

“ Degrowth”; a literature review and a critical analysis

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Abstract

Being a translation of the French term “Décroissance”, over the past few years the “Degrowth” slogan has seen debates and refinements and is slowly emerging as an alternative ideology for Sustainable Development. The aim of this paper is to offer a comprehensive literature review of the “Degrowth” concept and to critically analyze this emerging alternative and to highlight the challenges it will face as a concept in the main stream International political economy. Through the analysis the paper comes to the conclusion that Degrowth movement has pressing concerns when it comes to the practical feasibility even though it may have a strong critique against the growth model of progress. Finally it emphasizes the need to develop a practical and feasible path under the “Degrowth” slogan if it is to gain recognition in the international debate for sustainability as an appropriate alternative for the business-as-usual model.

Keywords- *Degrowth, Sustainable Development, Equitable Downscaling, Zero-growth, Steady State Economy*

1. Introduction

The term “Degrowth” has only recently been used in economic and social debates. It is the translation of the original French term “Décroissance”. The expression does not appear as such in any dictionary of social sciences before 2006. Proponents of “Degrowth” say that it is a political concept with theoretical implications rather than it being a concept symmetrical to growth concept (Latouche, 2010).

In year 2008 the First International Conference on Socially Sustainable Economic Degrowth for Ecological Sustainability and Social Equity was held in Paris, where number of

scholars supporting the degrowth slogan gathered to develop the idea of degrowth which resulted in the “Paris Degrowth Declaration”. Over the past few years the “Degrowth” slogan has seen debates and refinements and is slowly emerging as an alternative ideology for Sustainable Development. It still has a long way to go to be accepted by the mainstream political economy of the present age. Nevertheless the arguments surrounding “Degrowth” give us important insights as to the present age dilemma of balancing the social equity, environment and economy.

The aim of this paper is to critically analyze the idea of “Degrowth” and to highlight

the challenges it will face as a concept in the main stream political economy. The paper is ordered as follows; the next section will explain and elaborate on the various definitions of degrowth and will try to narrow down on a common definition by pulling together similar strands of ideas. The third section will focus on summarizing the various arguments put forth by the degrowth proponents. Fourth section will present a summary of common policy measures suggested by growth proponents to bring about degrowth and steady state economy. In the final section I will critically analyze the attractiveness and practical applicability of the “Degrowth” slogan.

2. What is “Degrowth”?

The main idea behind the concept is commonly defined as: "an equitable downscaling of production and consumption that increases human well-being and enhances ecological conditions at the local and global level, in the short and long-term" (Kerschner, 2010, p 544).

This definition of degrowth calls for the reduction of production and consumption to sustainable level which is hoped to translate into less resource use and less pollution which in turn will uplift the environmental conditions. Accordingly degrowth will come to mean two things in this definition. Firstly the down-scaling of production as measured by the GDP indicator (therefore this aspect is also termed as GDP degrowth or Economic Degrowth or Planned Economic Contraction). The second being the down-scaling of consumption (consumption degrowth).

Apart from these two main ideas there are slightly different other definitions as well.

Work-time Degrowth calls for a gradual change towards shorter working weeks, more

holidays and earlier retirement. The argument being that the increased labor productivity due to improved education, skills, labor division and technological progress has been used to produce (and consume) more goods and services instead of leisure. The work-time degrowth would mean not only (as a direct effect) less production and lower wages, and therefore less consumption, but arguably also less work stress and more happiness due to more leisure and time for family and friends (Van den Bergh, 2011).

Physical Degrowth or Sustainable Degrowth calls for a socially sustainable and equitable reduction (and eventually stabilization) of society's throughput. Throughput refers to the materials and energy a society extracts, processes, transports and distributes, to consume and return back to the environment as waste (Kallis, 2011). This definition draws heavily upon the work done by Herman Daly on Steady State Economy (SSE) (Kerschner, 2010).¹

Population Degrowth assumes that stabilization or de-growth of the economy inevitably requires stabilization or de-growth of the number of humans respectively.²

Radical Degrowth—a term coined by Van den Bergh (2011) - covers a much broader concept than above definitions. In fact this definition provides a broad umbrella to cover all other degrowth definitions. It denotes a radical change of (or many radical changes in) the economy. This may involve changes in values, ethics, preferences, financial systems, markets (versus informal exchange), work and labor, the role of money, or even profit making and ownership (Van den Bergh, 2011).

According to the 2008 Paris Declaration of Degrowth the characteristics of such a revolutionary degrowth are as follows; an emphasis on quality of life rather than quantity of consumption; the fulfillment of basic human

needs for all; societal change based on a range of diverse individual and collective actions and policies; substantially reduced dependence on economic activity, and an increase in free time, un-remunerated activity, conviviality, sense of community, and individual and collective health; encouragement of self-reflection, balance, creativity, flexibility, diversity, good citizenship, generosity, and non-materialism; observation of the principles of equity, participatory democracy, respect for human rights, and respect for cultural differences.

Tokic (2012) summarizes the gist of degrowth ideology in 4 steps; 1) the global economy is in an ecological overshoot; 2) thus, it is necessary to reduce the size of the economy; 3) once the size of the economy adjusts to ecological limits, the goal should be a steady state economy³ or zero economic growth; and

Figure 1 presents an easy to understand depiction of all these degrowth definitions.

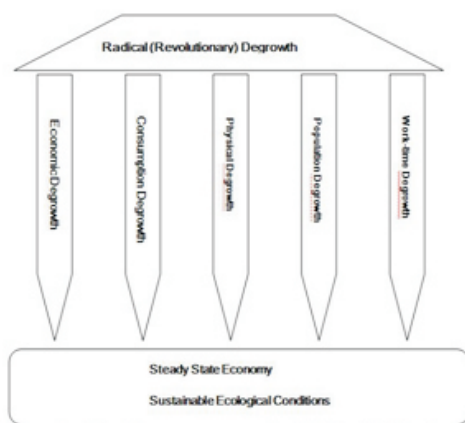


Figure 1 –A synthesis of Degrowth Definitions

finally, 4) the degrowth policy leads to a better quality of life.

According to all of these definitions it becomes clear that degrowth movement is

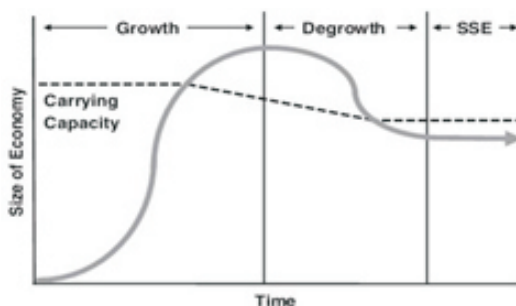


Figure 2 The degrowth transition to a steady state economy (O'Neil, 2012)

clamoring for “right-sizing” the economy and social practices. According to their view the world economy and society is operating at a point which is un-economic⁴, hence the operational size of the economy should be brought back down to the economic region of operation. By not doing so the whole economy and society are incurring more costs than benefits it produce.⁵ Hence the main definition of degrowth idea can be summarized as a “call for a paradigm shift from the general and unlimited pursuit of economic growth to a concept of "right-sizing" the global and national economies” (Research and Degrowth, 2010).

Figure 2 reproduces the chart presented by O'Neil (2012) which depicts the suggested growth and degrowth pattern by the degrowth movement.

3. Rational for “Right-Sizing”

The whole concept of degrowth emerged as a critique of the “Growth” ideology of the mainstream economy. Georgescu-Roegen, a pioneering author of degrowth tradition, challenged, what he called the 'growth mania' of mainstream economists (Kreschner, 2010).

Contemporary mainstream economic thought dictates that economic growth as measured through the GDP growth leads to material well-being of all. This growth model of

progress holds that the overall well-being of a society is approximately proportional to the size of its economy, in terms of GDP per capita, since more money means that more individual and social 'preferences' can be satisfied via market transactions. From this perspective, the answer to almost all social, political, economic, and even ecological problems is more economic growth (Alexander, 2012). Hence today almost all the countries treat the GDP growth as the cornerstone of their policy actions.

Degrowth proponents argue that giving such a prior position for GDP growth is neither necessary nor desirable. According to them this fetish bond of pursuing GDP growth is actually harming the well-being of the human beings rather than uplifting it.

Degrowth proponents also argue that the social dynamics of continuous emulation, status competition and feeling of 'self-completion' derived from material possessions rather than the actual necessity for consumption pushes the consumption-driven economy towards more production and more extraction (Jackson, 2009).

Alexander (2012) summarizes the critiques of the growth model into three headings; the social critique of growth, the ecological critique of growth and the economic critique of growth. These three branches of arguments roughly fall in line with the major philosophical camps from which degrowth proponents are coming from. Culturists and Anthropologists who call for more democracy, spirituality, non-violence, art or voluntary simplicity; Environmentalists who call for defending ecosystems and showing respect for living beings in all of their dimension; and Ecological Economists who are concerned about the constraints linked to resource depletion and waste disposal (Schneider, Giorgos and Joan, 2010). In this paper I too will follow the

same categorization to present the critiques of the growth model as offered by the degrowth proponents in justification for a degrowth paradigm.

3.1 Social critique of growth

Under this heading degrowth proponents express their doubts regarding the link between well-being, welfare or happiness, and economic growth. After the pioneering work of Richard Easterlin (1974) for nearly 40 years a sub-discipline of economics has emerged as "economics of happiness", providing empirical evidence that beyond a certain material standard of living increases in personal and/or national income have a fast diminishing marginal utility. For most of the rich nations the correlation between GDP per capita and well-being is evidently negligible (Alexander, 2012, Victor, 2012).

By quoting a number of empirical findings the proponents of degrowth argues that rich nations have actually surpassed the "social limits to growth". Hence they argue that given appropriate institutional restructuring these rich nations could have a somewhat lower GDP per capita without compromising, and perhaps even positively enhancing, social well-being (Alexander, 2012).

Jackson (2009, p6) highlights another social critique of growth-inequality as follows;

"Growth has delivered its benefits, at best, unequally. A fifth of the world's population earns just 2% of global income. Inequality is higher in the OECD nations than it was 20 years ago. And while the rich got richer, middle-class incomes in Western countries were stagnant in real terms long before the recession. Far from raising the living standard for those who most needed it, growth let much of the world's population down. Wealth trickled up to the lucky few. Fairness (or

the lack of it) is just one of several reasons to question the conventional formula for achieving prosperity.”

3.2 Ecological critique of degrowth

This branch of growth critique focus on the environmental degradation caused through continues growth and the ecological limits of resource extraction to sustain the growth model of progress.

The main argument being that the present growth has actually surpassed the ecological carrying capacities of number of resources and has overburdened the ecological sink capacities as well. This situation is termed as “ecological overshoot”.⁶

The critiques of this branch further criticize the “Sustainable Development” ideology stating that it is still focusing on the growth model trusting that the technological improvements will bring about material decoupling. But according to the available evidence absolute decoupling is not happening at all⁷ Even the small improvements in relative decoupling is questionable under the “Jevons Paradox” which postulates that efficiency improvements achieved under technology are contributing to even more material extraction which creates a rebound effect. In other words the positive impact of the green goods and services could be cancelled out by increases in production and consumption, as revenues from more eco-efficient technologies are used to consume more elsewhere in growing economies (Schneider et al, 2010).

Accordingly the human community must find a way to raise the material standards of living of the world's poorest people – which is obviously going to increase humanity's demand and impact on nature – while at the same time

reducing humanity's overall ecological footprint (Alexander, 2012). To achieve this goal the degrowth proponents suggest that the rich nations should give up their pursuit of economic growth while reducing their ecological footprint which will open up more ecological space for developing nations.

3.3 Economic Critique of Growth

In this branch of critique the main argument is that the rich nations have already passed the “optimal point of operation” in their economies. Drawing from Microeconomics theory of “economic region of production”, “optimal point of production” and “un-economic region of production” this branch of criticism highlights the lack of such notions when it comes to Macroeconomics.

When it comes to the concept of “Economic Growth”, the general idea is the growth of the economy as a constituent rather than about the feasible region of operation. In microeconomics however, when a firm's marginal costs exceed its marginal benefit that region of operation is treated as “uneconomic” while the region where the marginal benefits exceed the marginal costs is treated as “economic”. In that sense the economies of rich nations are actually pursuing uneconomic growth at the moment (Daly, 2008). Hence the argument being that developed nations should



Figure 3- GDP and Overall Costs and Benefits

de-grow their economies to the optimal region of operation while giving the chances for the poor nations to reach their optimal region by accelerating their growth. Figure 3 depicts these regions of growth.

Their argument is supported by the “Threshold Hypothesis” suggested by Max-Neef (1995). Threshold Hypothesis states that for every society there seems to be a period in which economic growth (as conventionally measured) brings about an improvement in the quality of life, but only up to a point--the threshold point--beyond which, if there is more economic growth, quality of life may begin to deteriorate.

4. Suggested Policy Measures

This section of the paper will look into some of the leading policy measures suggested by degrowth proponents.

Degrowth proponent Serge Latouche suggests following program of Rs as a way towards degrowth; Revalue, Re-conceptualize, Restructure, Relocate, Redistribute, Reduce, Re-use, Recycle (Kreschner, 2010).

According to Alexander (2012) explicit adoption of post-growth indicators other than GDP, working hour reductions, eliminating structural biases that favor more work, adopting basic income levels to guarantee dignified level of living for everyone, progressive taxation and maximum wages, giving priority for worker cooperatives rather than profit-seeking enterprises, accelerating the transition to renewable energy and abolishing inheritance and bequest are some of the policy steps for degrowth and achieving steady state economy.

Kallis (2011) summarizes a further set of policies apart from the above mentioned. Taxes on international capital movement and a tightened control on tax havens, circulation of

locally-based complementary currencies that keep wealth within the communities and the breaking-down and decentralization of banks and financial institutions, taxes on environmental damages, CO₂ and nuclear energy, caps (limits) on CO₂, energy and resource uses and pollution, resource caps in the form of moratoria on resource extraction and new infrastructures (nuclear plants, highways or dam infrastructures), or commitments to leave resources in the ground.

In his report for EU Sustainable Development Commission, Prof. Jackson (2009) outlines 12 steps for sustainable economy without growth. Namely, developing macro-economic capability; investing in public assets and infrastructures, increasing financial and fiscal prudence; reforming macro-economic accounting; sharing the available work and improving the work-life balance; tackling systemic inequality, measuring capabilities and flourishing; strengthening human and social capital; reversing the culture of consumerism; imposing clearly defined resource/emissions caps; implementing fiscal reform for sustainability; promoting technology transfer and international ecosystem protection.

Some of the policy measures are already highly-discussed under the mainstream sustainable development concept such as emission caps, pollution taxes etc. Some policy measures are quite new proposals such as work time reduction and locally based complimentary currencies.

5. Analysis

When observing the development of the 'degrowth' slogan the most obvious imbalance that I came to notice is that, even though it has a credible set of critiques and arguments against

the growth model, it still does not have a strong set of suggestions to move out of the growth paradigm. It is easier to say that we should stop the growth and should move backwards (de-grow) to a sustainable steady state. But most of the policy measures suggested under degrowth are already on the discussion table of sustainable development without making much progress either towards sustainable development or degrowth. The set of policy options which are under discussion these days have been developed by mainstream economists in-line with the growth ideology that prevails as at the moment. If such policies are facing difficulties, the success of the other set of radical degrowth policies are sure to face much difficulties when it comes to political approval under current political economic context.

Degrowth proponents are also cognizant of this challenge. Hence most of them advocate a grass-root level movement (Staggen and Ogrodnik, 2015), which will bring about the necessary life-style changes and a gradual change in the whole societal political ideologies and fabric of life (Kallis, 2011) (Kreschner, 2010). This call for revolutionary change⁸ may be attractive and looking through a historical lens may even make sense as societies underwent revolutionary changes through grass-root movements. Yet these revolutionary changes cannot be achieved within a short-period of time. It takes a huge amount of time for a society to change considerably so as to bring about the necessary amount of ecological benefits. But the urgency of the environmental threats⁹ that we are facing today raises the question whether we can actually wait for such a long time for the grass-root movement to kick in and bring about necessary changes in the political constituencies.

Hence it becomes clear that even a top-down push towards degrowth is necessary to

bring about the desired changes as fast as possible. Here comes the political economic impasse that even the sustainable development proposals are facing today. Hence a much stronger set of practical policies and suggestions are needed if this movement is to achieve any level of success in the present context.

Another problem with the degrowth critique is the lack of a proper, strong theoretical framework.¹⁰ Even though the movement has thus far been successful at highlighting the weaknesses of the growth model of progress, the movement still has to come up with a coherent theoretical framework to highlight the path of degrowth. Most importantly ambiguities in definitions, measurement problems, the final aim and objectives of degrowth should be addressed through a rigorous theoretical framework. The most urgent task would be then to develop a new theory of macroeconomics. As degrowth critiques highlighted above the present macroeconomics theory faces critical shortfalls in addressing the multi-facets problems of well-being. Hence degrowth proponents should give immediate attention to develop a new theory of macroeconomics in order to answer these shortfalls. A strong theoretical underpinning will help the degrowth movement to capture the attention of the mainstream economists as well as of the politicians. Then it would become bit more easy to push for a top-down change.

Another problem with the degrowth movement is that it completely ignores the in-built human nature. As degrowth proponents are arguing the human-consumption should be reined in. It calls for less use of materials. But the problem with the human nature is once they get used to a certain life-style and comforts, it becomes difficult to let go of that life-style and comforters. If one is moving from less-affluence to high-affluence then that change would be

gladly embraced but even a slight move from high-affluence to less-affluence is bitter for the human nature. Of course there can be exceptions to this pattern, but still the majority of people will follow this line of behavior

Kallis (2011) argues otherwise. According to him “People were alright without shopping malls and televisions a few decades back, and rest sure they will so be if they have to live without them in the future.” But such a behavior is only possible from a utopian type of human-being that degrowth proponents dream about. Kallis (2011) define that man as “convivial yet simple and content, enlightened human”. Creating this idealistic human being has been the aim of countless religions worldwide for thousands of years, the success of which is still doubtful. Kerschner (2010) also expresses doubts on the relevance of degrowth concept for large scale movements in the absence of 'moral growth'.

For an example take the life of an ordinary citizen of a developed country back in 1970's and 80's. At that time no one had mobile phones. Yet today it has become the everyday man's gadget with number of sophisticated additions. Will people be willing to let go of even one or two functionalities (say camera and email functions) of their phones for the sake of an environment-friendly phone? Leaving the car at home, having less number of out-door trips, having less-number of air-trips; these suggested behavioral adjustments easily ignore the very nature of human-beings.

Degrowth proponents another argument is that we should aim for “selective degrowth”.¹¹ This means selecting the sectors or activities which are greatly harmful to the environment and downscaling them gradually. As soon as this proposal comes to the table, the first question would be the challenge of selecting sectors to

downscale. According to degrowth proponents cultural, educational sectors should be encouraged to grow, while dirty, heavy productions such as shipping, air-travel should be downscaled. But the most apparent paradox is that these industries, which are labeled as “dirty”, in-fact helps the other desirable sectors to flourish. For an example, take the growth in study-abroad options available to present generation students. This is a positive development according to the degrowth argument. But would it have become possible without the improvements in the aviation industry, which is a “dirty” industry? As we can see here, all the sectors are inter-connected. We cannot push one industry to degrow while another industry to grow. Of course it is possible with substituting industries (like typewriters and computers), but it is not possible with complementary industries (like education and books, education and aviation).

In their arguments in favor of degrowth, degrowth proponents would always highlight that slogan of degrowth is only applicable to the global North of developed rich nations. Accordingly they still accept the need of growth model of progress for the poor global South. Apart from mentioning that rich nations should free up more ecological space for poor nations to achieve development, this ideology has not yet come up with a coherent policy set for global South under a degrowth paradigm. Why a policy set is needed for global South? According to the degrowth proponents South should pursue the growth paradigm while North pursues the degrowth paradigm. In this simple suggestion what they overlook is the extent of the global North and South interconnectedness and how much the global South is dependent upon the North in their quest for development.

If the North is to follow the policy of work-

time reduction, what would be the plight of the expatriates coming from global South in search of employment opportunities in the global North? What will be the impact on their income? As it became apparent during the recent crisis of 2008,¹² the first people to see the exit door were expatriates. In a situation of degrowth what would be plight of these workers? Would the global South be able to grow fast enough to absorb the returning natives?

If the North is to follow a policy of consumption degrowth what will happen to the exports of the global South, which are highly dependent on the markets of global North? In such a situation what are the steps that global South should follow in order to protect their export-incomes?

If the global North is to charge high taxes on international capital movements will the global South be able to find enough capital to maintain their growth models of progress? If the global North is to contract their economies and to redistribute income within, what will be the future of the foreign aid? Overseas Development Aid (ODA) has failed to reach its aimed levels of 0.7% of rich nations GNI. Under a scenario of GDP contraction will ODA too contract? Then what would be the plight of the global South aid recipients?

As can be seen from these examples, degrowth in one set of economies and growth in one set of economies in a highly interconnected world is bound to bring about some pressing concerns. Hence the need for the degrowth movement to develop a set of macroeconomic policies for the global South if they advocate a degrowth paradigm for global North. If not it would be so much difficult to garner the help of the global South in pursuing international level environmental agreements. Schneider et al.(2010) while mentioning that global South

may have something to lose and little to gain from degrowth in the North due to above mentioned concerns, still hope that movements for Environmental Justice and the "environmentalism of the poor" of the South to become the main allies of the degrowth movement of the North. But if the growth paradigm remains in the forefront in global South - as predicted and allowed under the degrowth paradigm of North- then these movements may not gain much of political clout and heed from the growth-aimed-political economy.

As can be seen from this analysis up to now the degrowth movement has pressing concerns when it comes to the practical feasibility at the moment. It may carry a valid set of critiques and arguments against the growth model of progress and GDP growth mania. But what it lacks is a proper set of working ammunitions to bring down the growth model of progress, or a valid set of alternatives to convince and spark the actions of the policy makers of both global North and South. Even the policy proposals till now are quite fragile, utopian and lack a good theoretical interconnectedness.

In conclusion degrowth slogan is not something to be ignored since it addresses the most pressing questions of the present "business-as-usual" model. Yet its lack of practical feasibility hinders its progress as a valid alternative. Hence the challenging task ahead of the degrowth proponents is to develop a convincing and practically feasible path of directions rather than being bogged on the same spot criticizing the growth model.

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Endnotes

1. The ratios and efficiency measures given in equation constitute the core of this SSE concept. Therein the economy is described as a stock of people and artifacts, which require maintenance via throughput of a flow of physical matter and energy. Stocks provide service, and as shown in ratio (2) and (3), cancel each other out just as they wear out in the real world. Ratio (2) constitutes the stock-service-efficiency and ratio (3) the stock-maintenance-efficiency. Service is the ultimate benefit of economic activity and should be maximized while throughput is the ultimate cost of this service and should be minimized. (Ibid).

$$\begin{matrix} (1) & (2) & (3) \\ \text{Service/throughput} & = & \text{service/ stock} \\ * & & \text{*stock/throughput} \end{matrix}$$

2. The planet's carrying capacity of our species is defined by the maximum sustainable impact (I) of our society. Impact (I) in turn is given by the well-known equation $I = PAT$: population size (P), times its affluence (or consumption) (A), times the environmental damage (T) caused. The reduction of (A) by sufficiency and frugality as well as that of (T) by acting more environmentally conscious and by technological progress cannot proceed indefinitely so (I) will inevitably continue to grow if population is not stabilized or decreased (Kreschner, 2010).

3. "Following Mill we might define a Steady State Economy as an economy with constant population and constant stock of capital, maintained by a low rate of throughput that is within the regenerative and assimilative capacities of the ecosystem. This means low birth equal to low death rates, and low production equal to low depreciation rates. Low throughput means high life expectancy for people and high durability for goods. Alternatively, and more operationally, we might define the SSE in terms of a constant flow of throughput at a sustainable (low) level, with population and capital stock free to adjust to whatever size can be maintained by the constant throughput beginning with depletion and ending with pollution." (Daly, 2008, p3).

4. In microeconomics theory of firms, a firm can operate in an un-economic region beyond a certain level of production. At this stage the production costs exceeds the revenue hence the firm should either shut-down or scale down back to the economic region of production (Economies of Scale theory & Firm's Cost and Revenue Theories) (Krugman & Wells, 2008, p 343)

5. One has to differentiate between degrowth and recession. "degrowth is not equivalent to negative GDP growth in a growth economy. This

has its own name: recession, or if prolonged, depression. These cause a cascade of effects in terms of unemployment, economic insecurity, lack of credit and finally collapse of social peace. Sustainable degrowth instead is the hypothesis that the inevitable – and desirable – economic (GDP) degrowth can be turned socially sustainable. It is a vision of a smooth process of down-shifting the economy through institutional changes, managing collectively a "prosperous way down" (Kallis, 2011).

6. "In the last quarter of a century the global economy has doubled, while an estimated 60% of the world's ecosystems have been degraded. Global carbon emissions have risen by 40% since 1990 (the Kyoto Protocol 'base year'). Significant scarcity in key resources – such as oil – may be less than a decade away" (Jackson, 2009, p6).

7. "It's vital here to distinguish between 'relative' and 'absolute' decoupling. Relative decoupling refers to a decline in the ecological intensity per unit of economic output. In this situation, resource impacts decline relative to the GDP. But they don't necessarily decline in absolute terms. Impacts may still increase, but do so at a slower pace than growth in the GDP. The situation in which resource impacts decline in absolute terms is called 'absolute decoupling'. Needless to say, this latter situation is essential if economic activity is to remain within ecological limits. In the case of climate change, for instance, absolute reductions in global carbon emissions of 50-85% are required by 2050 in order to meet the IPCC's 450 ppm stabilization target. Despite declining energy and carbon intensities carbon dioxide emissions from fossil fuels have increased by 80% since 1970. Emissions today are almost 40% higher than they were in 1990 – the Kyoto base year – and since the year 2000 they have been growing at over 3% per year." (Jackson, 2009, p48).

8. "According to Korten (2008) mobilisations

start with a “new cultural story” initially a conversation among a few, that gradually comes to challenge an established paradigm that seemed previously unmovable. In the gap and loss of meaning created by a crisis, such new stories may be seen to offer more convincing explanations and directions for action. Small, but accumulating, actions stemming from the initial conversations create gradually a new reality and give a concrete expression to the benefits of a different way of doing things. The new cultural story and the alternative, liberated social spaces and practices that embody it connect disparate people across interests and generate a social movement of thought and practice. As liberated spaces expand people lead and leaders (old and new ones coming in power) follow and respond. The movement for degrowth is much more in accordance with Korten's model of revolutionary social change.” (Kallis,2011, p 878)

9. “ The degrowth program is highly problematic because of its failure to analyze [...]the urgency to address global anthropogenic change from a transnational political perspective.” (Schwartzman, 2012, p119).

10. “ Berg and Hukkinen (2011) interview members of Finland's Committee on Sustainable Consumption and Production and, among other questions, ask whether there are alternatives to the growth story, specifically evaluating the feasibility of degrowth. The general consensus seems to be that the degrowth economy could

become a viable alternative to growth, but in its current form it is logically in-complete. Thus, it is not currently a story upon which to base an alternative policy development.” (Tokic, 2012, p50).

11. “ degrowth opens up the discussion of selective downscaling of man-made capital. It seems intuitive that if as a society we are to stay within ecological limits we will have to do with less high-speed transport infrastructures, space missions for tourists, new airports, or factories producing unnecessary gadgets, faster cars or better televisions. We may still need more renewable energy infrastructures, better social (education, and health) services, more public squares or theatres, and localized organic food production and retailing centers. We need therefore a “selective degrowth”, redistributing resources between public and private consumption and within and between generations. Selective degrowth opens up a political debate about which extraction – production–consumption activities need to degrow and which ones need to grow.” (Kallis, 2011,p875).

12. “ Recession affect all workers, but some workers suffer more than others. Immigrants [to US]-especially those from Mexico, Central America and many from the Caribbean and the rest of Latin America- are more vulnerable than other workers during recessions.” (Papademetriou and Aaron, 2009, p 14).