

## De - Growth

"I don't understand why when we destroy something created by man we call it vandalism, but when we destroy something created by nature we call it progress"

Ed Begley Jr.

In: Sekulova, Kallis, Schneider, 2017





#### Content

Degrowth definition Focal points

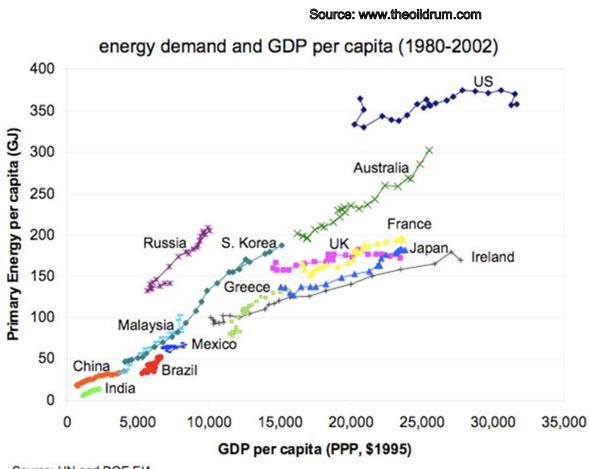
- Environment: Climate change, pollution, biodiversity
- Economics: Inequality
- Social and individual wellbeing

Impossibilities - difficulties - constraints - counter arguments

References



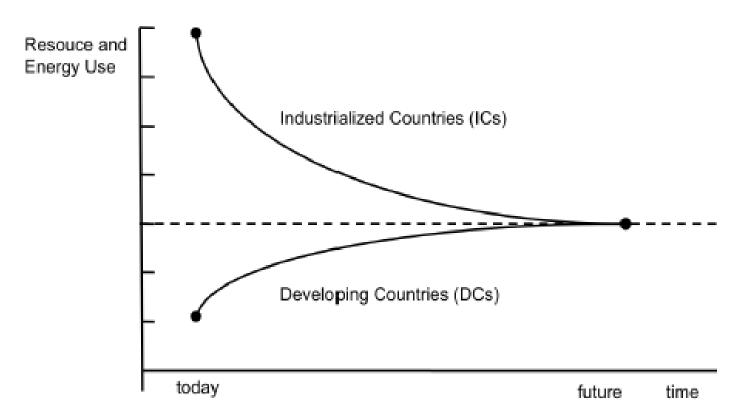
### Degrowth



Source: UN and DOE EIA



# Degrowth



Source: Hennicke, 2014



## Degrowth cloud





### Degrowth

# Scientific Interdisciplinary Approach



#### **Political Movement**



François Schneider on his one year tour through France



# Degrowth Conferences and activities

2008 – First degrowth conference: Degrowth for sustainability and equity, Paris ...

1) 6th International Degrowth Conference for Ecological Sustainability and Social Equity: Dialogues in turbulent times

Where: Malmö (Sweden) When: 21-25 August 2018

2) The First North-South Conference on Degrowth: Decolonizing the social imaginary

Where: Mexico City (Mexico) When: 4-6 September 2018

3) Degrowth in the EU Parliament: Post-growth conference to challenge the economic thinking of EU institutions with influent EU policy-makers

Where: European parliament, Brussels (Belgium)

When: 18-19 September 2018

....



## Degrowth Self-Description

Sustainable degrowth is a downscaling of production and consumption that increases human well-being and enhances ecological conditions and equity on the planet. It calls for a future where societies live within their ecological means, with open, localized economies and resources more equally distributed through new forms of democratic institutions. Such societies will no longer have to "grow or die." Material accumulation will no longer hold a prime position in the population's cultural imaginary. The primacy of efficiency will be substituted by a focus on sufficiency, and innovation will no longer focus on technology for technology's sake but will concentrate on new social and technical arrangements that will enable us to live convivially and frugally. Degrowth does not only challenge the centrality of GDP as an overarching policy objective but proposes a framework for transformation to a lower and sustainable level of production and consumption, a shrinking of the economic system to leave more space for human cooperation and ecosystems.

Source: https://degrowth.org/definition-2



#### Content

Degrowth definition

#### Focal points

- Environment: Climate change, pollution, biodiversity
- Economics: Inequality
- Social and individual wellbeing

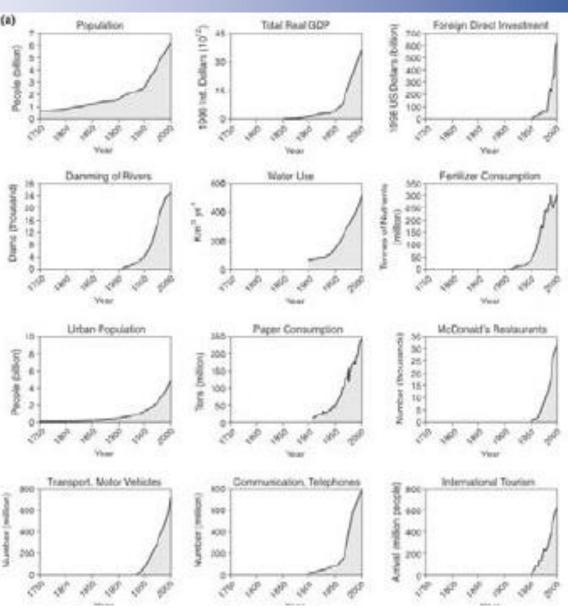
Impossibilities - difficulties - constraints - counter arguments

References



# Selected Areas of non linear Growth

- Population
- GDP
- Foreign Direct Investment
- Damming of Rivers
- Water Use
- Fertilizer Consumption
- Urban Population
- Paper Consumption
- McDonald's Restaurants
- Transport Motor Vehicles
- Communication Telephones
- International Tourism



Source: Sommer / Welzer 2014



Table 1. The updated control variables and their current values, along with the proposed boundaries and zones of uncertainty, for all nine planetary boundaries. In the first column, the name for the Earth-system process used in the original PB publication (R2009, reference 1) is given for comparison.

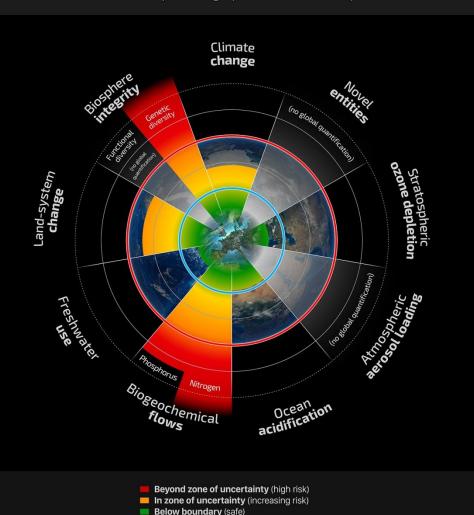
Earth-system process	Control variable(s)	Planetary boundary (zone of uncertainty)	Current value of control variable
Climate change (R2009:	Atmospheric CO <sub>2</sub> concentration, ppm	350 ppm CO <sub>2</sub> (350-450 ppm)	398.5 ppm CO <sub>2</sub>
same)	Energy imbalance at top-of- atmosphere, W m <sup>-2</sup>	+1.0 W m <sup>-2</sup> (+1.0–1.5 W m <sup>-2</sup> )	2.3 W m <sup>-2</sup> (1.1–3.3 W m <sup>-2</sup> )
Change in biosphere integrity (R2009: Rate of biodiversity loss)	Genetic diversity: Extinction rate	< 10 E/MSY (10–100 E/MSY) but with an aspirational goal of ca. 1 E/MSY (the background rate of extinction loss). E/MSY = extinctions per million species-years	100-1000 E/MSY
	Functional diversity: Biodiversity Intactness Index (BII)  Note: These are interim control variables until more appropriate ones are developed	Maintain BII at 90% (90–30%) or above, assessed geographically by biomes/large regional areas (e.g. southern Africa), major marine ecosystems (e.g., coral reefs) or by large functional groups	84%, applied to southern Africa only

Source: Steffen et al. 2015



#### **Planetary Boundaries**

A safe operating space for humanity



Boundary not yet quantified

# PB Concept for an Earth System

Originally from 2009: Rockstroem et al.

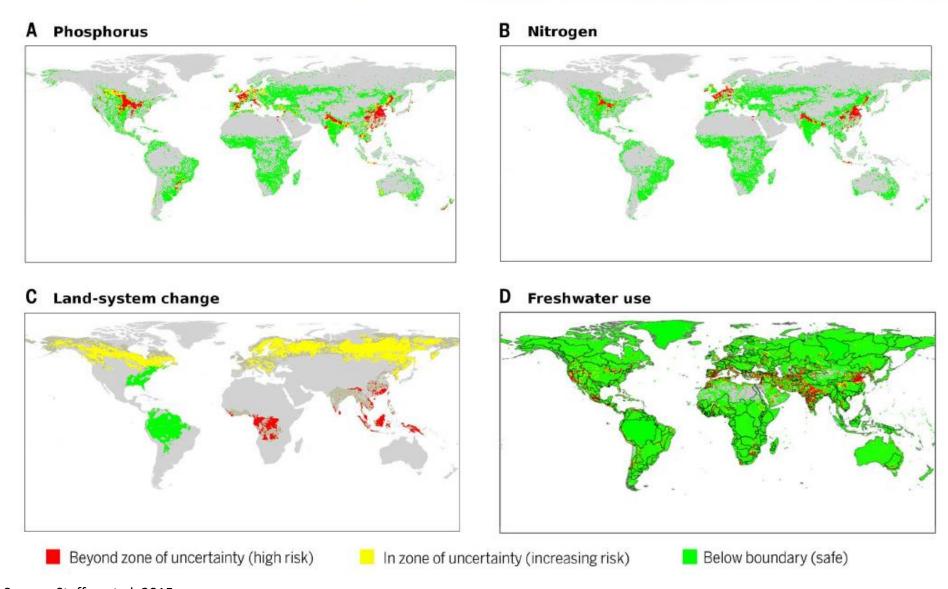
Update from 2015: Steffen et al.

ES Processes / Categories
Indicators / Control Variables
Thresholds

Source: Steffen et al. 2015

Source: Steffen et al. Planetary Boundaries: Guiding human development on a changing planet, Science, 16 January 2015. Design: Globaïa

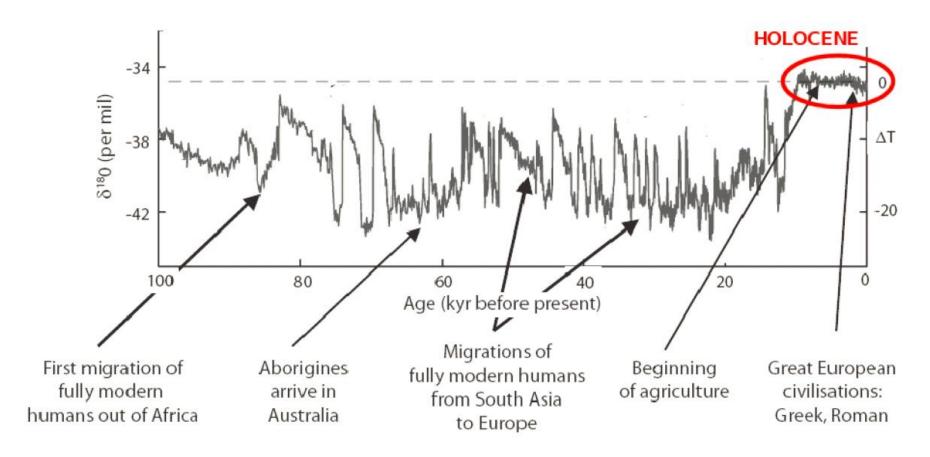




Source: Steffen et al. 2015



**Fig. 1.** The last glacial cycle of 18O (an indicator of temperature) and selected events in human history. The Holocene is the last 10 000 years. Adapted from Young and Steffen (2009).



Source: Rockstroem et al. 2009



# The Anthropocene Debate

Paul Crutzen (Nobel Laureate in Chemistry 1995) to rename the Holocene (holos + kainos = the completely new) to Anthropocene (*the man made new*)

#### Capitalocene

(Jason J. Moore)

Global Capitalist society as a system of power, profit and re/production which is dynamically stabilizing and reproducing itself in a steady process of expansion and intensification with regard to space, time, and energy through accumulation.



#### Content

Degrowth definition

#### Focal points

- Environment: Climate change, pollution, biodiversity
- Economics: Inequality
- Social and individual wellbeing

Impossibilities - difficulties - constraints - counter arguments

References



# Focal Point Economy: Inequality

R > G



Thomas Piketty
French Economist

"When the rate of return on capital significantly exceeds the growth of the economy (as it did through much of history until the nineteenth century and as is likely to be the case again in the twenty-first century), then it logically follows that inherited wealth grows faster than output and income. People with inherited wealth need save only a portion of their income from capital to see that capital grow more quickly than the economy as a whole."

Piketty, Capital in the 21st Century (2014), p. 26

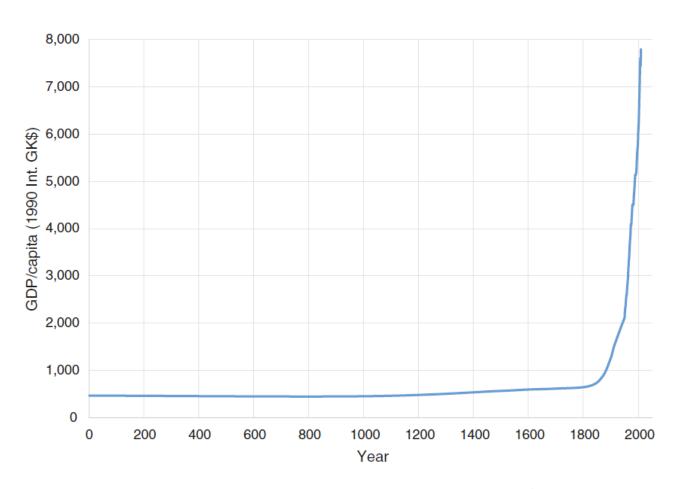
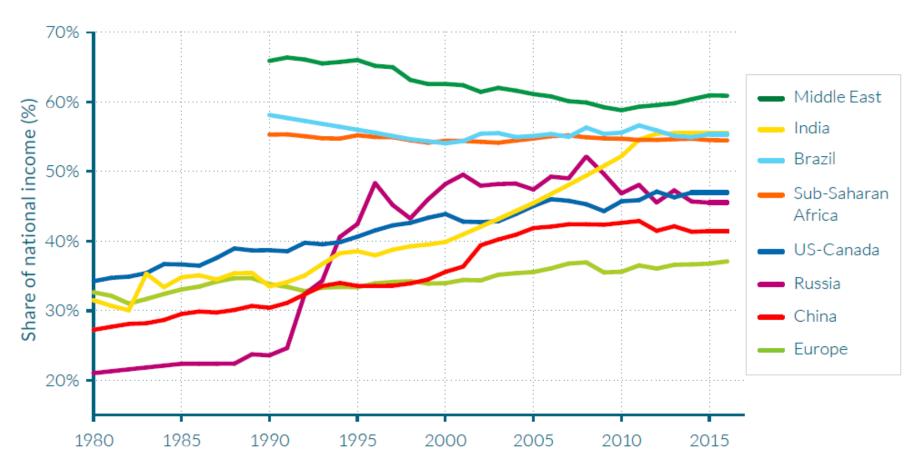


Fig. 2.1 World GDP per capita 1–2010 (1990 Int. GK\$). Source The Maddison-Project Historical Database, http://www.ggdc.net/maddison/maddison-project/home.htm (2013 version)



Top 10% income shares across the world, 1980-2016: Is world inequality moving towards the high-inequality frontier?

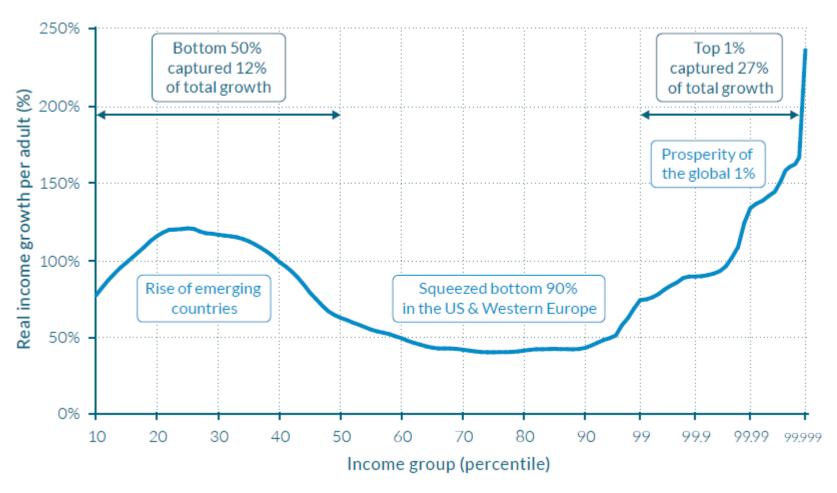


Source: WID.world (2017). See wir 2018.wid.world for data series and notes.

In 2016, 55% of national income was received by the Top 10% earners in India, against 31% in 1980.



#### The elephant curve of global inequality and growth, 1980-2016



Source: World Inequality Report 2018



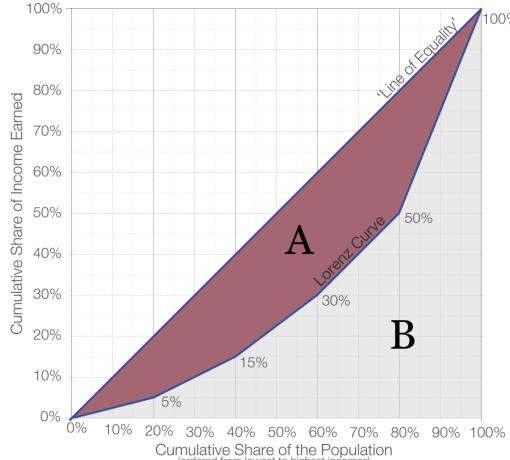
#### Visual Explanation of the Gini Coefficient Our World in Data



#### The Gini coefficient:

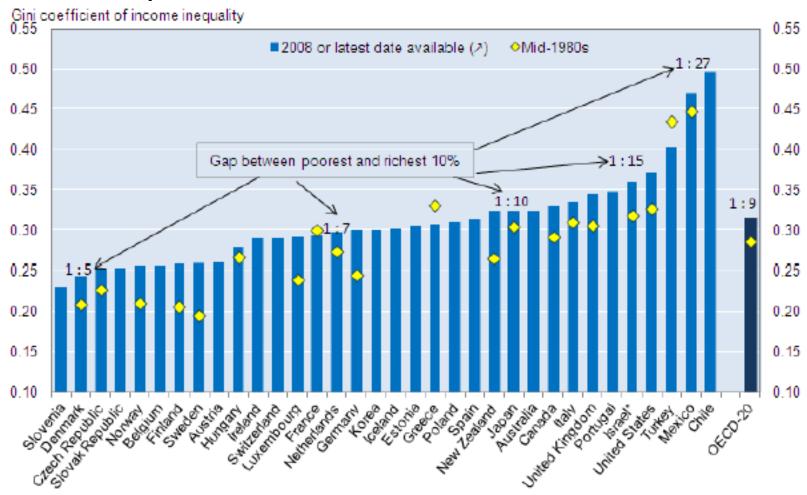
0 (perfect equality) to 1 (perfect inequality).







# Gini Index Increase in OECD Countries by ca. 10% between 1980 and late 2000



Source: OECD, Divided we stand 2011



#### Content

Degrowth definition

#### Focal points

- Environment: Climate change, pollution, biodiversity
- Economics: Inequality
- Social and individual wellbeing

Impossibilities - difficulties - constraints - counter arguments

References



### **Easterlin Paradox**

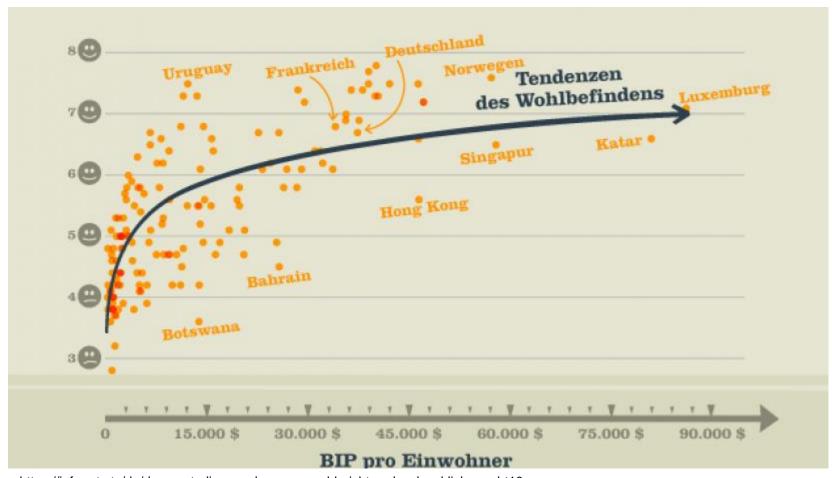
#### Long term Wellbeing does not increase with GDP

- Happiness (U.S. General Social Survey): "Taken all together, how would you say things are these days, would you say that you are very happy, pretty happy, or not too happy?" (Coded 3, 2, 1).
- Life Satisfaction (World Values Survey): "All things considered, how satisfied are you with your life as a whole these days? Please use this card to help with your answer."
  - 1 'Dissatisfied' 2 3 4 5 7 8 9 10 'Satisfied'
- 3. Financial Satisfaction (Latinobarometer): "How would you define, in general, the current economic situation of yourself and your family?

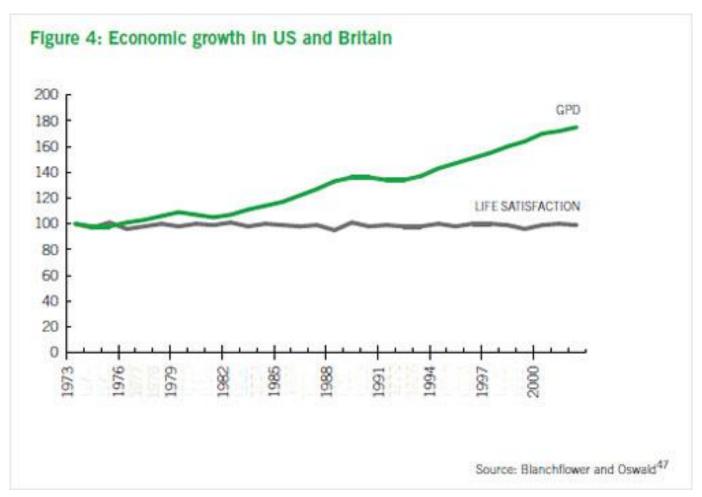
Would you say that it is....

1 = Very bad; 2 = Bad; 3 = Regular; 4 = Good;

5 = Very Good"



https://info.arte.tv/de/das-easterlin-paradox-wenn-geld-nicht-mehr-gluecklich-macht10



https://www.bbc.co.uk/blogs/thereporters/markeaston/2011/02/happiness work sleep and bicyc.html



#### Content

Degrowth definition

#### Focal points

- Environment: Climate change, pollution, biodiversity
- Economics: Inequality
- Social and individual wellbeing

Impossibilities - difficulties - constraints - counter arguments

References



### Growth Mechanism – Impossibilities for Degrowth I

Money, interest and credit

- Money as a credit relation
- Inherent tendency towards exponential growth



### Growth Mechanism - Impossibilities for Degrowth II

#### Profit, competition and capital accumulation

- Profit above the interest rate
- continuously increasing division of labor raises productivity and output, which drives producers to find new markets for new products. ..
- competition pushes producers to conquer market share to benefit from economies of scale and be able to re-invest more in technological improvements.
- modern corporations are under sustained pressure by shareholders to grow in order to maximize profits



# Growth Mechanism Impossibilities – Constraints for Degrowth III

Technical Progress, Innovation, and Resource Consumption

whether energy use is growth-led or inversely



# Growth Mechanism Impossibilities – Constraints for Degrowth IV

#### Politics, State and their Institution

- transcend the class conflicts that arose from scarcity
- to finance state expenses through taxes
- a substitute for equality of income
- fear for unemployment



# Growth Mechanism Impossibilities – Constraints for Degrowth V

Personal Reasons: Striving for 'More', Social Pressure, Accumulation and Inequality

Social status



#### References

Hennicke. 2014. Decoupling resource consumption and economic growth: Insights into an unsolved global challenge. Degrowth Conference. Wuppertal Institute.

Piketty, Thomas (2014), Capital in the 21st Century, Harvard University Press Cambridge

Rockstroem, Johan, et al. (2009), Planetary Boundaries: Exploring the Safe Operation Space for Humanity, Institute for Sustainable Solutions

Sommer, Bernd / Welzer, Harald, Ökologie: Klimawandel, Knappheiten und Transformationen im Anthropozän; in: Lamla, Jörn, et al., (2014), Handbuch der Soziologie, p. 419-432

W. Steffen et al. 2015. Science 347, Planetary boundaries: Guiding human development on a changing planet 1259855, (2015). DOI: 10.1126/science.1259855

Alvaredo et. Al. 2018. World Inequality Report, 2018. <a href="https://wir2018.wid.world/">https://wir2018.wid.world/</a>

OECD 2011. Divided we stand. <a href="https://www.oecd.org/els/soc/dividedwestandwhyinequalitykeepsrising.htm">https://www.oecd.org/els/soc/dividedwestandwhyinequalitykeepsrising.htm</a>