

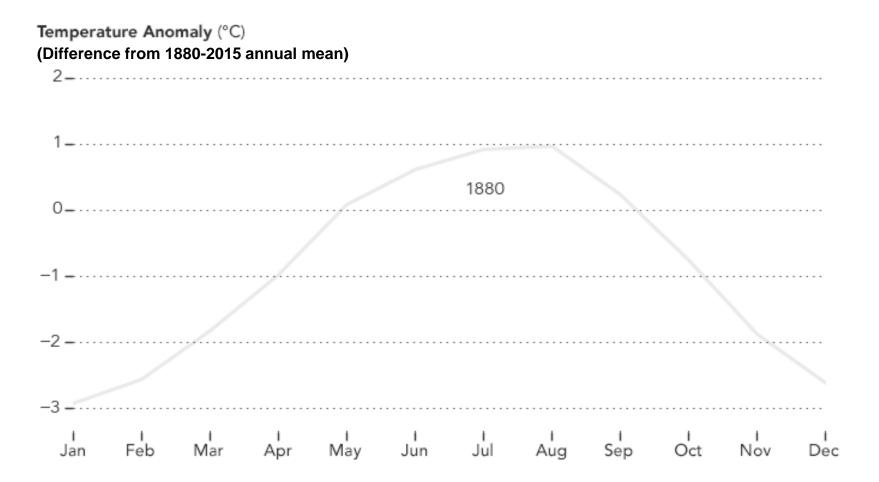
#### Introduction to Post-growth Economics

1<sup>th</sup> European River SummitSarajevo, 28<sup>th</sup> September 2018Niko Paech



# Agenda 1. Climate protection: Green growth or degrowth? 2. Green growth does not work 3. From early growth criticism to post-growth economics 4. Reduction strategies 5. Conclusion

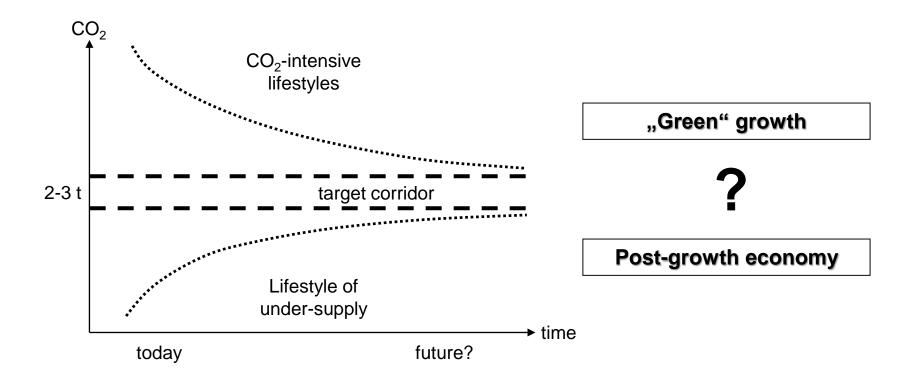
#### Climate change is the most significant limit to growth



http://earthobservatory.nasa.gov/IOTD/view.php?id=88607&eocn=home&eoci=iotd\_title

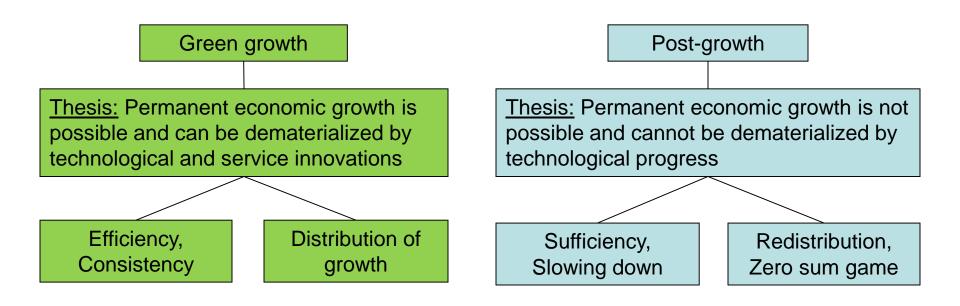
#### What is sustainability? Social justice within ecological limits!

- Meeting the 2 degrees celsius climate protection target
- Global budget: 750 billion tons of CO<sub>2</sub> until 2050
- 7,3 billion people  $\Rightarrow$  2,5 tons of CO<sub>2</sub> per capita p.a.



How much materialized freedom and self fullfilment may an individual claim without living beyond his or her ecological and social means?

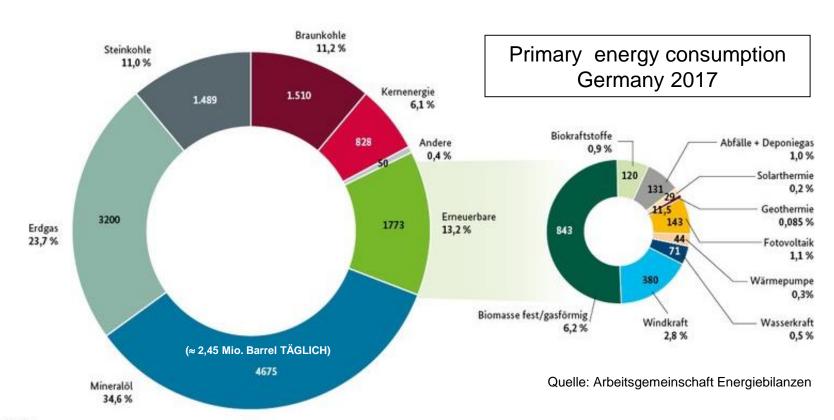
#### Sustainability and growth: Two different perspectives



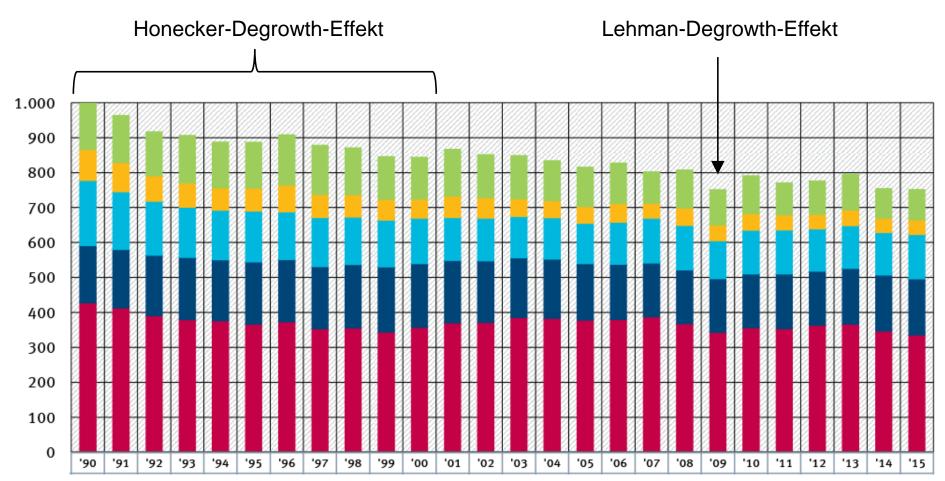
Technological Change
Satisfying demand by
ecological optimized
hardware and production

Cultural Change
Putting the demand as such in question; new forms of subsistency

#### The german "Energiewende" completely failed



#### Significant CO<sub>2</sub> reductions were caused by degrowth effects



Quelle: Umweltbundesamt (UBA)

Not technological innovations but shrinkings of industrial production turns out to protect the climate.



### growth against view o points Older

#### A small (and inclomplete) history of growth criticism/scepticism

#### 1. Is permanent growth possible?

- Quesnay (1758)
- Malthus (1798)
- Mill (1848)

#### 2. Is growth advisable?

- Keynes (1941)
- Erhard (1957)
- Kohr (1957)
- Boulding (1966)
- Mumford (1967)

#### 3. Is growth harmless?

- Geogescu-Roegen (1971)
- Meadows (1972)
- Schumacher (1973)
- Illich (1973)
- Fromm (1976)
- Gorz (1977)
- Daly (1977)/Hueting (1980)

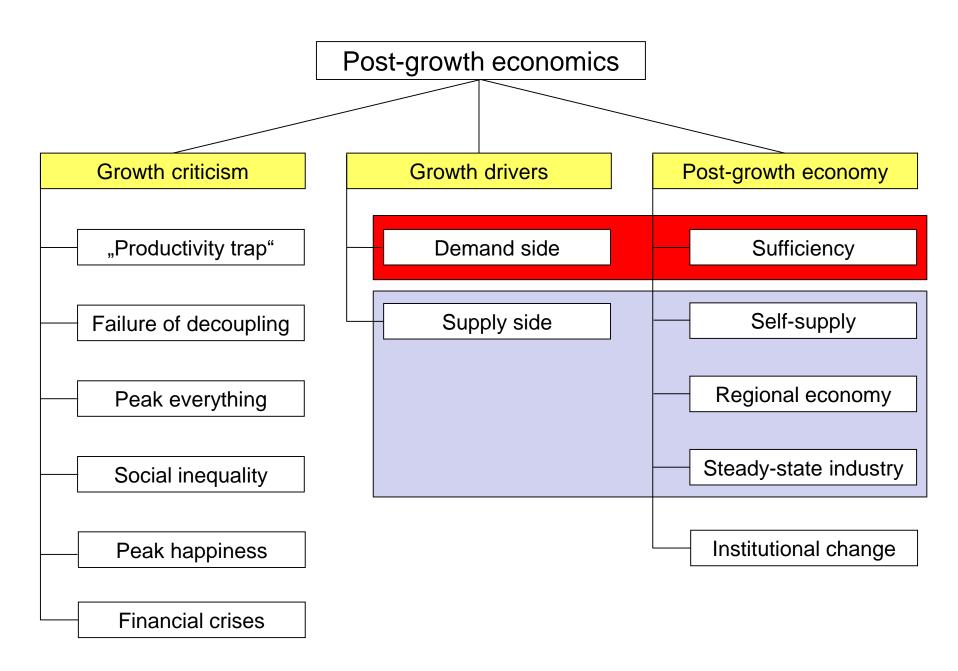
## degrowth concepts current

and

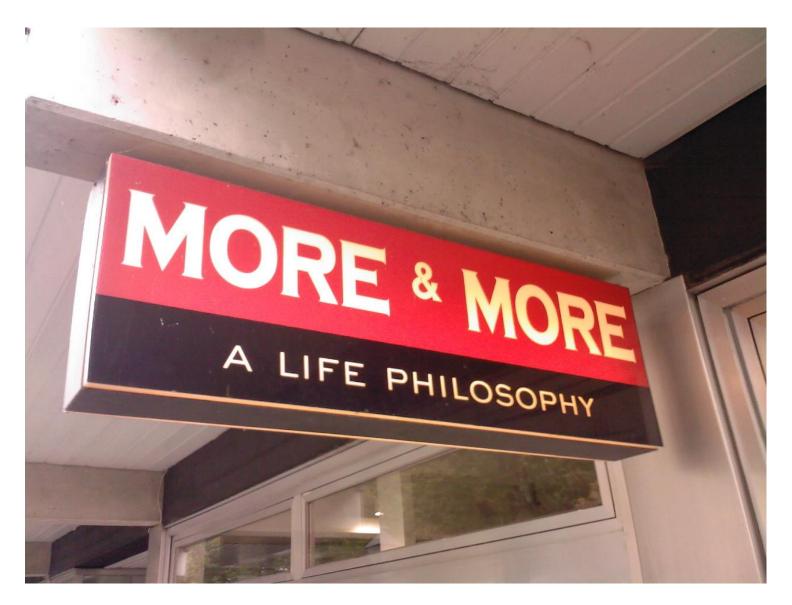
New

#### 4. Is degrowth possible?

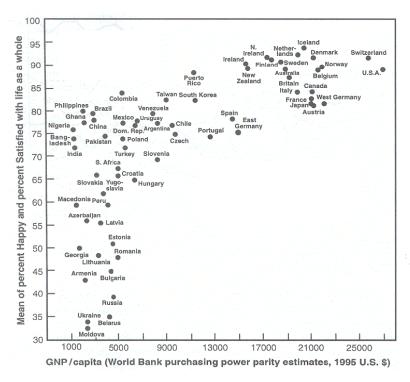
- Gronemeyer (1988)
- Neirynck (1992)
- Sachs (1992)
- Sakar (2001)
- Pallante (2005)
- Layard (2005)
- Paech (2005, 2012)
- Binswanger (2006)
- Latouche (2006)
- Trainer (2007)
- Victor (2008)
- Martinez-Alliez (2009)
- Jackson (2009)
- Miegel (2010)
- Schor (2010)
- Seidl/Zahrnt (2010)
- Welzer (2013)
- D'Alisa/Demaria/Kallis (2016)
- Gran (2017)

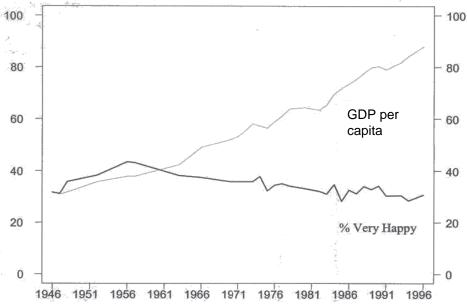


#### Is there a maximum of services/products consumers could desire?



#### Is happiness related to material wealth? (Layard 2005)





#### A new consumer theory: The microeconomics of sufficiency

Welfare as a function of own time that has to be invested in every act of consumption

Restriction:

$$T = 24 - t_{work} - t_{non-market} - t_{sleep}$$

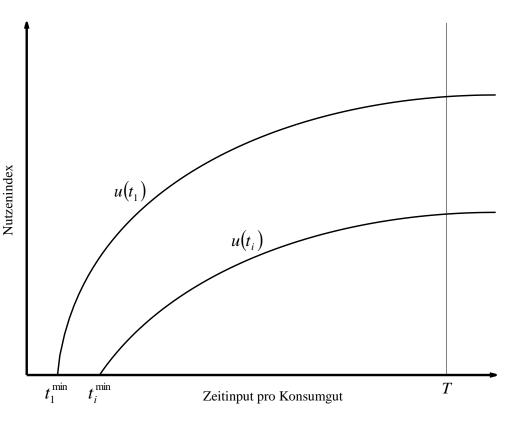
$$\sum_{i}^{n} t_{i} \leq T$$

Fixed consumption time:

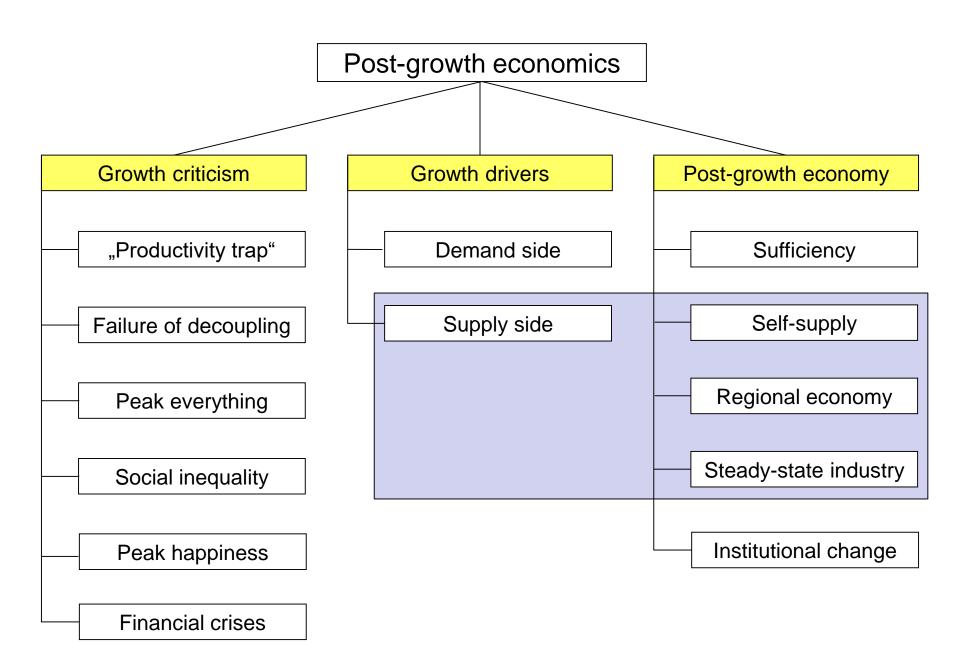
$$u(t_i) = 0$$
 if  $t_i < t_i^{\min}$ 

Marginal utility of consumption time:

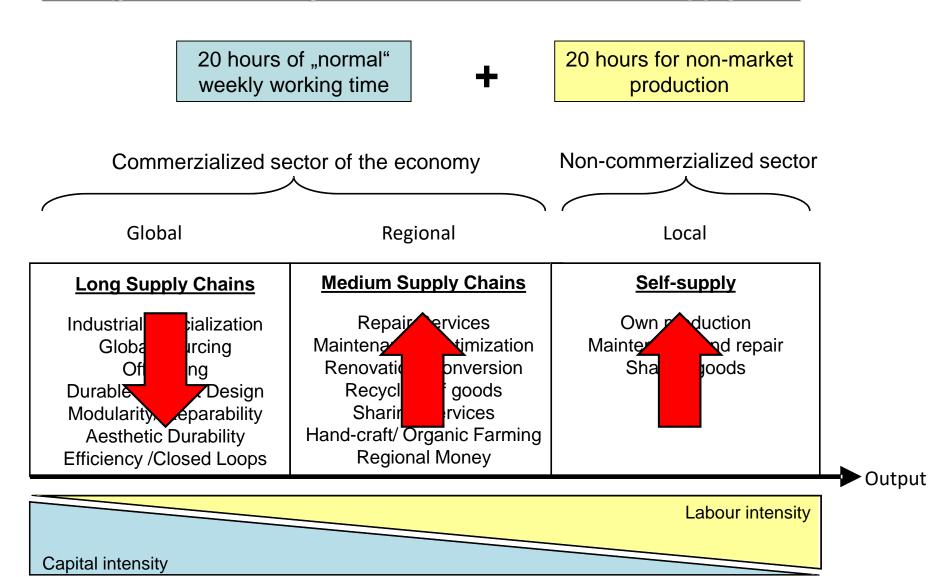
$$\partial^2 u / \partial t_i^2 < 0$$



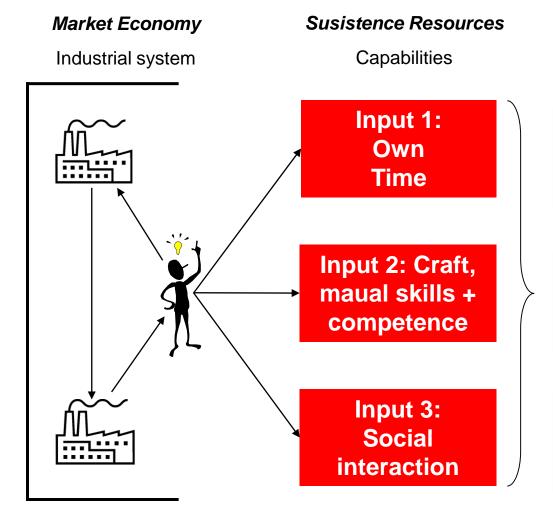
- After reaching a critical amount of consumption activities any further increase of it may even worsen the individual situation.
- Economies of time: sufficiency as rational protection against stress



#### Post-growth economy: Three dimensions of the supply side



#### <u>Urban subsistence: Resilience by a prosumer movement</u>



#### Self-work

Subsistence outputs

#### **Sharing usage of products**

For example: Car Sharing, collaborative consumption of goods and resources, etc.

#### Extension of the use period

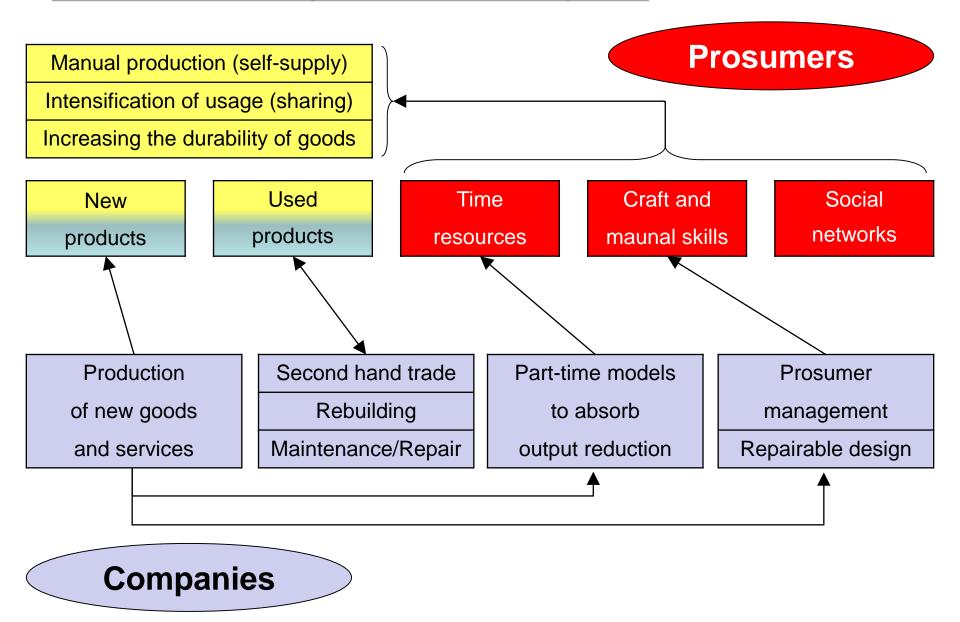
For example: Using own capabilites to repair, maintain, upgrade, rebuild material goods, etc.

#### **Own production**

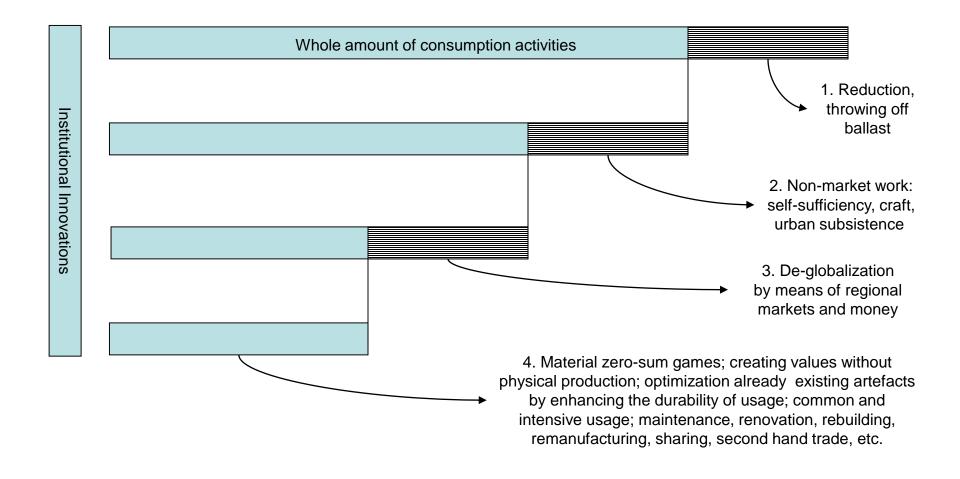
For example: Do-It-Yourself movement, Community gardens, open source design, etc.

#### Substitution of industrial production

#### Interaction between prosumers and companies



#### Five steps towards the post-growth economy: Reducing the industry



#### How to get there: Leaving the comfort area... a political program?

- 1. Political measures are possible but only theoretically:
  - Personal CO<sub>2</sub> accounts: 2-3 tons per year
  - 100% Money approach; regulating banks; Tobin tax
  - Commons based institutions to allocate and distribute resources, democratizing capital
  - Reform of education systems: craft instead of specialized work
  - Reducing and shaping the division of labour (20 hours)
  - Abolishment of advertising
  - Cutting of harmful subsidies
  - Programs to dismantle traffic and industrial infrastructures
  - Strict moratorium on projects resulting in soil and land areas being sealed
- 2. Handling the next probable collapse scenarios
- 3. Social diffusion of post-growth compatible lifestyles and supply systems

Conclusion: Only options 2 and 3 will work.

