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## Welfare after Growth

Koch, Max

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LUND UNIVERSITY

PO Box 117  
221 00 Lund  
+46 46-222 00 00



**Max Koch**  
Professor  
Lund University  
Faculty of Social Sciences  
Socialhögskolan, Box 23, 22100, Lund, Sweden  
Phone: 0046-46-2221268  
Email: [max.koch@soch.lu.se](mailto:max.koch@soch.lu.se)

# **Welfare after Growth**

## **Theoretical Discussion and Policy Implications**

First Draft

### **Abstract**

The paper discusses approaches to welfare under low or no-growth conditions and against the background of the growing significance of climate change as a socio-ecological issue. While most governments and scholars favour ‘green deal’ solutions for tackling the climate and financial crises, a growing number of discussants are casting doubt on economic growth as the answer to the dual crisis. Victor (2008), Jackson (2009a), Gough (2011) and Koch (2012) have provided empirical evidence that the prospects for globally decoupling economic growth and carbon emissions are very low indeed. These doubts are supported by recent contributions on happiness, well-being and alternative measures of measuring prosperity, which indicate that individual and social welfare is by no means equivalent to GDP growth. If the requirements of prosperity and welfare go well beyond material sustenance, then approaches that aim to conceptualise welfare under the circumstances of a ‘Stable State Economy’ become more relevant. In a no-growth economy, a qualitatively different environmental and welfare policy governance network would need to integrate the redistribution of carbon emissions, work, time, income and wealth. Since social policies will be necessary to address the emerging inequalities and conflicts, this paper considers the roles that the various ‘no-growth’ approaches dedicate to social policy and welfare instruments.

## Introduction

The current growth period of capitalism – often referred to as ‘financial’ or ‘finance-driven’ capitalism (Koch, 2012: 89-136) – is caught up in a twofold crisis, its economic and political structure and the climate and associated ecological crises. Many political economists were not very surprised that an economic crisis broke out in 2008, given the relative detachment of finance assets from real-value creation following the liberalisation and deregulation of financial markets since the 1980s (Stockhammer, 2008). Rising levels of debt in particular were seen as unproblematic, since gains from financial investments would spur both investment and consumption (Stiglitz, 2010). Yet an equity-based regime depends on monetary policies that control financial bubbles since there is always a risk that the diffusion of finance may push the economy towards structural instability (Boyer, 2000). In the absence of such policies, the financial sector becomes ‘self-referential’ so that the enormous bonuses that finance managers cashed in for their handling of financial transactions appeared as normal and well-merited revenues, for example. However, these rates of capital valorisation proved increasingly difficult to sustain, since financial investors were competing for a limited number of investment possibilities in the real economy, thereby exploiting ever narrower profit opportunities. In the short-term, financial investors could maintain profitability through ‘accumulation by dispossession’ (Harvey, 2005) and in particular through the sale of public goods such as social housing, the privatisation of the energy and care sectors and the creation of entire new markets such as that for carbon emissions (Lohmann, 2012). Yet in the long run, the balance between the finance sector and the real economy was lost, thus making the bursting of the bubble inevitable.

The climate crisis, for its part, tends to be understated if not ignored by policymakers, not least due to the delayed reaction of the climate system to past and present excessive greenhouse emissions. Most climate change (CC) models predict a doubling of pre-industrial levels of greenhouse gases for the second half of the 21st century, which would result in a rise of global mean temperatures of 2 to 6 degrees Celsius (Le Treut *et al.*, 2007; Stern, 2009). The most negative impacts on human livelihoods are expected to occur in the developing countries (especially in tropical regions), though there are also significant implications for welfare arrangements in the Atlantic space. Direct risks include more heatwaves, forest fires and rising sealevels that would threaten coastal countries. Indirect effects for the Atlantic space include, among other things, a degraded

coastal infrastructure impeding shipping, epidemics, and rising levels of distress migration from tropical Africa and South Asia, due to resource scarcity. Western economies and societies are also likely to suffer from disruption of vital oil and gas supplies, insecurity of food supplies with rising and volatile prices, disturbance of international economic networks and chains, growing restrictions on free trade and the corresponding weakening of global governance (Koch, 2012: 1-13). Both direct and indirect CC impacts will necessitate public investment and policy reconfigurations, whereby traditional social policies are likely to face increasing fiscal competition from prioritised environmental policies such as sea defences and removing housing from flood plains (Gough and Meadowcraft, 2011: 494). This competition is likely to be aggravated by the implementation of measures such as carbon budgets or carbon taxes in the developed world in order to stabilise carbon emissions.

Governments have to deal with contradictory goals in their reaction to this twofold crisis. While institutional path-dependency and technological lock-in effects bind governments to the pursuit of economic growth, they also have to intervene to protect public goods from the incursions of the market. Governments promote consumer freedoms in the quest for economic growth, for example, while also protecting social and common goods and defending ecological limits. In order to understand the different ways that governments deal with these goal conflicts and with CC in particular from a comparative perspective, Ian Gough (2011) distinguishes three scenarios. The first scenario, '*irrational optimism*', is associated with freer markets and technological optimism and with mainstream Republican positions in the US. There, the idea prevails that faster growth will 'equip future populations to cope with climate change, mainly through adaptation ...' (Gough, 2011: 16). Favoured solutions are deregulated drilling for oil in combination with some federal subsidies and loan guarantees for alternative energy sources, in particular nuclear energy as well as carbon capture and storage. The second scenario is '*green growth*' or ecological modernisation to which most European countries subscribe. The incorporation of environmental interests, including CC mitigation, will require a much more active state or 'a return to planning' (Giddens, 2009) in order to set goals and targets, manage risks, promote industrial policy, realign prices and counter negative business interests. Especially during the circumstances of financial crisis, economic recovery is seen as requiring public investment, and this should be targeted towards energy

security and low-carbon infrastructures. By reducing energy and material costs and the West's reliance on the fragile geopolitics of energy supply, the provision of jobs in the expanding 'green' sector and meeting carbon emission reduction targets it is intended to achieve synergy between economic, ecological and also welfare goals.

While the second scenario argues for an essentially Keynesian and green reorganisation of the economy, the third scenario, of '*no-*' or '*degrowth*', questions economic growth itself. Tim Jackson (2009a: 48) and the UK Sustainable Development Commission, among others, stress the distinction between relative and absolute decoupling of economic growth and carbon emissions, whereby the former refers to a 'decline in the ecological intensity per unit of economic output'. While resource impacts decline relative to the GDP in some countries, they do not do so in absolute terms (Koch, 2012: 123-30). Yet to stabilise CC on relatively optimistic assumptions, nothing short of absolute decoupling would be necessary. Not only have improvements in energy efficiency in recent decades been offset by increases in the overall scale of economic activity<sup>1</sup>, the prospects of achieving this in the future to the required extent are very low indeed. Jackson calculates that to establish a reduction of global carbon emissions to below four billion tonnes per annum by 2050 – a benchmark often cited by the IPCC – with continued global population growth (0.7% per year) and income growth rate of 1.4% per year would require a 7% a year improvement in the current global average carbon intensity (grammes of CO<sub>2</sub> per US dollar of GDP). In order to achieve conditions where the entire world population enjoys an equivalent income of EU citizens today, however, the global economy would need to improve in absolute decoupling by 11.2% per year up to 2050 (Gough, 2011: 58) and global carbon intensity would need to be almost 130 times lower than it is today (Jackson, 2009b: 488). Jackson (2009b: 57) concludes that there 'is as yet no credible, socially just, ecologically sustainable scenario of continually growing incomes for a world of nine billion people.' In the absence of evidence for absolute global decoupling of economic activity and carbon emissions, it is remarkable that most political and academic discourses on CC nevertheless favour one of Gough's first two scenarios. In the remainder of this paper, I will turn

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<sup>1</sup> The fact that efficiency improvements are often offset by the expansion of the total scale of production was first recognised by W.S. Jevons (1865) who noted that improvements in steam engines and the corresponding fall in the price of coal were accompanied by an increase in coal consumption.

to his third scenario and discuss ‘no-growth’ and ‘degrowth’ approaches and some of their implications for welfare and social policy.

### **‘No-growth’ and ‘Degrowth’ Literature**

Gross Domestic Product (GDP) seeks to measure the market value of all final goods and services produced within a country per year. GDP growth and the associated increasing consumption of use values are often seen as synonymous with improved individual and social welfare. Consequently, the pursuit of GDP has become one of the principal policy objectives in almost every country in the world; a measurement not only for the economic ‘performance’ of a country but also for its ‘development’ in more general terms. However, various social practices relevant for human welfare are not covered in the GDP, in particular, voluntary work, unpaid housework as well as illegal trades, environment damage and the depletion of natural resources. Yet increasing doubts in the capability of GDP as an appropriate measurement of societal development and the associated need to complement it with other types of management (Stiglitz *et al.*, 2009) do normally not lead scholars to question economic growth as such. For most scholars and policy-makers, a shift away from growth is associated with ‘recession, socio-economic instability, job losses, investment uncertainty and a decline in living standards, etc.’ (Barry, 2012: 132) Inquiries into managing the economy and society without growth is nevertheless not exclusively ‘the act of lunatics, idealists and revolutionaries’ (Jackson, 2009a: 102). Instead it rather characterises a particular perspective in economics, namely that of neoclassical theory, to analyse the production of goods and services from the standpoint of the growth of monetary value, which is seen as indefinite, while the roles played by energy and natural resources in this production are usually not mentioned. This economic perspective tends to finish at the point where the money flows stop: ‘the goods and the services produced by human activity only appear in the economic system insofar as they exist in the form of commodities, and they drop out of sight as soon as they lose this quality.’ (Deléage, 1994, p. 38)

Economics, however, has not always been interpreted as synonymous with a science of prices and the growth of economic value (De Gleria, 1999, p. 84). In the Physiocratic system, for example, the notion of natural resources was central. The wealth of nations was derived solely from the value of land and the entire economic

process was understood by focusing upon a single physical factor: the productivity of agriculture, which was the only kind of work that created value and surplus. In the 17<sup>th</sup> century, William Petty characterised labour as the ‘father’ of material wealth and the ‘earth its mother’ (cited in Marx, 1961: 43), and this was also reflected in the classical tradition of Adam Smith and David Ricardo as well as by Karl Marx. Far from abstracting from natural resources and matter in his analysis, Marx began *Capital* with an examination of the commodity and its twofold character as use value and exchange value, which renders his analysis amenable to ecological laws. While the exchange value aspect of the commodity emphasises the logic of unlimited valorisation, quantitative and geographic expansion of the scale of production and the circular and reversible moments of the production process, the use value aspect considers qualitative matter and energy transformations and hence irreversibility, the narrowed stock of natural resources, and their limited capability to serve as both sources and sinks for the increasing flow and throughput of matter and energy (Koch, 2012: 25-35). John Stuart Mill, for his part, is credited for arguing that economic growth was necessary only up to the point where everyone enjoyed a reasonable standard of living (Victor, 2008: 124; Daly and Farley, 2009: 55). He envisioned a ‘stationary state’ of the economy that would move beyond individual status competition and in which both population and the capital stock ceased to grow. It is remarkable that Mill, writing in the 1840s, precluded the essentials of the contemporary ‘no-growth’ debate by not conflating a stationary condition of capital and population with a stationary state of societal development. For Mill, continuing improvements in labour productivity would enable people’s minds to cease being ‘engrossed by the art of getting on’, thereby providing ‘more scope than ever for all kinds of mental culture’, and ‘for improving the Art of Living’ (Mill, 1848: <http://www.econlib.org/library/Mill/mlPbl.html>). Last not least, in 1930, John Maynard Keynes predicted that by his grandchildren’s time the economy would not need to grow further in order to meet basic human needs. Anticipating the more recent critiques of economic growth, consumerism and status competition, he divided human needs in two classes: absolute needs that people feel ‘whatever the situation of our fellow human beings may be’ and relative needs that people feel ‘only if their satisfaction lifts us above, makes us feel superior to, our fellows.’ While he feared that the needs of the second class may indeed be ‘insatiable’ due to the ongoing social logic of status competition and distinction, he nevertheless believed that ‘a point may



soon be reached' where absolute needs are 'satisfied in the sense that we prefer to devote our further energies to non-economic purposes.' (Keynes, 1963: 96)

The fact that economics and economic growth cannot ignore the laws of physics is one of the essential pillars of thermodynamic economics. Building up on the pioneer work of Nicholas Georgescu-Roegen (1971) this perspective stresses that processes of irreversible material and energy transformation take place in production, transport, communication and consumption. This use of the first law of thermodynamics builds upon Einstein's theories about mass and energy and asserts the conservation of energy and material reserves of a system (ultimately of the universe). The second law captures the fundamental asymmetry of the universe, in which the distribution of energy changes in an irreversible manner. The 'measurement' of total disorder or chaos in a system is 'entropy': all economic activity runs against the general tendency of the universe to move towards a state of greater disorder, or greater entropy. The overall increase in entropy resulting from production processes is always greater than its local decrease arising from the production of a concrete good. The continuation of work and consumption processes, whatever their historical form, is therefore dependent upon a continuous input of low-entropy energy for the rearrangement of matter. Yet the Earth's sources and sinks of energy and raw materials are finite, that is, they can be used only once. Georgescu-Roegen's work served point of departure for the most prominent contemporary approach in ecological economics, Herman Daly's steady-state economy (SSE). In contrast to GDP growth, which is a value index of the physical flows in an economy, the primarily physical concept of a SSE is that of a relatively stable population and 'artefacts' (stock of physical wealth) and the lowest feasible rates of matter and energy throughput in production and consumption. The scale of the economy does not erode the environmental carrying capacity over time. In thermodynamic economics, there is such a thing as 'uneconomic growth', that is, where the costs of growth in terms of the degradation of ecosystems arising from further throughput exceed the benefits (Martínez-Alier *et al.*, 2010: 1734-4). Daly is not in favour of abandoning economic growth as such but of viewing it as a 'process to be consciously and politically monitored and regulated' (Barry, 2012: 133) Hence, while two basic physical magnitudes, population and artefacts, are to be held relatively constant in a SSE, mainly qualitative parameters such as 'culture, genetic inheritance, knowledge, goodness, ethical codes ... the embodied technology,

the design, and the product mix of the aggregate total stock of artefacts' (1977: 6-7) are free and welcome to evolve. This is also reflected in Daly's distinction between 'growth' and 'development', whereby the former refers to quantitative change, and the latter to qualitative change. Wilkinson and Pickett (2010: 225) also emphasise that a transition to a SSE would not necessarily mean 'stagnation and lack of change' as it would potentially 'create huge demands for innovation and technical change'. Continued technological advances such as 'digitisation, electric communications and virtual systems, creating "weightless" sectors of the economy' facilitate the maintenance of high living standards with low resource consumption and emissions.

The main debate circles among environmental economists focuses upon the issue of whether a 'steady state' goes far enough in the face of major ecological challenges such as CC. While Daly's SSE looks at stabilising the economy in the short run – Martínez-Alier *et al.* (2010: 1743) talk about this taking ten years – both the 'late' Georgescu-Roegen and, the mainly French, *décroissance* ('degrowth') approaches argue that a substantial retraction of production and consumption levels in countries such as the US would be necessary to meet the CC challenge and to allow poor countries to catch up in development. Building up on political ecology, critical debates on 'development' and authors such as André Gorz, Ivan Illich, Marshall Sahlin, Serge Latouche and the Regulation Approach (Guilbert and Latouche, 2006), degrowth thinking generally calls for 'a disassociation with consumerism as prerequisites for voluntary simplicity, which in turn requires reducing the time allocated to and the sharing of labour, better selecting technical innovations and re-localising economic activities.' (Martínez-Alier *et al.*, 2010: 1743) Echoing earlier critiques of Western lifestyles such as in the concept of 'enjoyment of life' by Georgescu-Roegen (1975: 353), degrowth concepts are centred upon the issue of how to be able to enjoy a 'good life' within ecological limits. However, despite the differences between Daly and the degrowth literature, Martínez-Alier *et al.* (2010: 1744) point out their compatibility and complementarity. On the road to a 'globally equitable' SSE, throughput would need to 'degrow' in the global North, while the global South could continue to grow in terms of GDP but would need to contribute with an above-average decrease in population after an estimated peak in world population around 2050.

The goal of a SSE is also supported by the Canadian economist Peter Victor (2008) who has made the greatest effort to date in defining how an advanced economy and society could cope without economic growth. Victor created a computer model of the Canadian economy in which key variables such as productivity, population, consumption, public spending, investment, employment and trade are changed allowing diverse future scenarios to emerge. In order to reduce greenhouse-gas emissions by 80% over 50 years, for example, an economy that increases its real GDP by 3% annually must reduce its emissions intensity – tonnes of GHG per unit of GDP – by 6% a year, while in a non-growing economy the annual cut would be ‘still very challenging’, but only 3.2% (Victor, 2010: 370). In another example, the working week is shortened to four days, thereby creating more jobs. At the same time, more public services are provided for the poor by creating higher taxes for the rich and the imposition of a carbon tax to expand government revenues and to discourage the use of fossil fuels. In this scenario unemployment falls to 4 percent after twenty years, while the standard of living of most people rises and greenhouse gas emissions decrease to levels below those outlined in the Kyoto Protocol. Victor’s scenarios indeed indicate ‘that there may be more room than commonly supposed, even within the conventional framework, to stabilise economic output.’ (Jackson, 2009a: 81)

### **Related Theoretical Debates**

The case for a SSE and for welfare beyond economic growth is backed up by recent material on the links between inequality and happiness, consumption patterns, the psychology of well-being and by more general theoretical concepts of the living standard, in which welfare improves without GDP growth. Happiness research indicates that once countries have sufficient wealth to meet the basic needs of their citizens and reach a certain per capita income<sup>2</sup> reported levels of (un)happiness show little correlation with GDP growth. In fact, despite significant economic growth, ‘happiness has not increased since 1950’ in most Western countries’ (Layard, 2011: 30). As a corollary, extra happiness provided by extra income is greatest for the poorest and declines steadily as people get richer. Wilkinson and Pickett (2010: 6) make a similar argument in relation to another important indicator of welfare: life expectancy. While life expectancy increases among the rich countries by between two

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<sup>2</sup> Different studies indicate different amounts of money – from \$15000 to \$25000 per year – after which the happiness curve flattens off (Wilkinson and Pickett, 2010: 8).

and three years every decade, this happens to a large extent ‘regardless of economic growth, so that a country as rich as the USA no longer does better than Greece or New Zealand ...’. Some countries such as Costa Rica and Cuba achieve life expectancies close to eighty years at a fraction of the CO<sub>2</sub> emissions common in the richest countries (WWF, 2006). These examples indicate that it is possible to ‘make dramatic reductions in emissions in most rich countries without any loss of health and wellbeing ...’ (Wilkinson and Pickett, 2010: 219-20). According to happiness research, the ‘Big Seven factors’ that affect happiness do not include GDP growth but family relationships, financial situation, work, community and friends, health, personal freedom and personal values (Layard, 2011: 63).

Far from the promotion of these factors, the wealthy societies in the Atlantic space continue to be built upon the neoclassical claim that individual freedom is maximised when people are encouraged to pursue their own self-interest and compete with each other with minimal governmental restraint. Consumption practices are an important part of status competition. In contrast to neoclassical theory, which mainly deals with consumption as an isolated phenomenon – the result of autonomous choices of rationally acting individuals – political economy and sociological concepts of consumption have always been concerned with its social genesis and context. The Regulation Approach, for example, insists upon the fact that individual purchase decisions are neither spontaneous nor necessarily ‘rational’ but indeed greatly influenced by structural factors such as income inequality and sales strategies (Boyer and Saillard, 2002). Social theorists of consumption argue that, in rich countries, buying things is not in the first place about the goods themselves but rather about the symbolic message that the act of purchase conveys (Soper *et al.*, 2009). Both acquisition and possession of use values symbolise much of our social standing in society as well as our identity and sense of belonging. However, if the rate of production of new, fashionable and desirable goods is high and accelerating, continuous efforts must be made by all social agents to re-establish or improve their original position and to distance themselves from other people. What Hirsch (1976) called the competition for ‘positional goods’ is mediated through a genuinely social logic that Bourdieu (1984) referred to as ‘distinction’. This sets in motion a never-ending cycle of defining taste by the avant-garde and keeping-up strategies by the mainstream. This cycle plays into the hands of the valorisation interests of various

culture industries, but contradicts the principal reproductive needs of the earth as an ecological system. Buying and consuming more stuff tends to imbalance the carbon cycle, since such 'choices' are normally bound to matter and energy transformations that more often than not necessitate the burning of fossil fuels.

Another prominent recent critique of the growth society is that from the psychology of well-being, which assumes that humans must have certain psychological needs satisfied in order to flourish and experience personal well-being (Kasser, 2009: 175). These needs include feeling safe and secure but also competent and efficient. People also require love and intimacy but struggle under conditions of loneliness, rejection, and exclusion. Finally, people have a need for autonomy, that is, the ability to choose in relative independence from coercion and internal or external pressures. However, where 'economic growth is a key goal of a nation' (Kasser, 2011: 194-6) with its encouragement of self-enhancing, hierarchical, extrinsic and materialistic values, the fundamental needs required for human well-being are contradicted, since materialistic people are most likely to be dissatisfied with life, lack vitality, and suffer from anxiety, depression and addiction problems. And when faced with insecurity or psychological or physical pain, such people tend to turn to money and possessions as a way of coping with distress rather than seeking comfort from friends, community or family. Hence, to the extent that people 'prioritise the self-enhancing, extrinsic values required for the maintenance of the economic system, they become more likely to act in ways that bolster the system and they become more likely to support the creation of the kinds of social institutions ... that perpetuate the system.' (Kasser, 2011: 200) Kasser (2011: 204) concludes from his empirical research that people's well-being and experience of autonomy would be 'more strongly valued in more co-operatively oriented economic systems'. He argues that there is a synergy between the 'kinds of behaviours that satisfy the psychological needs crucial for well-being' and 'ecological sustainability' (Kasser (2009: 175-6). While CC and other forms of ecological degradation have 'clear ramifications for the potential satisfaction of the need of safety/security', people would gain confidence in circumstances that obviate ecological problems (Kasser, 2009: 178).

Finally, a range of philosophers question the utilitarian perspective that individuals are best able to determine what contributes to their quality of life, while the structural

logic of distinction that underlies consumption and influences individual choices is normally neglected. Among the alternatives to Utilitarianism is the capability approach, which is not so much concerned with the actual choices that people make than with the options they are free to choose from. This theme is further explored in the distinction of ‘capabilities’ and ‘functionings’. Roughly speaking, ‘functionings’ come close to what psychologists of well-being and happiness researchers describe as human needs, while ‘capabilities’ include both states of being and opportunities for doing. According to Amartya Sen (1993: 37), they are ‘central to the nature of well-being’ and encompass ‘elementary ones as escaping morbidity and mortality, being adequately nourished, having mobility, etc., to complex ones such as being happy, achieving self-respect, taking part in the life of the community, appearing in public without shame.’ Martha Nussbaum (2006: 74-8), for her part, builds upon philosophers such as Kant, Rawls and the early Marx and proposes a list of ten central human capabilities sought for each and every person, ranging from physical health and integrity to the control of one’s environment.<sup>3</sup> Many of these needs or capabilities are interrelated and complementary and some of them are limited and finite. As Daly and Farley (2009: 279) observe, this stands in ‘stark contrast to the assumption of infinite wants, or the nonsatiety axiom in standard economics’ and also to the neoclassical tendency of ignoring social phenomena and aspects of welfare that do not have a price. Hence, people’s well-being is understood in broader terms than their expenditure, adding environmental and communitarian perspectives to a short-term, individualist, and private vision of individual choice (Nussbaum and Sen, 1993). In fact, most of Nussbaum’s list of central human capabilities requires few, if any, material resources, allowing for a surplus in welfare for one person or one generation without leaving less room for development for others. Far from meaning a lifestyle characterised by austerity, the corresponding transition from a consumerist society to a welfare society in Nussbaum’s sense would value ‘inward aspects of human well-being’ instead of ‘outward manifestations of status and success’ (De Geus, 2009: 121).

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<sup>3</sup> The list includes, among others, socio-economic and ecological aspects of welfare: life (ability to live a life of normal length); bodily health and integrity; senses, imagination and thought; emotions (being able to have attachments to things and people outside ourselves); practical reason; affiliation (being able to live with and toward others, to recognise and show concern for other human beings); other species (being able to live with concern for and in relation to animals, plants, and the world of nature; play; control over one’s environment (political participation, economic and employment rights) (Nussbaum, 2006: 76-8).

## Policy Implications

No- and degrowth approaches have remained at fairly abstract levels to date, mostly failing to discuss concrete policy proposals, let alone their synergy potentials in a coherent transition strategy. The remainder of this paper introduces the no-growth theorists' fragmented ideas for reform and focuses on the policy areas of macro-economic reforms, inequality/redistribution, minimum and maximum incomes, carbon rationing, consumption, working time reduction and work life balance as well as population/migration. In an attempt to map out economies in which growth is sidelined and where stability, resilience and wellbeing are in focus, Daly and Farley (2009: 417) suggest two main principles of *macro-economic reforms* that respect economic limits; firstly, the rate of extraction of non-renewable resources should not exceed the rate of creation of renewable substitutes and secondly, waste emissions should not exceed the environment's capacity to assimilate them. There is consensus that achieving these goals cannot be left to the market but requires the state to set a collective limit on aggregate throughput to keep it within the absorptive and regenerative capacities of the ecosystem. Daly and Farley as well as Jackson argue in favour of a re-regulation of the international political economy away from free trade, free capital mobility and unregulated financial markets. All promote local economic circles instead. Jackson (2009: 104) is perhaps most outspoken in his engagement for an increase in public control of the money supply to provide greater protection against consumer debt. He also demands public sector jobs in building and maintaining public assets, investments in renewable energy, public transport infrastructure and public spaces, strengthening community-based sustainability initiatives and especially the retrofitting of the existing building stock with energy- and carbon-saving measures. Finally, all no-growth authors are in favour of investment into ecological transitions in developing countries, renewable energy, resource efficiency, low carbon infrastructures, and the protection of habitats and biodiversity. At company level, both Daly and Farley and Wilkinson and Picket demand state intervention in the existing property structure and, in particular, a broadening of capital ownership to regulate workplace-based structures of inequality and rank-ordered hierarchies. Wilkinson and Picket (2010: 255-7) argue that more democratic employee-ownership would enhance employee participation and commitment and maximise profit-sharing, while the

power- and income gap between external shareholders and employees would decrease.

There is agreement among no-growth authors that the *distribution of wealth and income*, a traditional concern of social policy, both within and across countries and in an intergenerational perspective, is crucial for the reduction of carbon emissions (Daly and Farley, 2009: 441). Daly and Farley (2009: 442) propose generally that government redistribution policies should respect what people have earned through their own efforts, but people should ‘not be able to capture for themselves values created by nature, by society, or by the work of others. And they should pay a fair price for what they receive from others, including the services provided by government, and for the costs they impose on others’. Both Daly and Farley and Wilkinson and Pickett assume that a less unequal distribution of resources would generate public goods such as economic stability, lower crime rates, stronger communities, and better health and that this would be a price worth paying by taxing those who consume excessively. In contrast, governments are seen as ‘unable to make big enough cuts in carbon emissions without also reducing inequality’ (Wilkinson and Pickett, 2010: 217). To achieve redistribution and to enhance ecological sustainability, most no-growth authors argue for an *ecological tax reform*. Jackson (2009a: 106) outlines its general principle by shifting the burden of taxation from ‘economic goods (e.g. incomes) to ecological bads (e.g. pollution)’. If the tax base were linked to the throughput of finite resources, external costs, which private enterprises enjoy as ‘free gifts’ from nature to date, would be internalised and considered in their cost calculations. However, Daly (1977: 63) prefers the definition of depletion quota to pollution taxes, since the latter would increase competition within the recycling industry, spurring it to ‘even greater competitive efforts.’ According to most approaches, the income from depletion and/or pollution tax would be complemented by an income and inheritance tax reform. Daly and Farley (2009: 44) advocate a highly progressive income tax that asymptotically approaches 100%, more ‘direct limits on how much someone can earn, or relative limits that establish a legal ration between the highest and lowest income allowed’ and a ‘high inheritance tax’ since much of the accumulated wealth is directly inherited. Wilkinson and Pickett (2010: 254-5) essentially agree and complement this by efforts to remove loopholes in



taxation systems, thereby limiting formal business expenses, as well as legislation to limit maximum pay in a company at a multiple of the average or lowest paid.

For Daly, it is critical to define both *minimum and maximum limits on income and wealth*. After reaching the maximum income, people would be incentivised to ‘devote their further energies to noneconomic pursuits’ so that confiscatory revenues would be rather small. The opportunities thus forgone by the wealthy would be made available to the ‘not-so wealthy, who would still be paying taxes on their increased earnings. The effect on incentive would be negative at the top but positive at lower levels, leading to a broader participation in running the economy.’ (Daly, 1977: 56) While not all no-growth theorists explicitly argue in favour of maximum income, there is agreement on the necessity of the introduction of a minimum or basic income. Varying across authors, this would be co-financed from general revenues, an increasingly progressive income tax, eco-taxes and/or from depletion and emissions certificate auctions. The specific policy instruments for ensuring minimum income are more contested than the general need for this policy instrument. Andersson, who reviewed different attempts of linking no- and degrowth approaches and basic income schemes, concludes that these have ‘not yet worked out in a consecutive way’ (Andersson, 2009: 3). He suggests a kind of equivalence between basic income financed by green taxes and the distribution of equal and transferable rights to use scarce environmental resources and to emit a given quantity of greenhouse gases. In line with the hypothesis that it will ultimately be necessary to limit transnational and global inequalities in wealth and income in order to reach an Earth-wide steady state, Andersson (2009: 6) proposes the successive generalisation of an unconditional basic income from the already rich countries to a global scheme.

No-growth authors agree on the necessity of identifying clear *resource and emission caps* according to climate science expertise and on the establishment of reduction targets under those caps. There is further agreement on the application and generalisation of ‘contraction and convergence’ and ‘cap and share’ models for climate-related emissions at equal per capita allowances (Jackson, 2009a: 106), leading to the eventual convergence of equal per capita emissions across the planet. The consensus is that if policies to cut emissions are to be seen as fair, richer persons and countries, which on average contribute much more to CC than poorer persons and

countries, would be affected most (Wilkinson and Picket, 2010: 222). The British Sustainable Development Commission (2007: 7) advocates the introduction of a measurement of individual carbon footprints as a central element of the measurement of environmental well-being. This indicator would need to reflect ‘not only the direct emissions associated with consumption in the UK, but also the emissions “embedded” in imported goods and services.’ In Personal Allowances and Trading schemes, the total permissible level of emissions is divided by the adult population (often with a lower allowance for each child) to identify the equal share, or quota, of allowable emissions per head. In some of these schemes people are provided with an electronic card to cover payments for fuel, power and air travel. Those using less than their share would be able to sell their unused allocation back to a carbon bank, which sells them on to people who want to use more than their allocation of fossil fuels (Wilkinson and Picket, 2010: 222). Again, there is ‘wide variety of such proposals’ (Gough and Meadowcraft, 2011: 499), the common denominator of which is to create a ‘dual accounting standard and currency’ for energy and fuels so that these have a price both in monetary and carbon terms.

The view of no-growth theorists on Western *consumption* rates is that these would need to decrease disproportionately so that citizens of other countries could enjoy an improvement in their material standard of living. While consumption is generally seen as critical to human development as long as it ‘enlarges the capabilities of people without adversely affecting the wellbeing of others’ (British Royal Society, 2012: 47), there is agreement with Daly and Farley’s (2009: 442) argument that on a finite planet subject to the laws of thermodynamics the present generation should develop a ‘sense of obligation toward future generations’ that is seen as being entitled to having the same opportunities for development as the present. Conspicuous consumption is viewed as a negative externality, and people should pay for the negative impacts this imposes upon others. Policy proposals about the most effective ways of reducing such consumption and the accompanying carbon emissions are not very detailed as yet. Daly and Farley (2009: 444), for example, propose a progressive consumption tax, which would help redistribute and allocate resources more efficiently. Kasser (2009: 178) suggests a threefold strategy involving the decrease of the extent to which people are exposed to lifestyle models of conspicuous consumption, for example, by banning advertisements aimed at children; the support of people’s resilience, for example, by

teaching individuals how to decode advertisement messages; and helping people to act in accordance with ‘intrinsic’ goals, for example, by encouraging ethical consumption.

If the physical indicators of throughput and GDP as a whole are reduced and labour productivity does not decline, growing unemployment is the result. No-growth theorists have therefore started to debate the *relations between no- or degrowth, remuneration, employment and work* (Martínez-Alier *et al.*, 2010: 1746). Moving towards a SSE would entail a significant cut in the percentage of time spent in paid work in order to reduce unemployment and distribute working time more evenly across the population, break the circle of working to earn to consume, and to enable a better work-life balance as well as time for currently unpaid activities such as child- and personal care or engagement in local voluntary activities. In most approaches, the welfare state plays a crucial role in this redistribution (Gough and Meadowcraft, 2011: 500). Reducing the working week is, for example, at the heart of Victor’s resilience scenario for the Canadian economy, in ‘which employment can be increased, poverty and greenhouse-gas emissions reduced, and government debt effectively managed without growth’. Victor (2010: 371) shows that employment can be spread more evenly among the workforce allowing the ‘benefits of greater productivity’ to be ‘directed towards more leisure time, rather than increasing GDP’, thanks to shorter working hours as key ingredient. In a more general theoretical perspective, such readjustment of employment, work and other activities presupposes placing ‘both on a more equal footing, rather than seeing “work” as signifying a lack, or a less valuable human activity than “employment”’ (Barry, 2012: 139) This, again, calls ‘for a much larger, more expansive conceptualisation of the economy in which all work, all economic activity, all resource and energy use is included’ (Barry, 2012: 139)

Finally, there is agreement on the necessity that a SSE would ultimately be predicated on relatively stable *population* levels, since (all other things being equal) more people imply more greenhouse gas emissions and use up more finite resources. This goal raises the issue of appropriate population size<sup>4</sup> and of suitable ways of achieving this. Daly (1977: 57) advocates a scheme of ‘transferable birth licences’, according to

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<sup>4</sup> Gough and Meadowcraft (2011: 500) cite the British Optimum Population Trust that advocates a goal of halving the UK’s present size to thirty million people.

which every woman would receive an amount of reproduction licences that corresponds to replacement fertility. These would be freely transferable by sale or gift, so that ‘those who want more than two children, and can afford to buy the extra licenses, or can acquire them by gift, are free to do so’. Andersson (2009: 6) points to the problem of implementing this proposal in highly unequal societies, ‘since poor families are generally larger than rich ones’. Hence, he stresses the necessity of linking population policies to (in)equality-related policies and in particular to an unconditional basic income. In a more equal society, transferable birthrights would be ‘easier to accept’ as ‘people would not have to sell their rights to have children just to get along economically.’ Victor focuses on the advanced Western countries that are already heading towards a relatively stable or declining population. From the global perspective, he emphasises the need for an immigration policy that ‘caters to humanitarian interests and ...contributes to prosperity and development where the need is greatest.’ (Victor, 2008: 201) Again, Andersson (2009: 6) discusses the issue of immigration in combination with an unconditional and adequate basic income. Assuming that its introduction in the rich countries would increase immigration from poorer countries, migration would imply a stronger global ecological impact, since the ‘way of life in the rich countries requires a bigger per capita footprint’. Only if migration coincided with improvement in living conditions in the poor countries, thereby reducing ecological degradation stemming from poverty and too high birth rates, the ‘ecological impact from migration to richer countries could in principle be neutralized.’

## **Conclusion**

The paper took its part of departure from Ian Gough’s three scenarios of government reactions to the dual crisis of finance-driven capitalism, focusing on the ‘no-’ or ‘degrowth’ scenario, as well as the associated theoretical debates and policy implications. Growing academic interest in no-growth approaches can be traced both to increasing empirical doubts that economic growth can be decoupled from carbon emissions in absolute terms and to the increasingly popular idea that, in principle, the dual crisis offers ‘unique opportunity to address financial and ecological sustainability together’ (Jackson, 2009b: 488). The paper has shown that no-growth approaches have developed in different and sometimes unconnected academic circles and disciplines. Basically, this literature states that the environment cannot absorb further

increases in emissions, nor does further economic growth in the developed world improve key indicators of welfare such as life expectancy or happiness. On the contrary, much of what is required for human flourishing and welfare is non-material once a decent material standard of living has been attained and this is achievable at much lower levels of matter and energy throughput than currently. However, even though all these approaches point in the same direction, they require theoretical integration. Different strategies for this impending interdisciplinary effort appear possible at this preliminary stage. Martha Nussbaum's list of ten central capabilities is a promising point of departure for redefining welfare in the absence of economic growth for the developed world, thereby allowing for a catch-up GDP increase in the developing countries. Itself the summary and conclusion of a range of philosophical and social science debates, the multidimensionality of the concept should not be considered a weakness but rather an adequate reflection of the multidimensional nature of welfare. It brings together social and ecological human needs and seems open-ended enough for the inclusion of new empirical insights from diverse academic disciplines.

Despite the growing empirical and theoretical critique of economic growth as the central policy goal, contemporary welfare states follow either 'irrational optimism' or 'green growth', when dealing with CC and associated challenges, while 'no-' or 'degrowth' alternatives have had little impact on public policy-making. The continuing top priority of economic growth in policy planning is not only due to the fact that certain ways of identifying, perceiving, theorising and tackling issues are 'locked-in' the social structures of finance-driven capitalism and the minds of policy-makers, but also that the no-growth authors' partially far-reaching policy proposals are presently mainly studied 'within separate silos' (Gough, 2011: 59). This may not be surprising given the fact that the theoretical approaches upon which these proposals are built are likewise diverse and in need of integration. However, as in the case of the different no-growth theories, there appears to be sufficient common ground for combining, complementing and unifying the as yet fragmented policy proposals and for formulating a coherent strategy for the economic, political and ecological restructuring of the advanced capitalist countries. The basis for such a strategy is the common belief in the necessity of a 'radically different environmental/welfare policy regime' and the 'redistribution of carbon, work/time,

and income/wealth ...' (Gough, 2011: 59), in which both traditional and new types of social policy instruments play an important part. The literature reviewed in this paper emphasises the need for tackling inequality (including the socially destructive logic of status-enhancing consumption) and ecological challenges such as CC at the same time. It further points to the need to identify the investment demands associated with a sustainable economy and the socio-economic implications of carbon emission caps and rationing schemes. There is further agreement among no-growth authors about the necessity of a reduction in working hours as well as improvements in the work-life balance, an ecological tax reform and the introduction/development of minimum income schemes to tackle both inequality and the ecological impact of migration. Less consensus appear to exist on the issues of maximum income, government interventions in the established ownership structures of corporations and adequate population/immigration policies.<sup>5</sup>

The design of and debate about policy proposals must take into consideration interdisciplinary research into conflicts as well as the potential for synergy between social and climate policies. Such research should be conducted in a comparative perspective and in consideration of different welfare regimes; and it should encompass the local, national and transnational policy levels. The 'no-growth' literature reviewed in this paper suggests that the following policy fields are of special relevance for such research: income policies, working time and work-life balance policies and taxation in relation to carbon emissions reductions; housing, transport, urban policies and community development in relation to carbon emissions reduction targets; and policies countering shifts in producer and consumer behaviour in order to de-carbonise economy and society.

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<sup>5</sup> There is debate whether capitalism as a mode of production is compatible with a non-growing economy (Barry, 2012; Manuel-Navarette *et al.*, 2012; Victor, 2010; Koch, 2012). The basis for a consensus, however, is that in a transition to a SSE with focus on renewable energy sources as well as qualitative changes in the Western way of life the balance within the mixed economy would need to be altered, defining much narrower limitations of the market as a steering and allocation instrument than is currently the case.

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