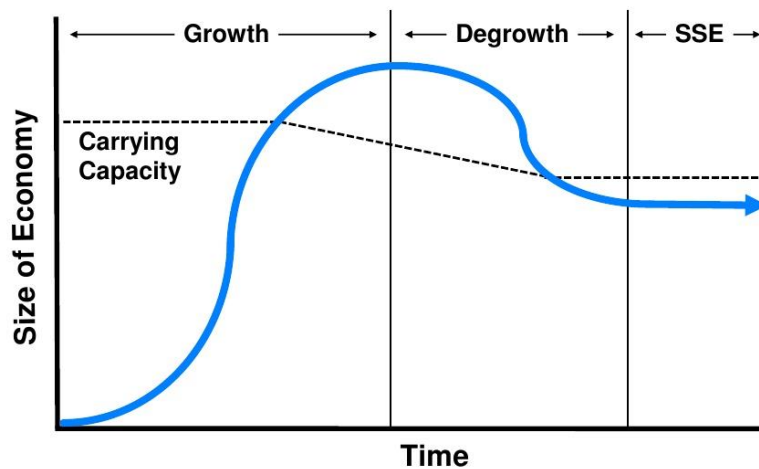


Macroeconomics of Degrowth

The Degrowth Transition to a SSE



2

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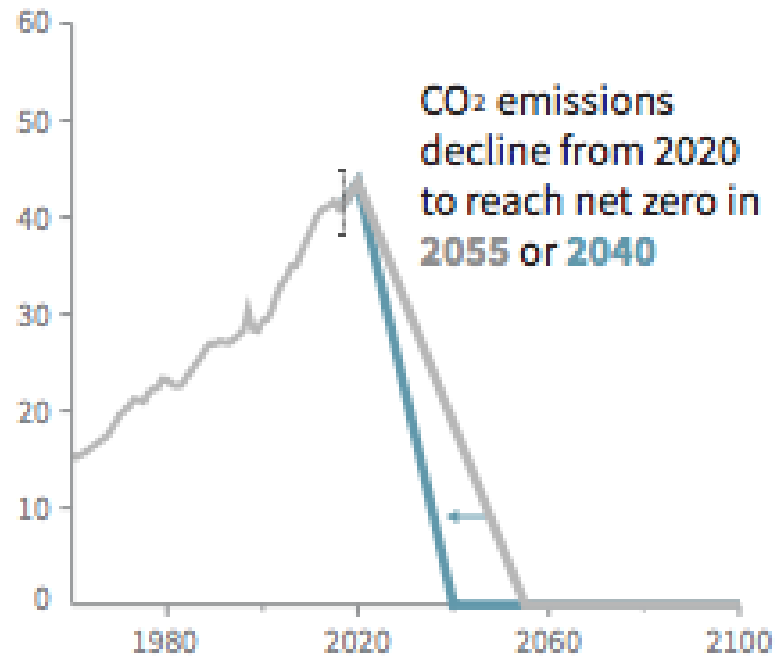
Content

Part I: Different strategies: Green Growth, A-Growth, Growth Independence, Degrowth

Part II: Macroeconomics of Zero Growth

Part I: Different strategies:
Green Growth, A-Growth,
Growth Independence, Degrowth

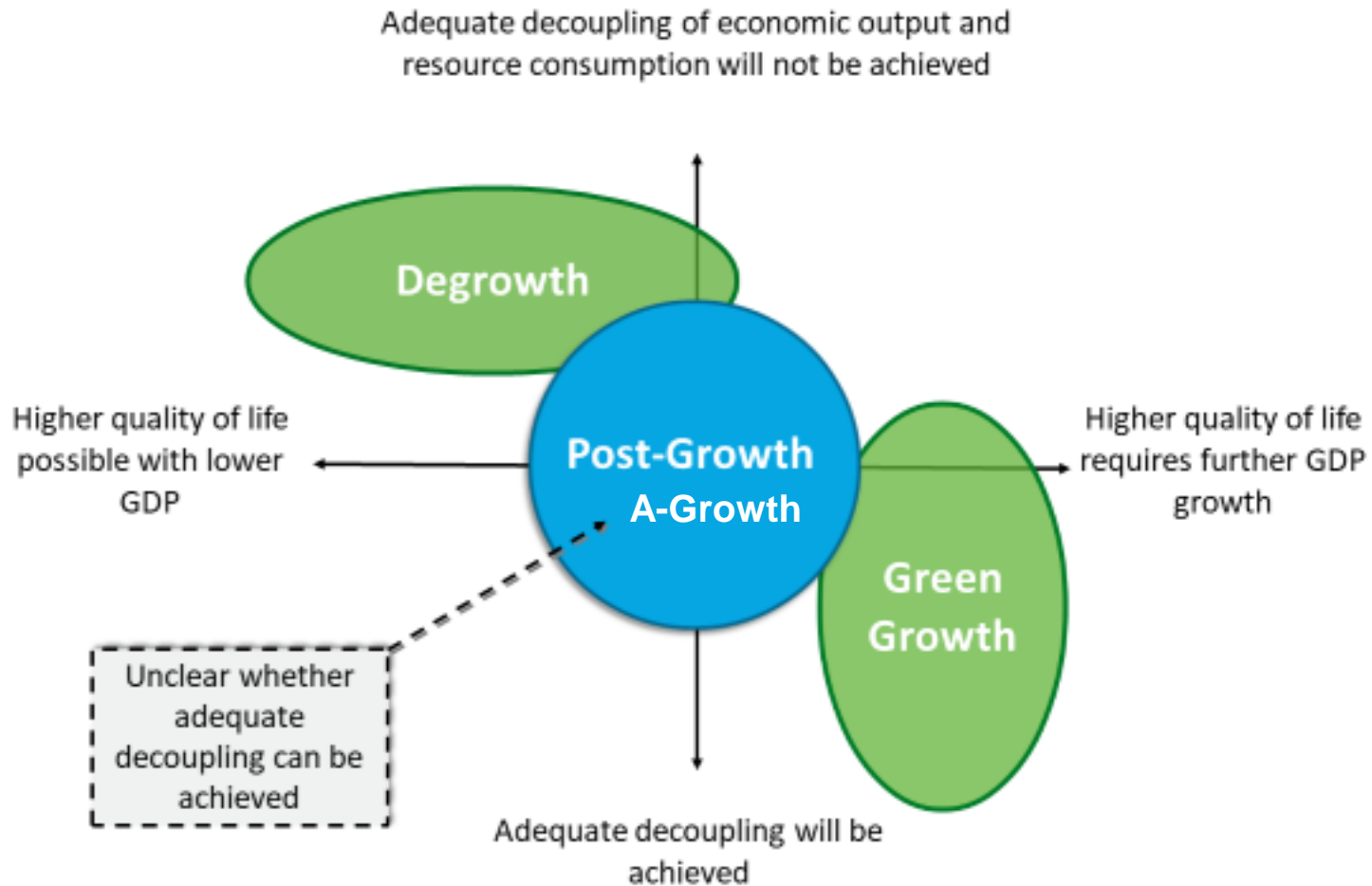
Motivation



Faster immediate CO₂ emission reductions limit cumulative CO₂ emissions shown in panel (c).

IPCC Special Report on Global Warming of 1.5°C (2018).

Different strategies

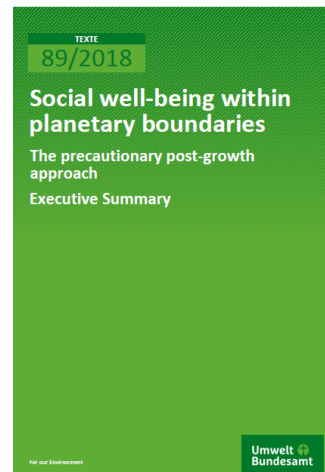


A-Growth and Sufficiency

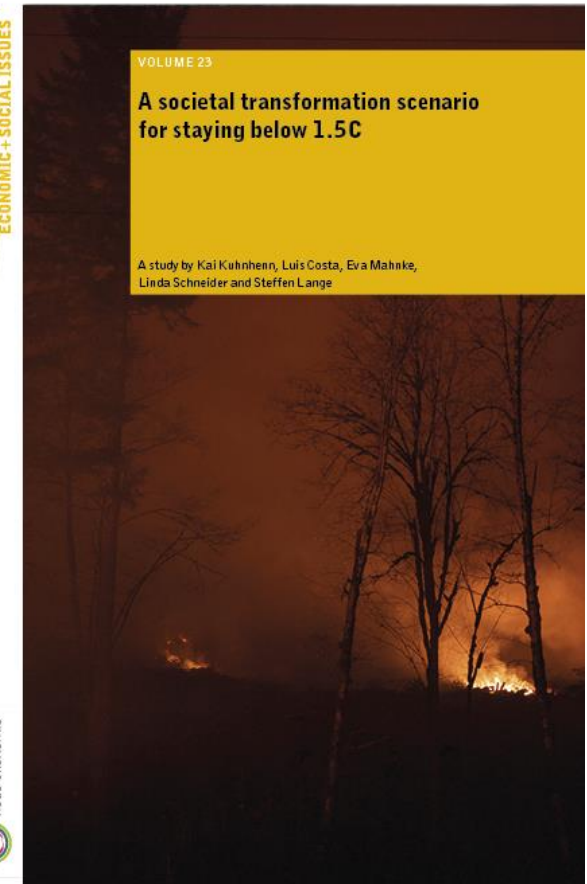
- Simple version: Cap-and-trade system for greenhouse gases
- More complex version: Various policies to reduce emissions
- Whether this leads to positive or negative growth does not matter
- Sufficiency measures part of this?



Jeroen van den Bergh

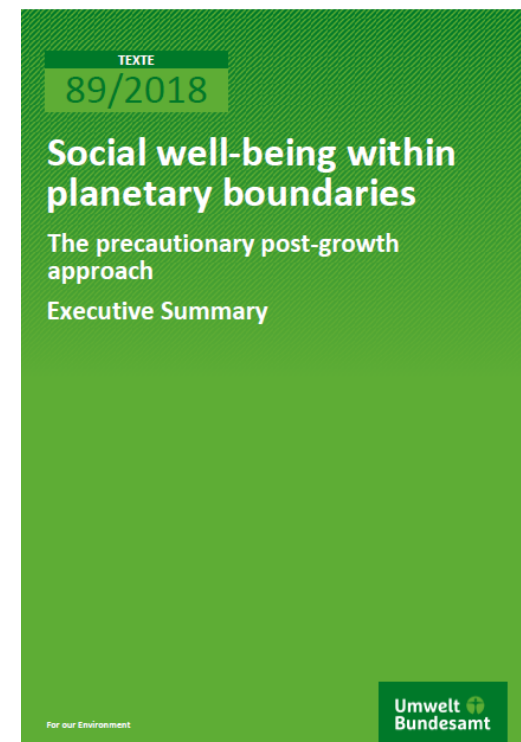


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ECONOMIC + SOCIAL ISSUES



Growth Independence

- Analysis:
 - Certain institutions are growth dependent
 - Strict environmental policies might lead to economic shrinkage
 - This would have strong negative social consequence – which is why the policies are not put into place
- Central examples:
 - Employment and wage income
 - Social security systems



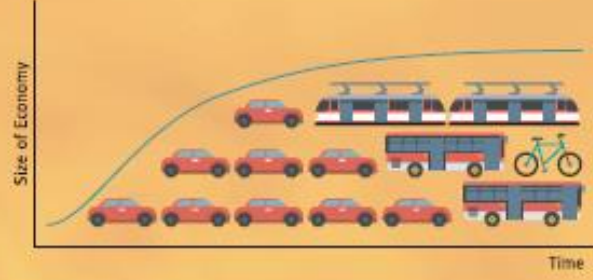
Part II: Zero Growth



Lange

Macroeconomics Without Growth

metropolis



Steffen Lange

Macroeconomics Without Growth

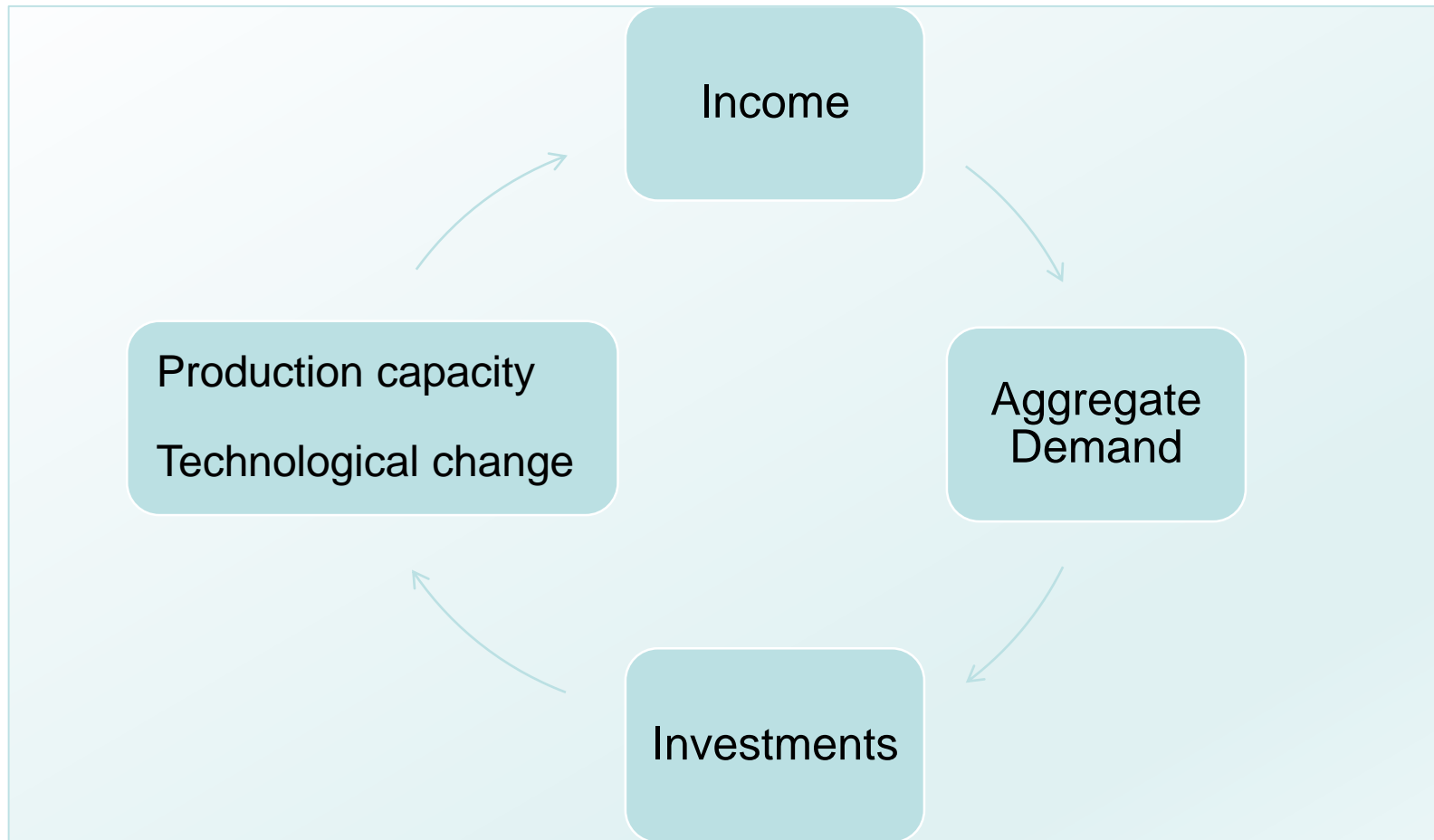
Sustainable Economies in Neoclassical, Keynesian and Marxian Theories

Wirtschaftswissenschaftliche Nachhaltigkeitsforschung **Band 19**

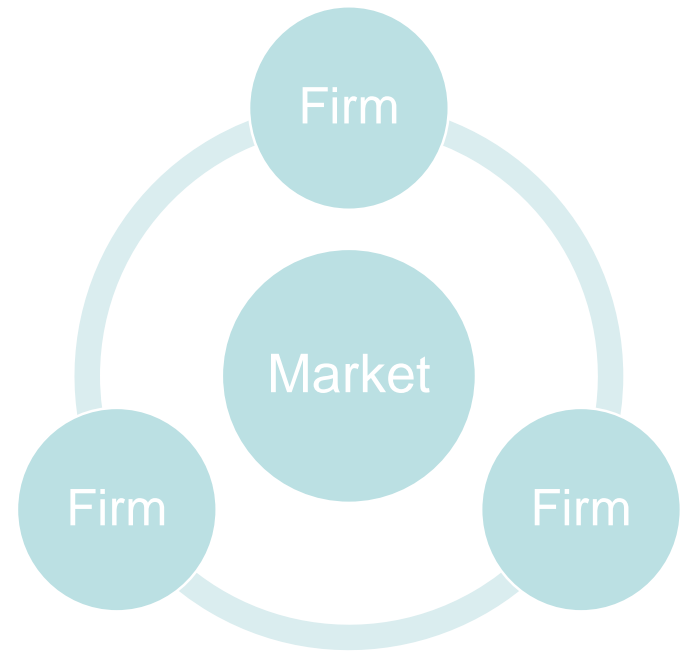
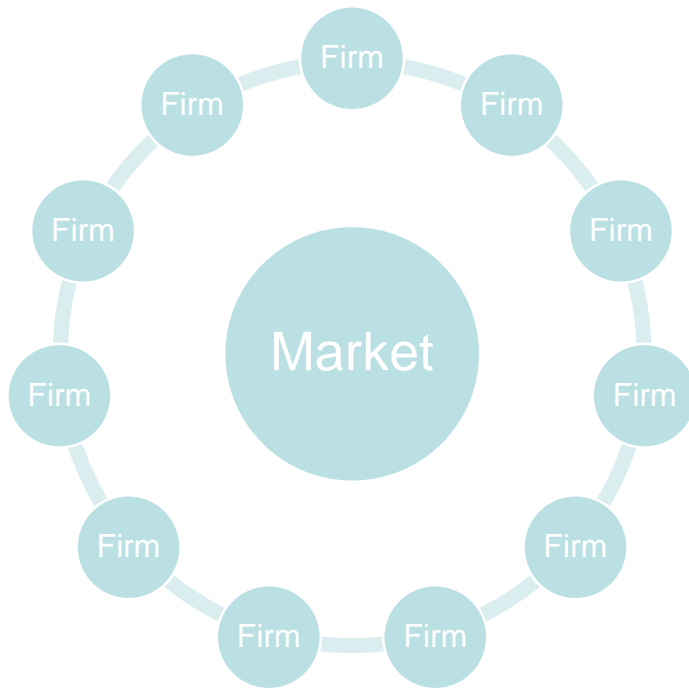
Plural Theories

II	III	IV
NEOCLASSICAL THEORIES	KEYNESIAN THEORIES	MARXIAN THEORIES
109	217	395
Chapter 5	Chapter 10	Chapter 15
Introduction	Introduction	Introduction
111	219	397
Chapter 6	Chapter 11	Chapter 16
Fundamentals	Fundamentals	Fundamentals
115	225	403
6.1 Basic Macroeconomic Model: Neoclassical Foundations	11.1 Keynes: Effective Demand	16.1 Marx: The Accumulation of Capital
115	226	404
6.2 Solow Model: Savings and Capital Accumulation	11.2 Harrod: Warranted, Actual and Natural Growth	16.2 Conditions for Sustainable Economies Without Growth
121	243	415
6.3 Neoclassical Growth Model: Microfoundations	11.3 Domar: Capacity and Demand Effects	16.3 Results and Discussion
128	247	423
6.4 Results and Discussion	11.4 Neoclassical Synthesis: Aggregate Demand and	
134	Aggregate Supply	
	251	
	11.5 Kalecki: Investments and the Business Cycle	
	257	
	11.6 Kaldor: Technical Progress Function	
	275	
	11.7 Robinson: Biased Technical Change	
	280	
	11.8 Results and Discussion	
	288	
Chapter 7	Chapter 12	
Endogenous Technological Change	Monetary Theories	
143	295	
7.1 AK Model: Human Capital and Improvement of Knowledge 143	12.1 Davidson: Revenue Expectations and Monetary Constraints 296	
7.2 Endogenous Techn. Change I: Extension of Technologies	12.2 Monetary Keynesianism: Equilibrium Without a	
147	Labour Market	
7.3 Endogenous Techn. Change II: Replacement of Technologies 150	304	
7.4 Directed Technical Change: Different Types of	12.3 Binswanger: Growth Imperative and Growth Impetus	
Techn. Change	312	
154	12.4 Godley and Lavoie: Stock-Flow Consistent Models	
7.5 Results and Discussion	324	
161	12.5 Results and Discussion	
	336	
Chapter 8	Chapter 13	
Environment and Technology	Environment and Demand	
167	339	
8.1 Dasgupta-Heal-Solow-Stiglitz Model: Substitution	13.1 IS-LM-EE: Environmental Constraints	
and Techn. Change	340	
168	13.2 Harris: Clean and Dirty Sectors	
8.2 Green Solow Model: Abatement	345	
173	13.3 Fontana and Sawyer: Environmental Depletion Rate	
8.3 AK Model with Environment: Abatement	351	
Depending on Techn. Change	13.4 Results and Discussion	
175	355	
8.4 Endogenous Techn. Change with Environment:		
Natural Resources		
178		
8.5 Directed Technical Change with Environment:		
Clean and Dirty Sectors		
180		
8.6 Results and Discussion		
187		

Keynesian Theories



Marxian Theories



Surprising results

- In neoclassical and Keynesian theories, zero growth is not a problem in principle
 - Central role of technological change
 - Business Cycle around zero growth (for example Kalecki)
 - Binswanger's theory of growth imperative depends on few assumptions
- In Marxian theories, zero growth more difficult. Reasons:
 - Interest to accumulate by capitalists
 - Coercion to invest and grow

Synthesis

Supply side

Increases in productivities need to be outbalanced by reductions in supply of production factors. For example:

Equivalence between reductions in labour supply ($-g_{LS}$) and growth in labour productivity (g_T)

$$-g_{LS} = g_T$$

Equivalence between reductions in resource supply ($-g_R$) and growth in resource productivity (g_Γ)

$$-g_R = g_\Gamma$$

- and constant capital productivity and capital stock

$$g_K = 0$$

Demand side

Changes in different components of aggregate demand need to outbalance one another

$$\Delta I + \Delta C + \Delta G = 0$$

Assuming constant capital depreciation and a constant capital productivity, investments stay constant

$$\Delta I = 0$$

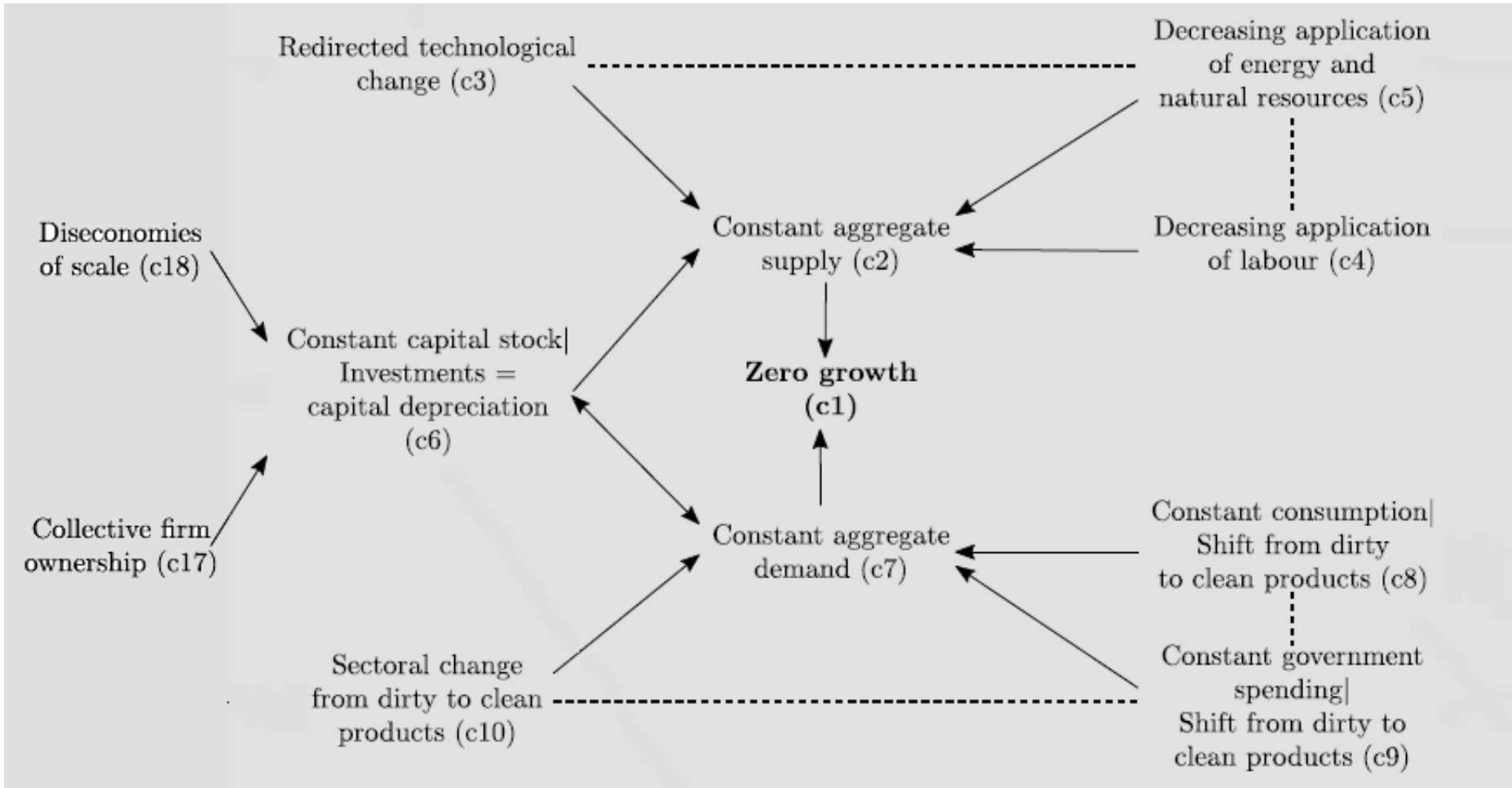
Therefore

$$\Delta C + \Delta G = 0$$

Savings equal investments

$$S = I$$

Synthesis

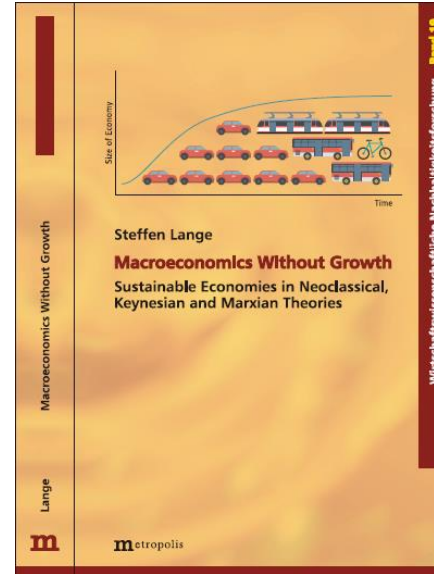
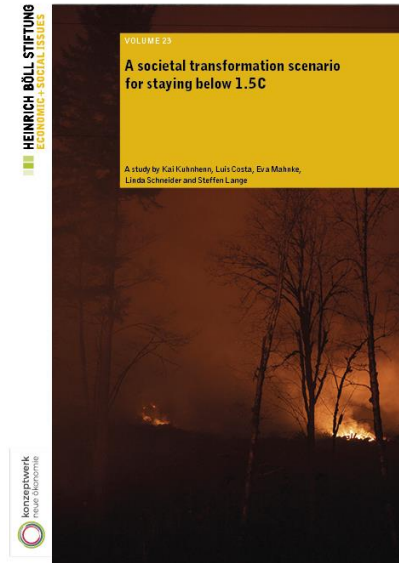
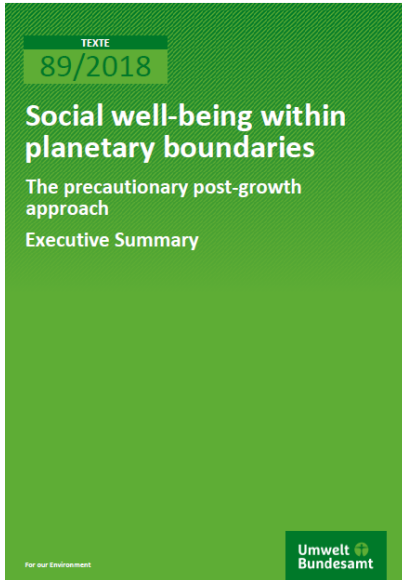


Relation to the growth and environment debate

- Important question: What is the cause for less/zero growth?
 - Strict environmental limits (exergy economics)
 - Redirected technological change combines reduced energy and resource consumption with high employment -> working hours reductions depend on degree of substitution between energy and labour
 - Less consumption and/or government spending
 - Necessity to redistribute work and/or provide income beyond wage-labour
 - Question of distribution always a central issue

Additional questions:

- What will capitalism in the economic sense do? In particular the financial system?
- What will the political economy of capitalism do?
- Relation to gender questions (wage vs. reproductive work)
- International competition



Thank you.

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