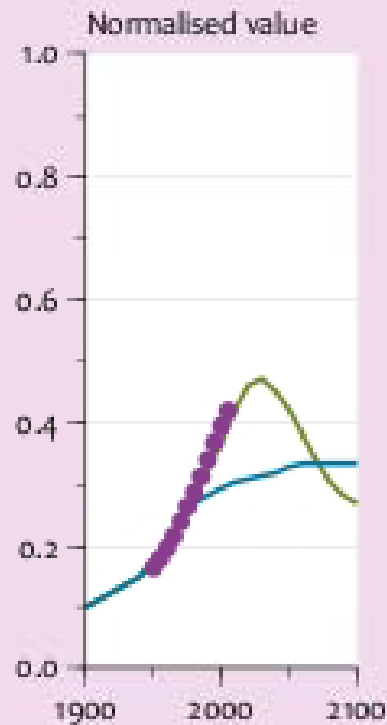


Source: Meadows et al 1972

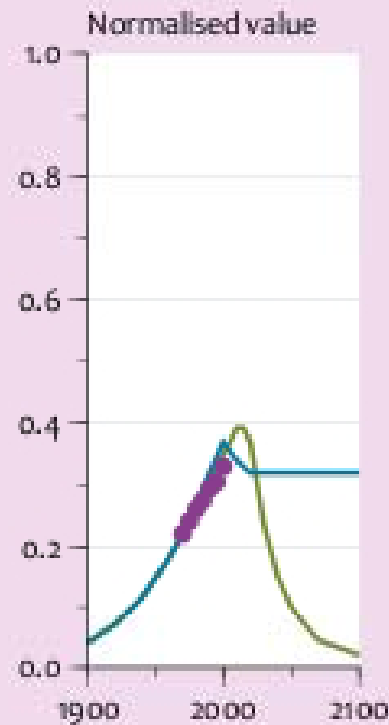
Figure 2.2

Comparing 'Limit to Growth' scenarios to observed global data

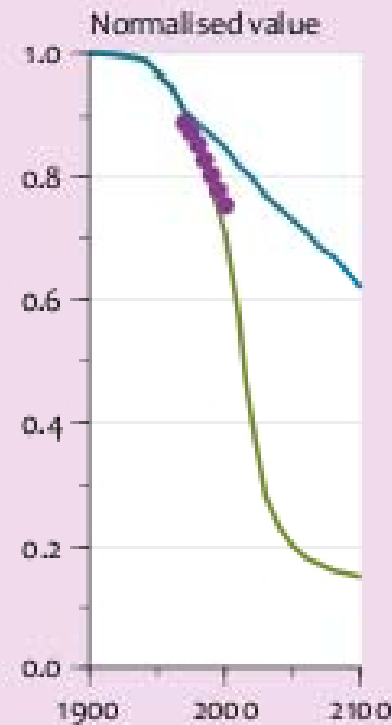
Population



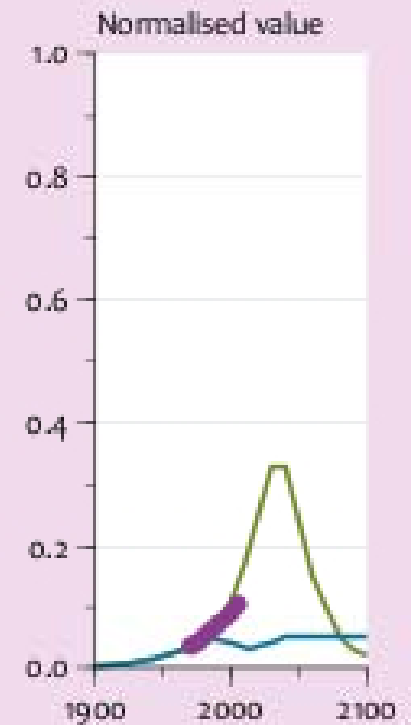
Industrial output



Non-renewable resources



Pollution



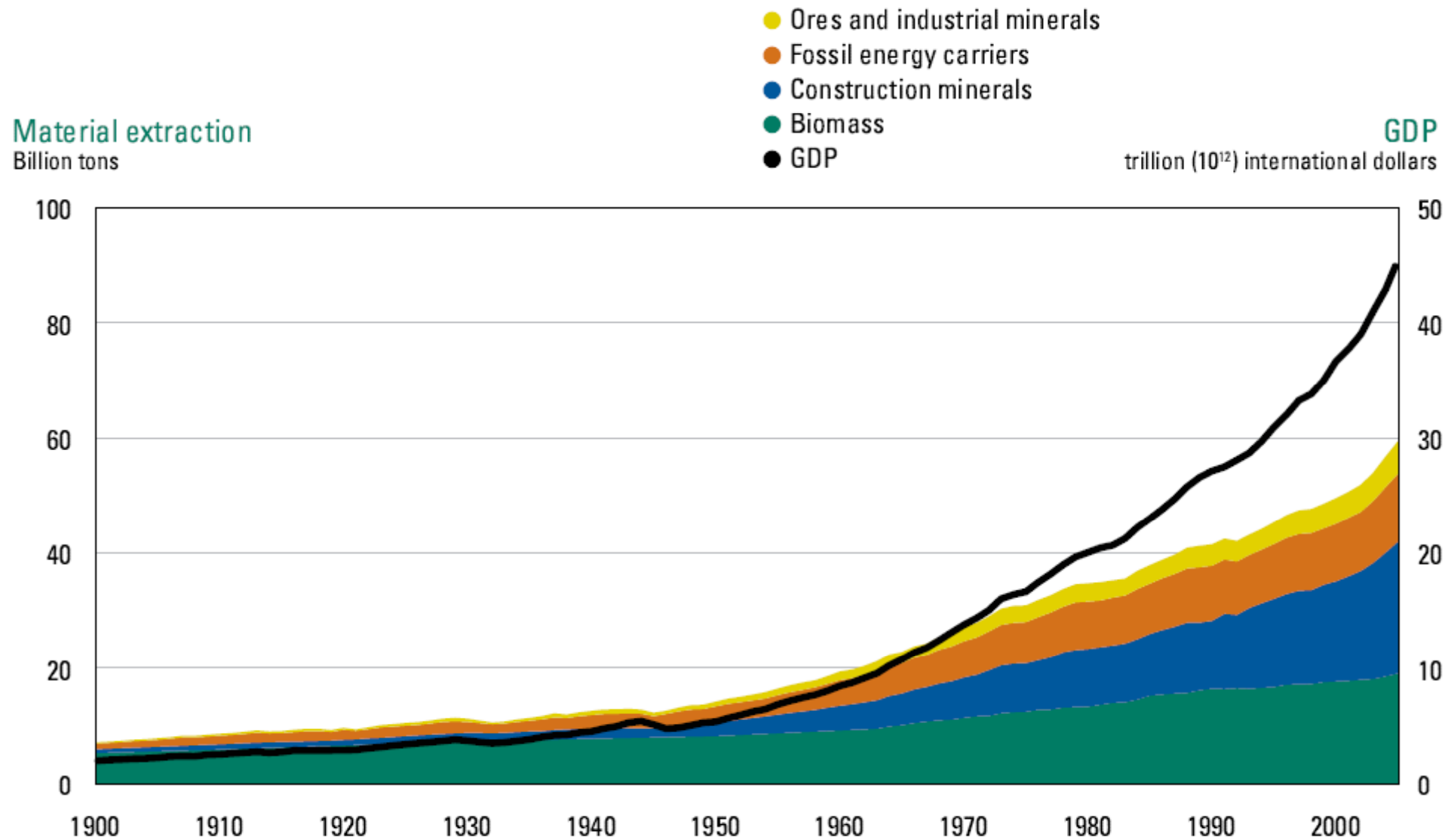
'Limit to Growth' scenarios

— Standard run

● Observed data

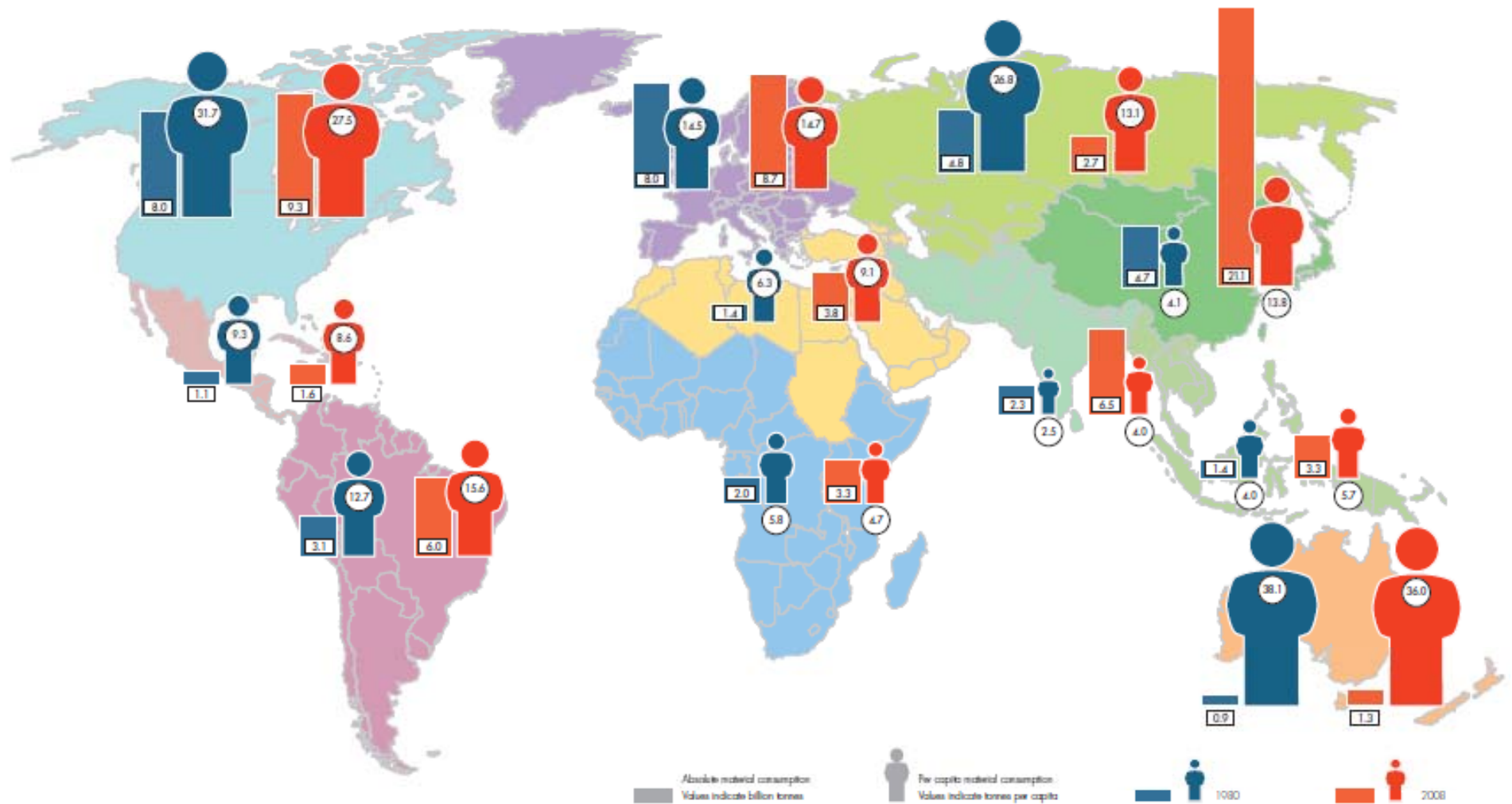
— Stabilized world

Global resource extraction in bn t, 1900-2005



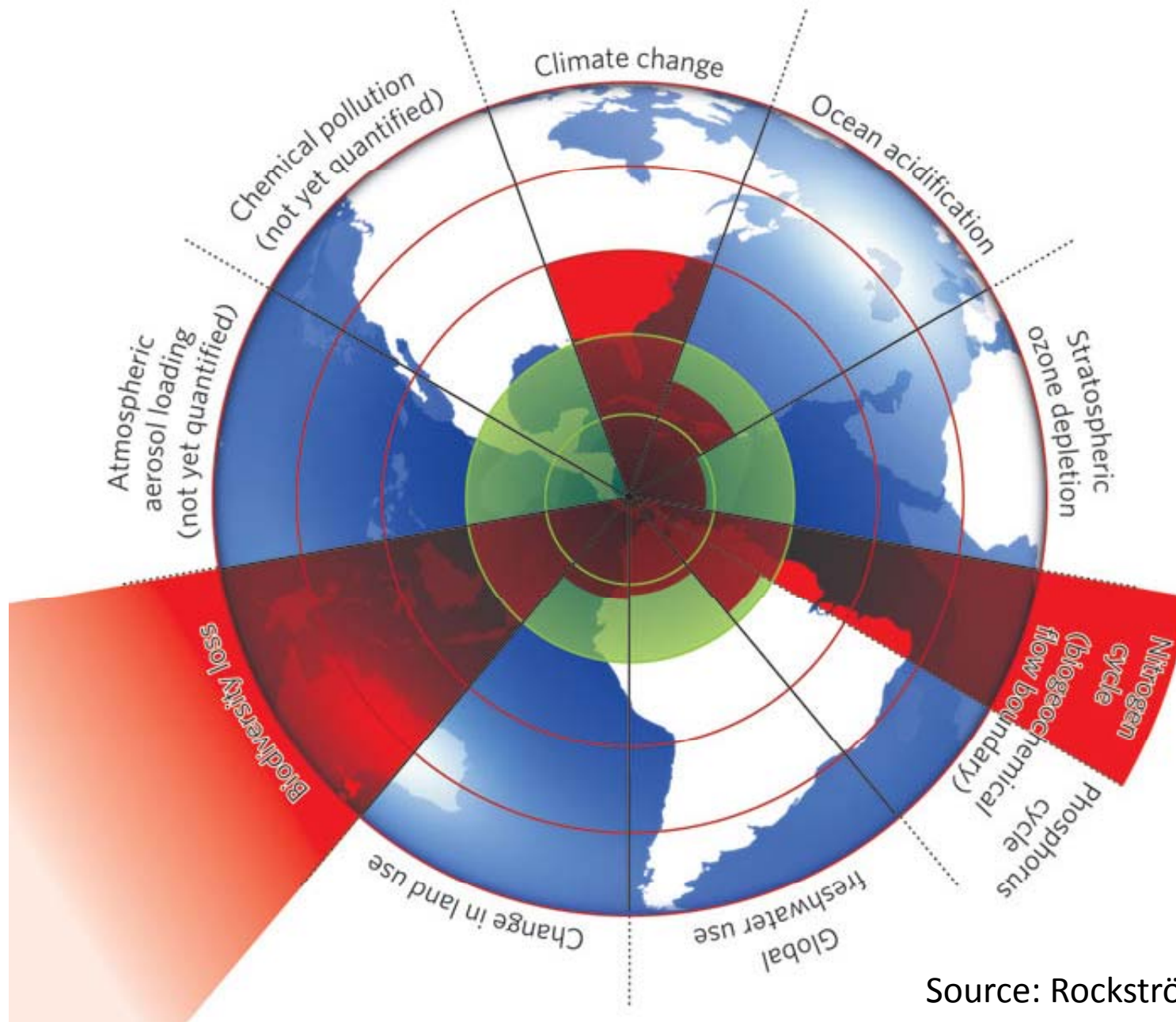
Source: Krausmann *et al.*, 2009

Material consumption by regions in absolute and per capita terms 1980 and 2008



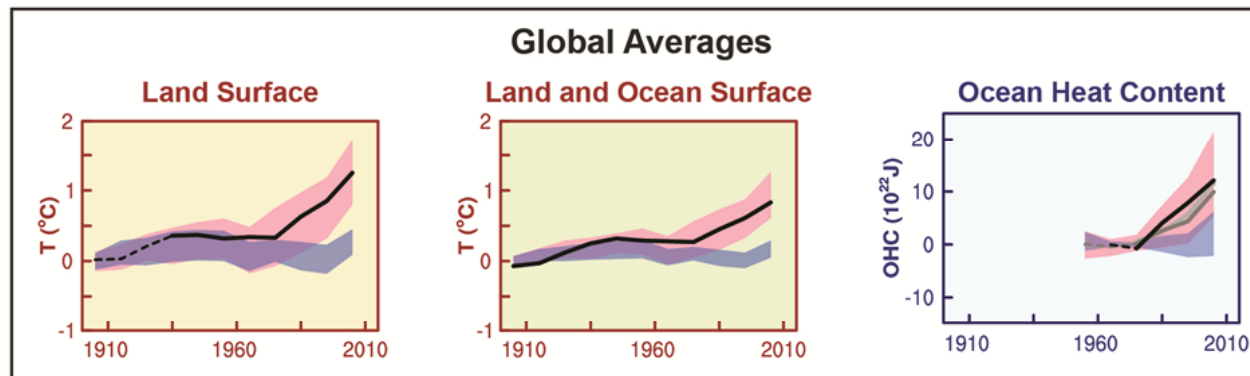
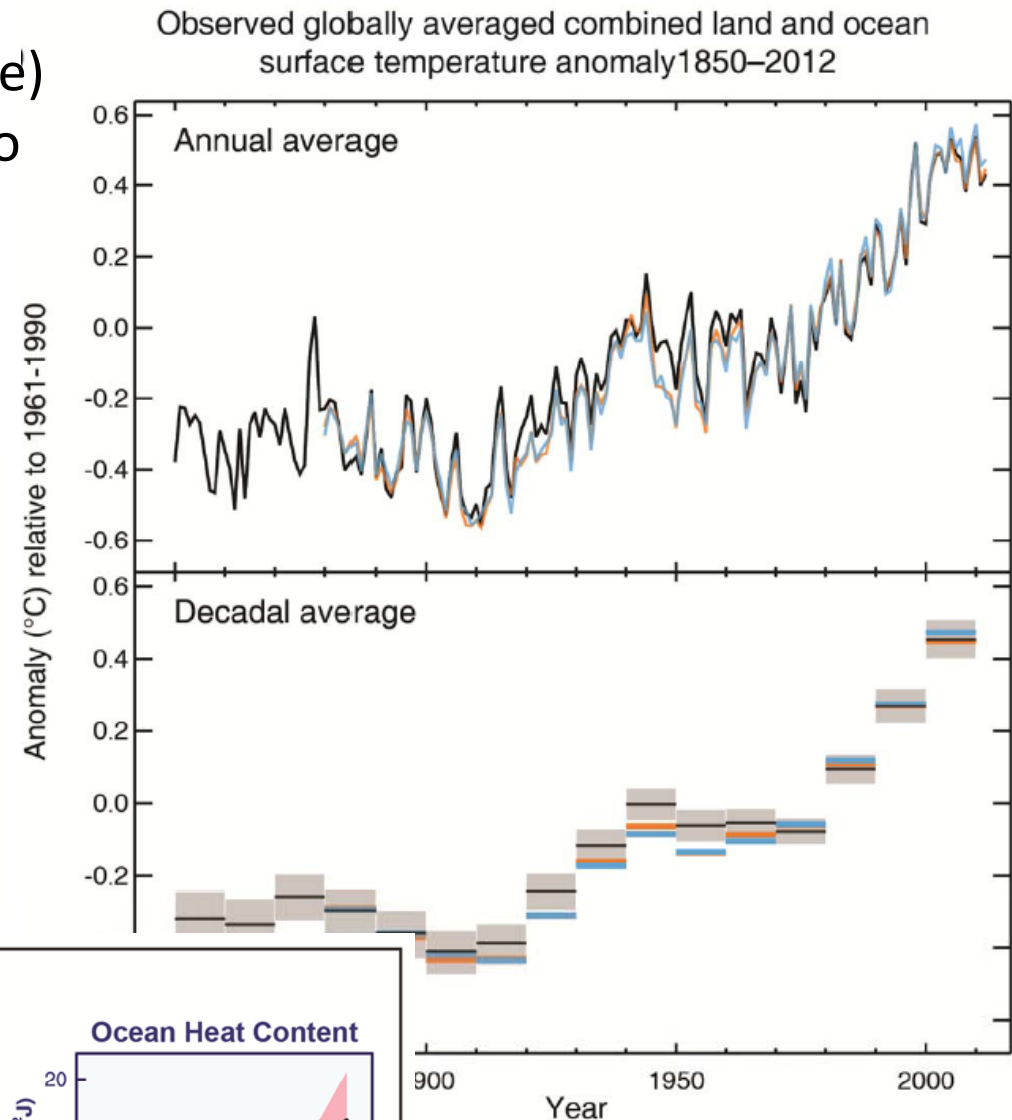
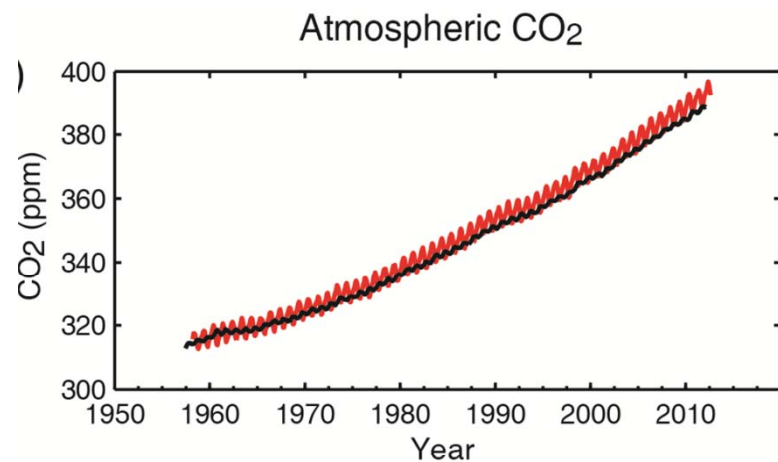
Source: Dittrich, Giljum et al. 2012

Earth system boundaries and human interference



Source: Rockström, Steffen et al. 2009

IPCC WG1 (The Physical Science Base) presented in Sep 2013 their input to the Fifth Assessment Report, which will be presented in Oct 2014.



Observations

Models using only natural forcings


Models using both natural and anthropogenic forcings

A changing climate leads to changes in extreme weather and climate events



Source: IPCC SREX, 2012

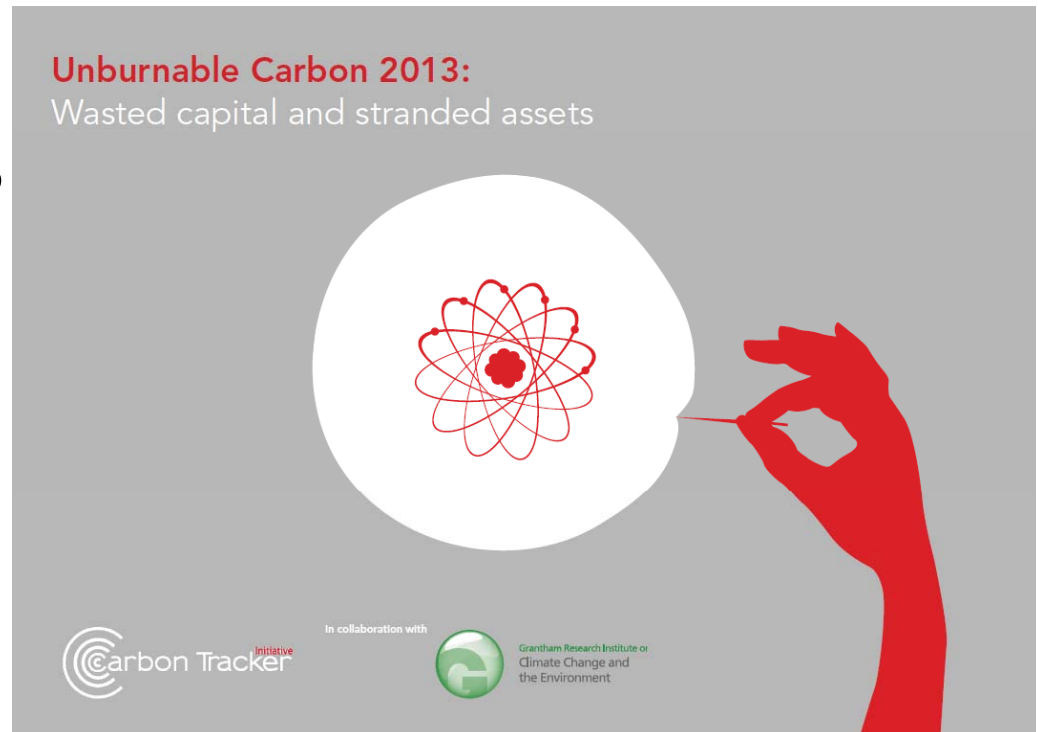
Since 1950, **extreme hot days** and **heavy precipitation** have become more common



There is evidence that anthropogenic influences, including increasing atmospheric **greenhouse gas concentrations**, have changed these extremes

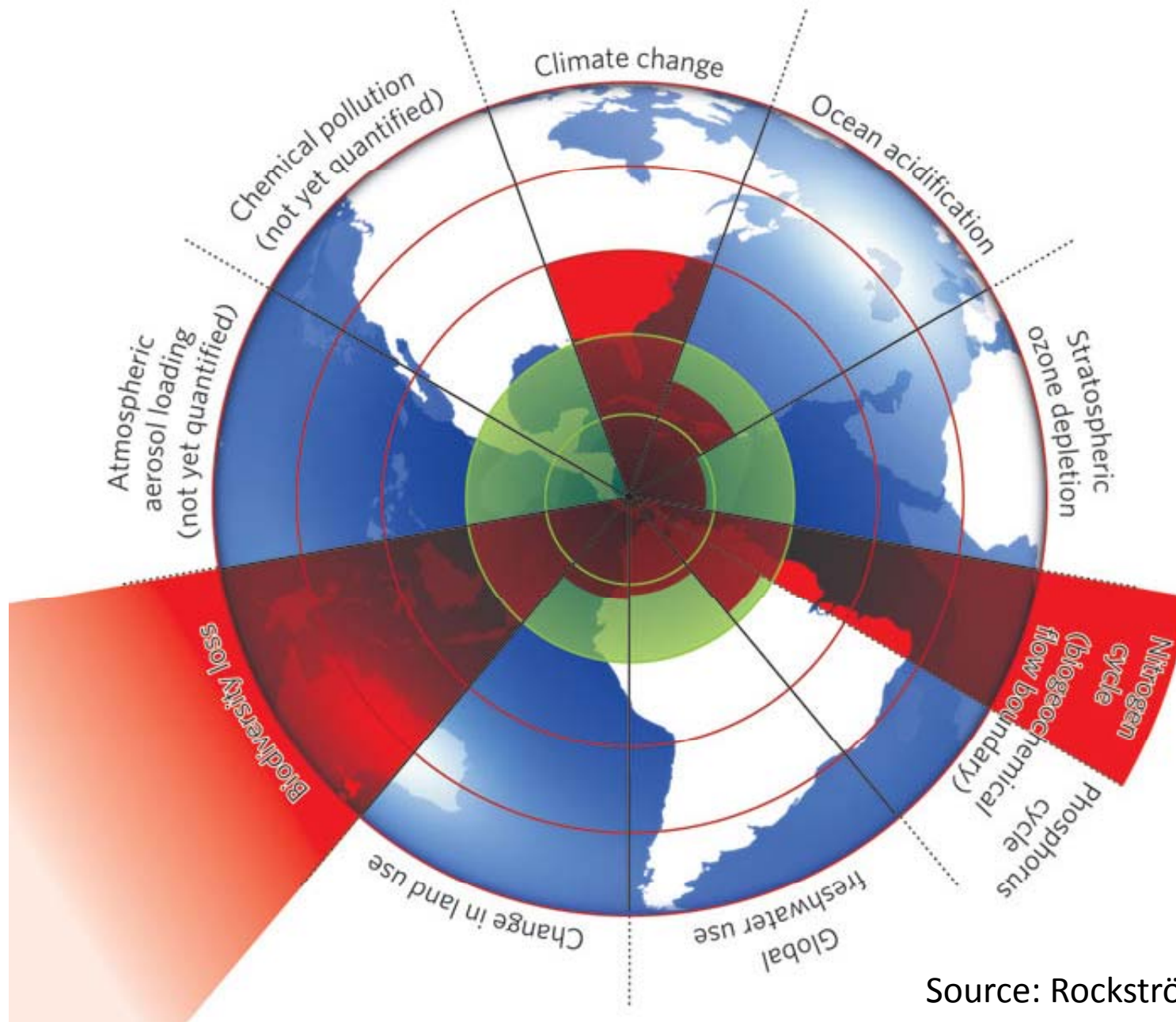
“In 2010, governments confirmed in the Cancun Agreement that emissions should be reduced to avoid a rise in global average temperature of more than 2°C above pre-industrial levels, with the possibility of revising this down to 1.5°C. “

- Carbon Tracker & IEA models: carbon budget for a 2°C scenario would be around 565 – 886 billion tonnes (Gt) of carbon dioxide (CO₂) to 2050
- Total carbon embedded in the world's indicated fossil fuel reserves: 2,860GtCO₂
- only 20% of total fossil fuel reserves can be burnt to 2050



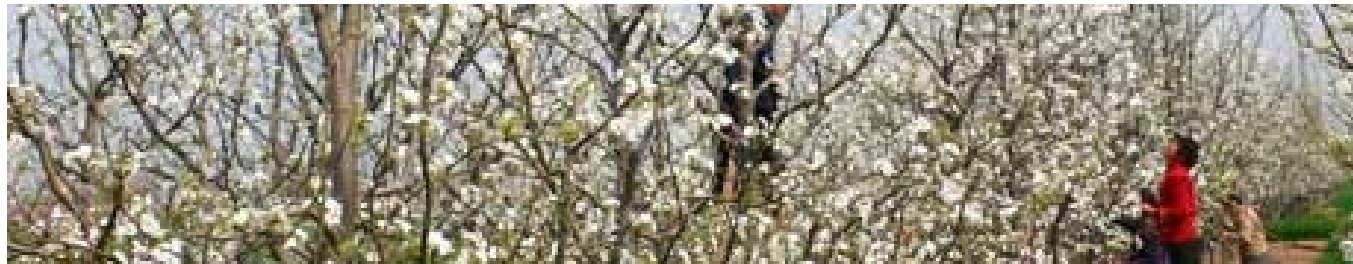
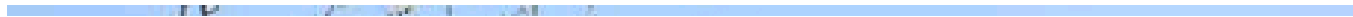
“As a result the global economy already faces the prospect of assets becoming stranded, with the problem only likely to get worse if current investment trends continue - in effect, a carbon bubble.”

Earth system boundaries and human interference



Source: Rockström, Steffen et al. 2009

Ecosystem services



Global Change

International Geosphere-Biosphere Programme Issue 78 ■ March 2012

ANTHROPOCENE

The geology of humanity

Urban expansion
No signs of slowing

Natural catastrophes
2011 breaks records

GLOBAL
IGBP
CHANGE
International
Geosphere-Biosphere
Programme

www.igbp.net
Earth-system science for a sustainable planet



THE NEXT GOLDEN STATE: A 16-PAGE SPECIAL REPORT ON AUSTRALIA

The
Economist

MAY 28TH-JUNE 3RD 2011

Economist.com

Obama, Bibi and peace

Huntsman blows his horn

A soft landing for China

The costly war on cancer

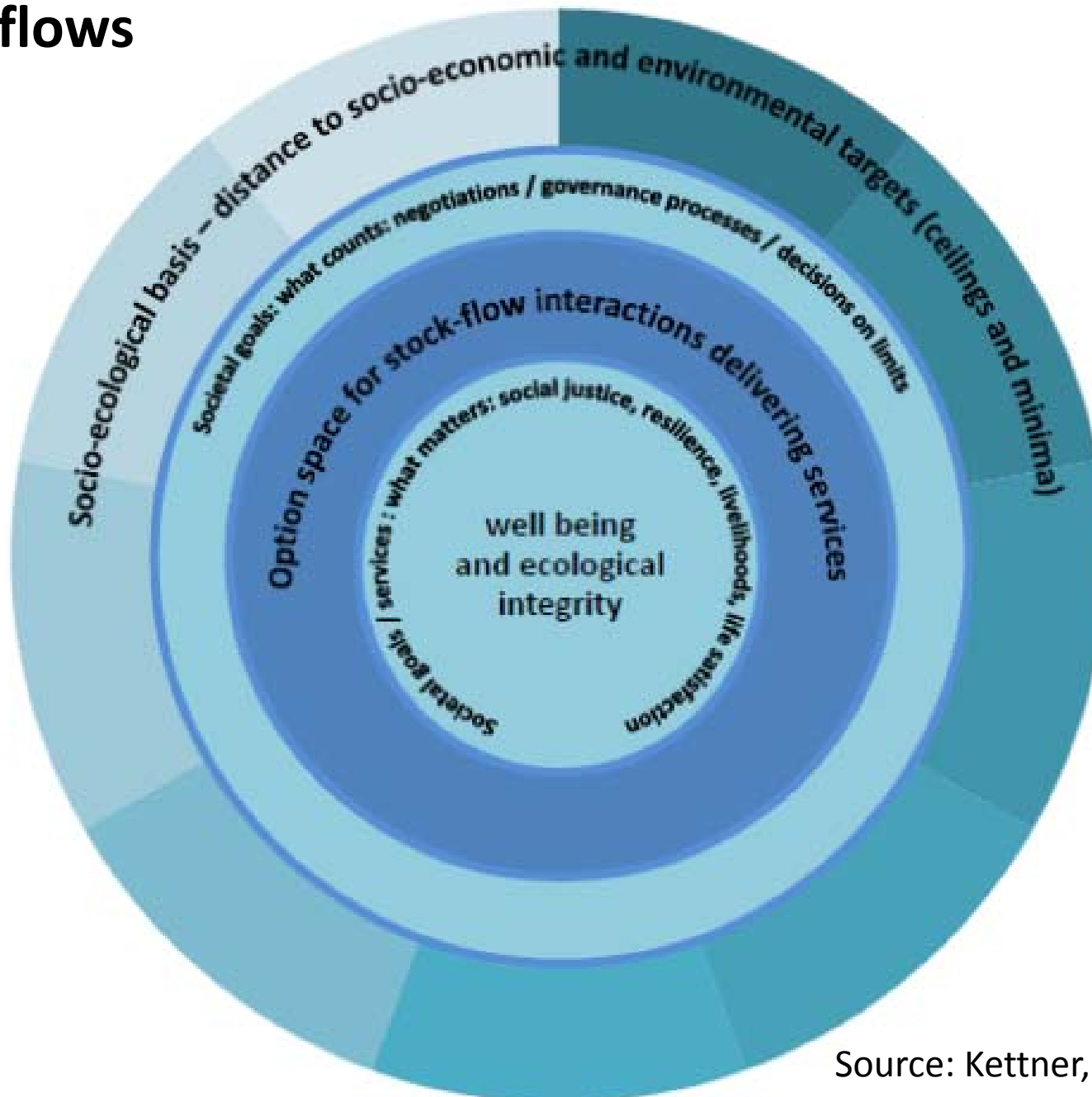
How the brain drain reduces poverty

Welcome to the Anthropocene



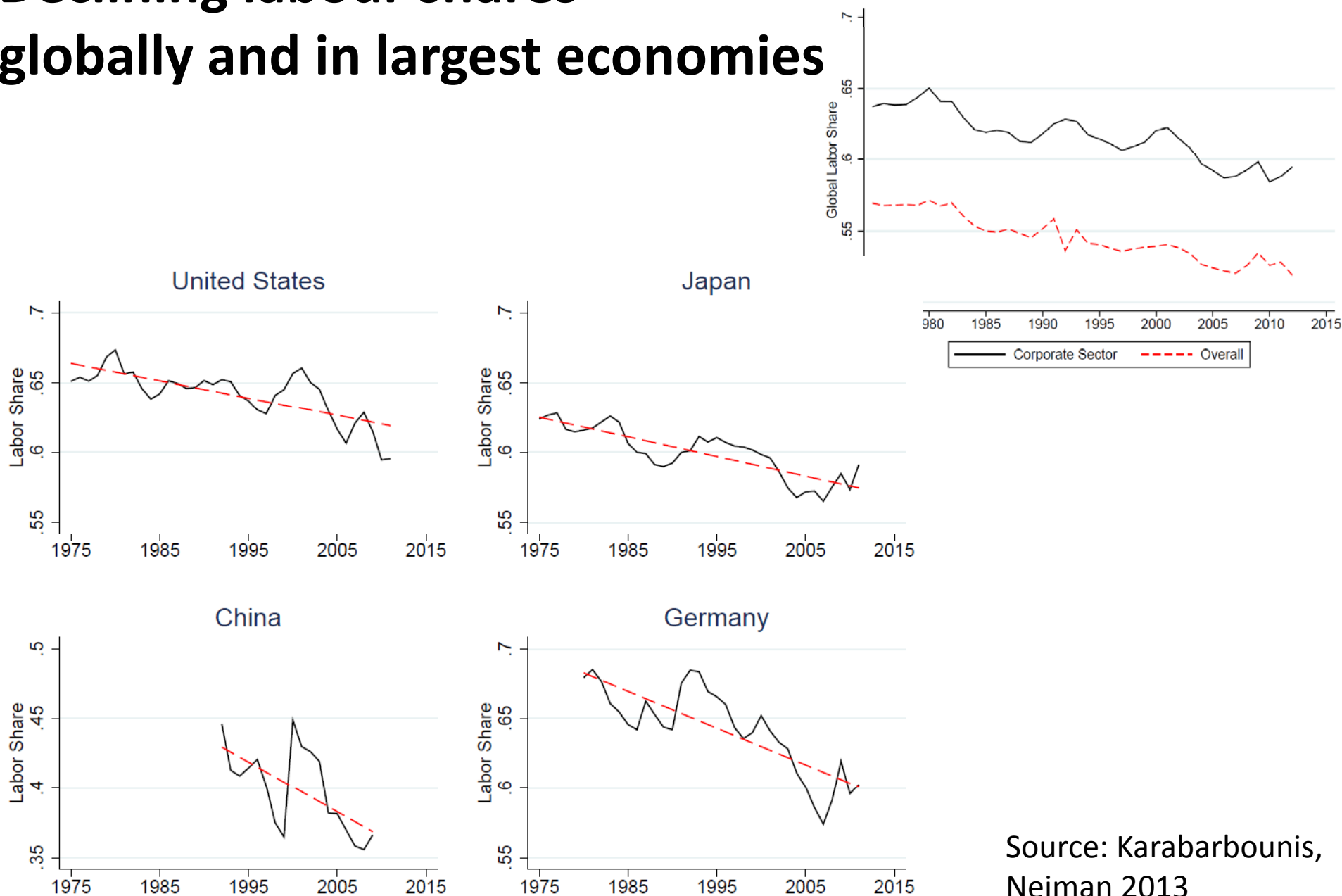
Geology's new age

Social and planetary boundaries: socio-ecological stocks and flows

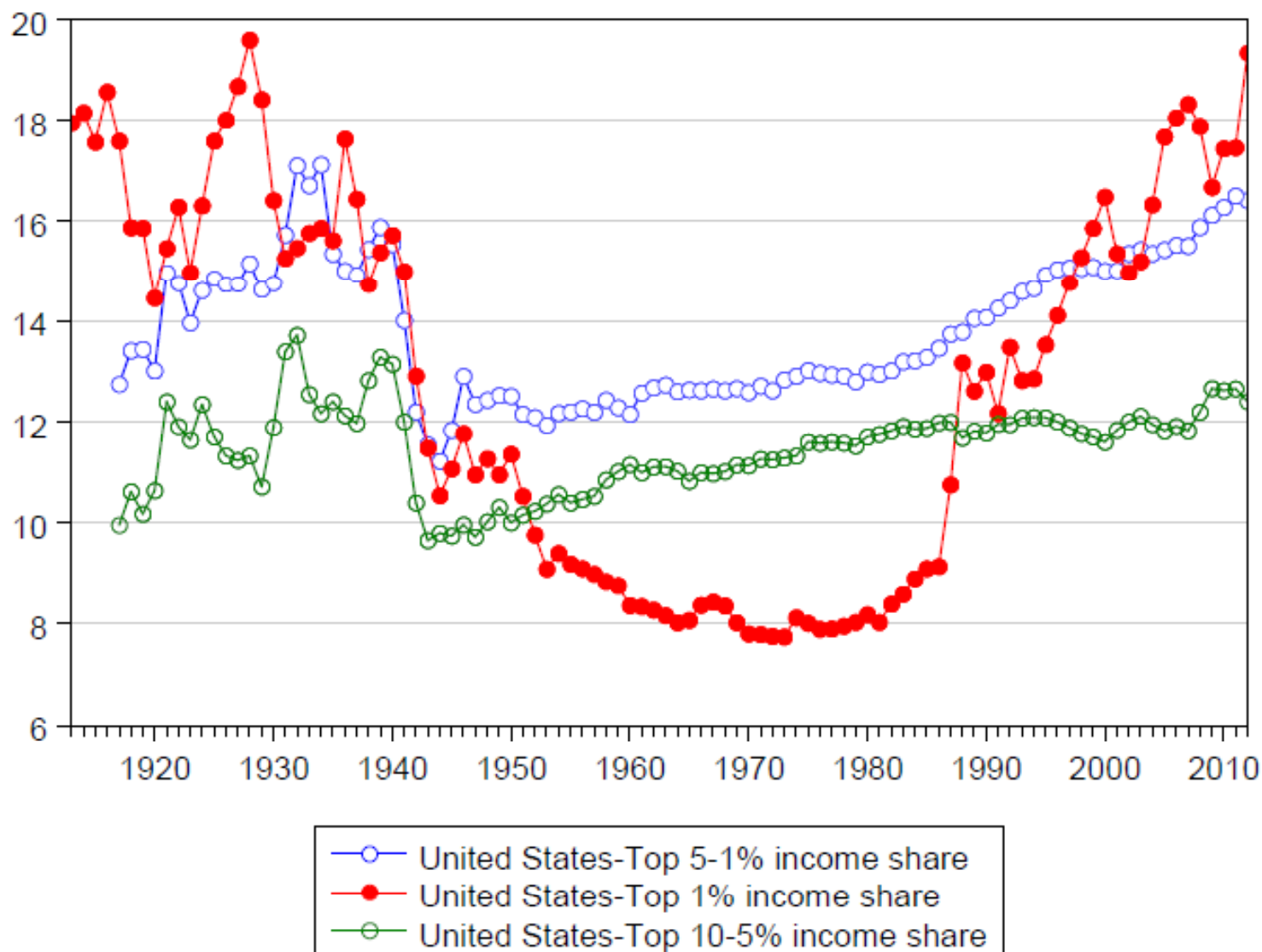


Source: Kettner, Köppl, Stagl forth.

Declining labour shares – globally and in largest economies



Personal Income Distribution



Source: Alvaredo, Atkinson, Piketty & Saez (2013)

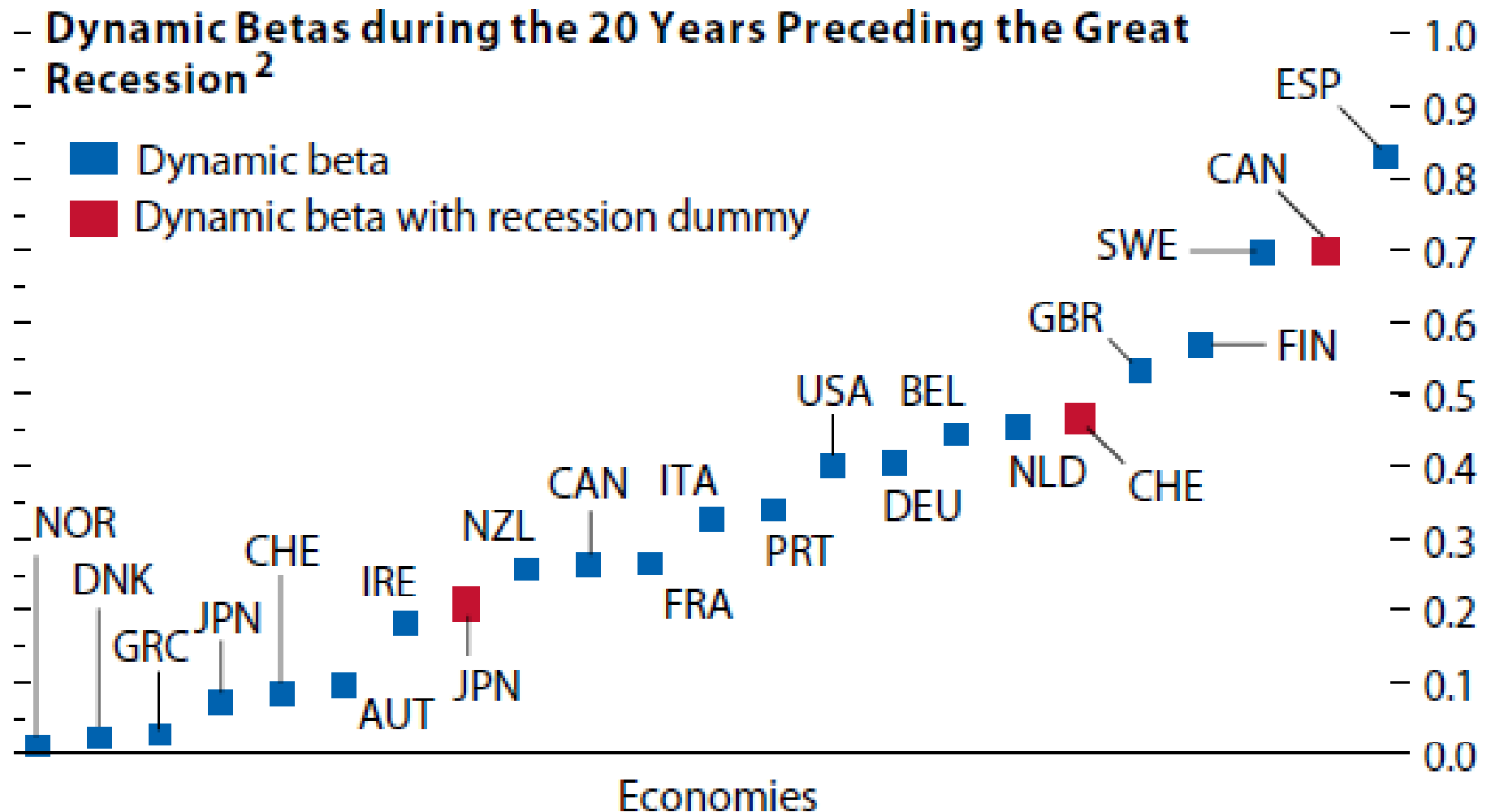
Framing

- Preferences :: biophysical limits :: implications for different groups in society / socio-ecological transformation
- "All ecological projects (and arguments) are simultaneously political-economic projects (and arguments) and vice versa. Ecological projects are never socially neutral any more than socio-political arguments are ecologically neutral" (Harvey 1996).
- PKE: Economic imbalances should be viewed as the result of interaction between inequality and financial deregulation (Stockhammer)
- EE: Imbalances in delivering prosperity should be viewed as the result of interaction between inequality, financial deregulation and insufficient environmental regulations.
- Sustainability is not only relevant for the long term

Proposition 1: Unemployment can be kept low even in low-growth economies.

- **relationship between economic growth and the change in employment** (influenced by labour supply, labour productivity, demand for types of products, working time etc.)
- **relationship between the change in employment and unemployment rates** (hidden domestic labour reserves, additional foreign workers, demographic factors, participation rates, labour market institutions, labour market history, norms, reaction to employment opportunities etc.)
- **account for impacts on income distribution** (influenced by financialisation, globalisation, labour market institutions, technology)

Dynamic Betas: The Long-Term Impact of Output Fluctuations on Unemployment Rate Dynamics



Proposition 2: ‘Green jobs’ are an accounting exercise for political propaganda.

- The hope: ‘green innovations’ as well as energy and resource efficiency will bring growth, (prosperity, jobs and reduction in poverty)
- “For the purposes of the Green Economy Initiative, UNEP has developed a working definition of a green economy as one that results in **improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities**. In its simplest expression, a green economy can be thought of as one which is **low carbon, resource efficient** and **socially inclusive**. Practically speaking, a green economy is one whose growth in income and employment is driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services.” (UNEP; highlights in the original)
- Europe 2020: „new strategy for jobs and smart, sustainable and inclusive growth“

Proposition 3: Reducing working time is economically feasible.

- What would happen, if we exchanged less of our time for money? Suppose, for example, we did paid work for 30 instead of 40 hours each week? Life would certainly be different. Perhaps it would be better – for people, for the planet and for our beleaguered post-industrial economy. (see also Kallis et al 2013)
- Keynes famously predicted that rates of productivity, driven by technological change, would rise so rapidly that by the 21st century no one would need to work more than 15 hours a week; „Three-hour shifts or fifteen-hour week may put off the problem for a great while.“ Keynes, 1932

- Historic decline in working hours
 - Daily: from 16 hrs in 1820 to 8 hrs
 - Weekly: from 80 hrs to 40 (38.5 or 38 hrs)
 - Paid leave: 2 weeks from 1950 to 5 weeks
 - Average pension age: to 58 years (eg in AT)
 - Household labour supply increased from 60 hrs in 1885 to 70-75 hrs
- How ,natural' is the 40-hour paid working week? In many sectors it is no longer the norm, but the exception.
- What can we learn from the NL experience of shorter working hours?

NEF: “A ‘normal’ working week of 21 hours could help to address a range of urgent, interlinked problems: overwork, unemployment, over-consumption, high carbon emissions, low well-being, entrenched inequalities, and the lack of time to live sustainably, to care for each other, and simply to enjoy life.”



21 hours

Why a shorter working week can help us all to flourish in the 21st century

Proposition 4: Decent work reduces illness and protects rights.

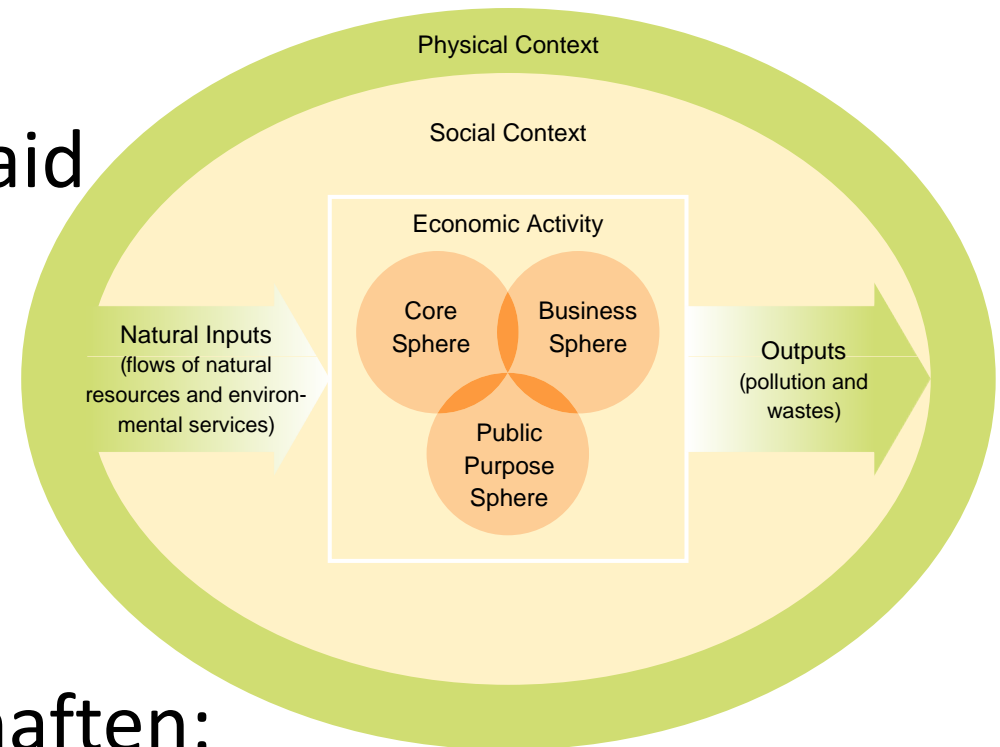
ILO's decent work agenda (2008) includes:

- **Creating Jobs** – an economy that generates opportunities for investment, entrepreneurship, skills development, job creation and sustainable livelihoods.
- **Guaranteeing rights at work** – to obtain recognition and respect for the rights of workers. All workers, and in particular disadvantaged or poor workers, need representation, participation, and laws that work for their interests.
- **Extending social protection** – to promote both inclusion and productivity by ensuring that women and men enjoy working conditions that are safe, allow adequate free time and rest, take into account family and social values, provide for adequate compensation in case of lost or reduced income and permit access to adequate healthcare.
- **Promoting social dialogue** – Involving strong and independent workers' and employers' organizations is central to increasing productivity, avoiding disputes at work, and building cohesive societies.
- Work here refers to workers in the formal economy but also to unregulated wage workers, the self-employed and home workers

See also Millenium Development Goals, Ghai 2003 and other contributions in this Special Issue

Proposition 5: Employment depends on care and nature.

- Account for care work, subsistence work, civic engagement etc.
- Parallel between unpaid care work (mostly of women) and unpaid ecosystem services.
- Network



Source: Goodwin 2003

Vorsorgendes Wirtschaften:

care, cooperation, orientation on what's necessary for the Good Life

Thanks for your attention!

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ISEE 2014: Wellbeing and Equity within Planetary Boundaries



**The biannual conference of the ISEE will be hosted by the
University of Iceland August 13 – 15 2014.**

**Deadline for paper and poster abstracts is November 15th.
The deadline for Session Proposals has been extended to
November, 1, 2013.**

<http://isee2014.yourhost.is>

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Backup slides

In a nutshell...

- Change income distribution
- Regulate financial system
- Stimulate investment in real economy
- Stay within biophysical boundaries
- Value care work

