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Happy degrowth through more amateur economy

Jørgen S. Nørgård*

Department of Civil Engineering, Technical University of Denmark, Building 118, DK2800 Lyngby, Denmark

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ABSTRACT

This paper outlines a simple, aggregate, descriptive model of what is here termed a "whole economy", covering all human involvement in the economy, from ultimate means or ecological sacrifices, to the ultimate ends of human satisfaction. The model embraces not only the formal "professional economy" driven by money, but also the parallel non-paid, voluntary economy, here termed "amateur economy", driven by peoples' affective motivations.

The input of work to the economy plays an essential role in the paper's analysis of options for reducing ecological sacrifices. Hence, part of the paper is devoted to a brief historical overview of the role of work, including turning points in the 1930s in the United States, when work sharing was displaced by work creation through consumerism, and, in the post-war economy when GDP became the dominant economic indicator.

The paper proposes the aim of a happy and sustainable degrowth for affluent countries, implying the transfer of some activities from the professional economy to the less 'labor' productive amateur economy. This will tend to reduce overall labor productivity and hence resource throughput, but increase satisfaction and happiness. A key element in the analysis is combining a reduction in consumption with a reduction in production, which is obtainable through lowering either working time or work productivity and turning some of the leisure time into voluntary activities.

Economic growth is not a law of nature but the consequence of explicit political decisions taken. Hence growth is also open to new political decisions in recognition of physical limits to growth and the human quest for replacing economic growth with life satisfaction, including increased free time.

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1. Introduction

"The subconscious reason [for Americans' opposition to restrictions in energy use] is that many people are afraid of the added free time, which will accrue as production is limited". Victor Paschkis, 1972

One year before the 1973 oil crisis erupted, physicist Victor Paschkis observed that opposition to restrictions on energy use stemmed from Americans' subconscious fear of free time. That same year, the Club of Rome report, *The Limits to Growth*, (Meadows et al., 1972), contributed to a boom in awareness of the risk from continuing the rich world's path of development. In the debate that followed negative reactions to the book largely ignored its long-term projections, which today appear quite correct (Nørgård et al., 2010).

When people in affluent countries become conscious about human pressure on the environment, a first solution that comes to

* Tel.: +45 4525 1933. *E-mail address:* jsn@byg.dtu.dk. mind is typically to reduce wasteful physical consumption. This is something we directly face in everyday life, and is indeed very relevant. Less obvious, however, is the necessity to also reduce our contribution to the production of goods and services through the work we perform. For the individual, this role appears as a small piece in a big puzzle. It can be easy to overlook the environmental consequences of one's work. In a degrowth economy, however, we have to constrain both our consumption and our production.

When the concepts of 'growth' and 'degrowth' are used in this paper they primarily refer to increasing or reducing the economy's physical throughput. Since throughput is directly (although not proportionately) coupled to the GDP (Nørgård, 2009), we have degrowth in GDP in mind throughout the paper.

Today's debate on how to mitigate climate change and other urgent environmental problems is dominated by technological solutions and ignores the two other main factors of population size and per capita consumption. But the ultimate issues have to do not only with the temporary transition phases of growth or degrowth as such, but even more with the environmental sustainability of the steady state levels, at which these transitions are aiming. There should be no doubt that the affluent part of the world needs to

move into a temporary degrowth phase until a more optimal economic level is reached. This paper demonstrates how reducing paid work time and consumption can help take us toward mitigating the environmental pressure, while at the same time improving people's general well-being.

The paper is organized along the following lines:

Section 2 presents a simple descriptive model of the economy that is more holistic than has become customary. This whole economy model is obtained by expanding the economic chain to include parameters that are more appropriate but harder to quantify, such as human happiness and the exploitation of nature.

Section 3 presents historical reflections relevant to the discussion of degrowth, especially the role of work, with special attention to a turning point in the 1930s, when consumerism emerged as the path out of depression.

Section 4 describes the development in more recent decades with regard to the political choice between work hours and leisure and considers the consequences of the fixation on growth in Gross Domestic Product (GDP) as the dominant indicator of progress.

Section 5 is devoted to surveys of people's preferences for leisure versus income and includes some discussion on the environmental impact of leisure and an intended reduction in labor productivity.

Section 6 describes some examples of amateur economic activities, both on an individual base and in collective undertakings.

Section 7 rounds out the paper with some reflections and conclusions.

2. Whole economy model

"Not everything that can be counted counts, and not everything that counts, can be counted." A. Einstein.

At the outset, economics as a discipline was not about money as it is commonly perceived today. As the Greek origin of the word indicates, economy is about good housekeeping with resources. Only some of the transactions in our daily life happen to be measured in money terms, and hence contribute to GDP. But in recent decades that has been a growing part. There are many good reasons to blow the whistle on the present extensive use of this narrow one-dimensional indicator, GDP, as a measure of a society's economic health.

2.1. Unfolding to a whole economy

In searching for replacement for this defective GDP, it appears useful to unfold the conventional monetary model in two directions, vertical and horizontal, to form what is in this paper termed a whole economy as illustrated in Fig. 1.

The vertical unfolding implies extending the chain of flows beyond the easily quantifiable monetary parameters to include 'softer' concepts from the ultimate cost of the exploitation of nature up to the ultimate benefits. The latter is here also termed happiness or satisfaction and is synonymous to what is elsewhere termed human well-being or, by Herman Daly, ultimate end (Daly, 1977: 19; Nørgård, 2006).

The horizontal unfolding of the economic system consists of embracing all activities that provide human satisfaction or happiness. As illustrated, the linkages can be divided into three main categories: the professional economy in the center, the amateur economy to the right and, to the left, the flow of free gifts from nature, designated here as "Gratis". The latter may not entirely qualify as part of the economy, since it generates satisfaction without requiring any production inputs by humans. But the

amount of free satisfaction from this gratis chain influences the demand on the other two chains.

In today's affluent nations, the transactions central to the economy are those passing through the professional economy, defined as the part driven by money, quantified and summed up as GDP. The professional economy constitutes only some of the links in Fig. 1's central chain, suspended between ultimate cost and ultimate benefits, both of which are hard to quantify and impossible to express in money terms. Nature as such is basically ascribed no monetary value, and human happiness also fails a direct monetizing.

These ultimate cost and benefits constitute what the economy should in principle deal with. Classically, the purpose of the economy was often expressed as providing happiness (Bentham, 1996). To Nineteenth Century Utilitarianism, the perception of living in an infinite, empty world made consideration on any ultimate cost in ecological sacrifices seemingly meaningless. Today most economists and politicians still seem to disregard the ultimate cost. They often seem to have suppressed the "soft" aspects of the whole economy, like happiness and satisfaction. The typical economist's tendency to restrict research to monetized parameters is probably motivated by a subconscious wish to make economics appear as a more objective science, But taken over by politicians, the exclusion of non-quantifiable parameters tends to reduce the room for subjective, democratic political decisions.

In recent decades, however, extensive surveys and other research are increasingly devoted to quantifying the ultimate benefits, human satisfaction and happiness (see, for example, Layard, 2005). Similarly, the ultimate cost in environmental damage and resource depletion is being investigated and recorded by various parameters like CO₂-emission, phosphorous flow into oceans and biodiversity (Rockström et al., 2009). *Ecological Footprint* is increasingly being recognized as a parameter summarizing some important ecological costs (WWF, 2010; Wackernagel et al., 2005).

2.2. Professional versus amateur economy

Parallel to the professional economy in Fig. 1 is what here is called the amateur economy. All economy originated from this category and today a large fraction of the whole economy is still

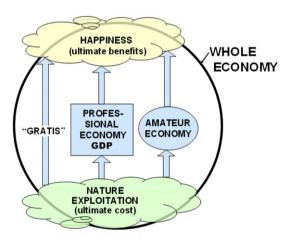


Fig. 1. Model of the Whole Economy flow from cost to benefits. Whole economy is much more than the money economy, since it includes all the steps in converting the ultimate cost to the ultimate benefits, human happiness. Besides the professional money based economic chain, also the amateur economy contributes to people's satisfaction as does nature's free gifts.

there, especially in developing countries with subsistence economies.

While the professional economy is driven mainly by money, the amateur economy is here used to describe those activities driven by love (latin: amare = to love) and other affections. This is quite similar to what is often termed voluntary or unpaid work, and no attempts will here be made to distinguish between these terms, whereas informal economy includes "gray" and "black markets" which is here included in the professional economy, although not showing up in GDP. Contrary to common use today, the term 'amateur' is not used here with a negative connotation, as compared to 'professional'.

In the amateur or voluntary economy the very production activities, the process, is by definition a source of direct personal satisfaction, while in the professional economy such satisfaction is often lacking. In the professional economy, the lack of intrinsic satisfaction is presumably compensated monetarily enabling people to purchase satisfaction.

In affluent countries, much of the growth in GDP over the last fifty years can be ascribed to pulling activities like child care, health care, cooking, entertainment, maintaining houses, etc. from the non-paid amateur economy into the professional economy. Similarly, with the blessing of GDP growth oriented governments, the professional sector tends to take over some of the satisfaction formerly provided as gratis gifts of nature, prompted by increased population density and environmental degradation. For example, when the beach gets polluted, the demand for swimming pools from the professional economy increases.

The consequences of these shifts from amateur economy and gratis gifts of nature into the professional economy might roughly be the same amount of ultimate benefit in meals, personal care, etc., but at a higher money cost and hence a higher GDP (van den Bergh, 2009). The environmental consequences of such shifts are discussed in sect. 5.3

It is worth asking whether this shift from amateur to professional economy has been taken too far, especially when the loss of intrinsic satisfaction from amateur activity is taken into account. Work in the professional economy is typically characterized by leaving the final decisions about working procedures, working pace, and product design, to others and being compensated for that loss of autonomy by money and consumption. Switching back to a more amateur economy is one way for people to take back control (and responsibilities) of their time and activities. Similarly, improving the environment can make more gratis satisfaction available and relieve the professional economy.

2.3. Whole economy efficiency index

How efficient are we today at converting the exploitation of nature into human satisfaction or happiness? For a large number of countries, this has been analyzed by what is termed the Happy Planet Index (HPI), which is defined as Life Expectancy multiplied by a Life Satisfaction index, divided by the per capita Ecological Footprint (NEF, 2009). The results of this index would prove embarrassing to people in affluent OECD societies who think of their economies as being quite efficient. True, citizens in these countries are rather happy, but this is achieved at a very high cost in terms of environmental sacrifice and in work time as well. Out of 143 countries, Denmark ranks 105th and the USA ranks 114th in whole economy efficiency. At the top of the list, we find Latin American countries, with Costa Rica ranked highest and Cuba in 7th place due to their cultural heritage and policies dedicated to health, education and other basic necessities. These benefits are combined with a per capita ecological footprint much lower than in industrialized countries – as little

as one quarter of the footprint of the USA. Some poor countries, like Zimbabwe, rank at the bottom, because of low life expectancy and low life satisfaction.

There are good human and environmental reasons to change the direction of development and lifestyles in the affluent countries. It could be useful to study some cultural experiences from other countries such as those in Latin America and Bhutan, the latter having pioneered the introduction of a Gross National Happiness indicator (Colman, 2011).

3. Role of work through history

Why do we work? Throughout history the immediate answer to that question has been that we have to produce some necessities for life or, in modern times, earn money to be able to purchase those necessities. But there is potentially more satisfaction to work than just the output. The activity of working can be satisfying in itself. The two sources of satisfaction, 1) the product output and 2) the work process to provide it, can have very different values as a motive for working, which is one of the central arguments of this paper. 'Work' is here defined as all human activities exerted to make an output, be they paid or non-paid.

3.1. Historic view on work

The role of work in human economies has varied over history, and through different cultures. Changes have occurred due to new environmental conditions, new technologies, new cultural trends, etc. The following is a brief look at the concept of work in Western cultures, with cases from the USA and Europe.

Looking back more than 500 years ago, Northern Europe was to a large extent covered by forest, with arable land for primitive farming at small settlements in clearings. The economy still retained relics of Stone Age economy based on hunting and gathering (Sahlin, 1974). Contrary to common belief, annual work time seems to have been lower than today, with scores of holidays, celebration of harvest and very short working hours in the dark winter. This early history of working time in Denmark (Kjaergaard, 1994) is confirmed by findings for the USA and the UK (Schor, 1991: 45). Furthermore, when comparing today's work pattern with work in the distant past – as well as when comparing with other cultures - it makes little sense to count work hours without also considering the human qualities of the work. Most work was on farming, where cattle and pigs were fed by leaving them in the pasture or forest to graze on wild grasses, leaves, roots and various nuts and other fruits. Livestock were milked to provide cheese or slaughtered for meat, hides for shoes, tallow for candles, etc. Other tasks consisted in gathering nuts, berries and mushrooms in nature, fishing on the lakes, rivers and oceans, or hunting in the forest (Lidegaard, 1972). Today, people in affluent countries that don't need to spend time on such activities for subsistence hunt and fish for recreation and even pay large sums for the privilege of doing so. This underscores the point that some work processes have a value or satisfaction in themselves, not only as a means for some higher satisfaction.

Of course, life in ancient time was not all beer and skittles. Medical care was poor, life was short, etc. But work was varied and directly meaningful. All this changed with shrinking forest cover, growing population density, and industrialization. The above 'paradisiacal' description should not suggest going back to such conditions but it may offer some hints about how western economic development went off the rails and into overconsumption, which now poses a threat to the well-being of people as well as of the environment.

3.2. Protestant ethics on work and consumption

Deforestation and population growth in North European countries created a general need for more labor-intensive agriculture, including the reclamation of wetlands (Kjaergaard, 1994). The so-called Protestant work ethic, emphasizing hard work and frugality (Weber, 2001), can be seen as an attempt by the ruling class in North European countries, in collaboration with the church, to foster a public morality that could rescue the economy. Over the course of generations and centuries these efforts succeeded, and gradually hard work was to be considered a vocation or a calling, in the sense that it was good in itself, whether the output was needed or not.

Today, few Westerners — particularly Europeans — feel strongly attached to the Protestant church, or to any other religion for that matter. In the formally Protestant Nordic countries, the percentage of people who attend religious services at least once a week had by 2001 dropped to seven percent in Sweden and only three percent in Denmark. This compared to 46 percents of Americans who attend church weekly (Inglehart and Norris, 2004: 21). In the more Catholic countries of Southern Europe, the participation in religious services is also lower than in the USA, with weekly attendance ranging from eight percent in France to 40 percent in Italy (Inglehart and Norris, 2004).

It is tempting to see a correlation between these differences in religious interests and the annual working hours, which in less religiously attached Europe are 10–20 percent lower than in the USA. The general vocation and admiration for hard work seems to have faded with emancipation from the church. There are, of course, other related cultural differences between the two continents. A plausible hypothesis is that people seeking challenges in life dominated emigration from Europe to America, while the more risk-averse population stayed behind in the 'old world'. Consequently, Europeans developed societies with greater emphasis on equity and public welfare, and less urgency about the accumulation of wealth.

Despite the declining influence of religious attitudes on Western economic life, the cultural engraining of work as a virtue continues today, often through businesses influencing youngsters through education, sport clubs, advertisement, etc. (Beder, 2000).

During the emergence of the work ethic in the 1500s and onwards, people in power perceived it as a necessity for rescuing the mainly agricultural economy from ecological collapse. That work ethic was a blessing for the emerging industrialization, but it is ironic that today this same work ethic is an essential element in the ecological threat the world is facing.

4. Conception of consumerism

The Twentieth century in the West witnessed more change in technology, health and material well-being than any previous century. Unfortunately, this was also true with respect to wars, population growth, and environmental destruction. For good and bad, much of this was related to the attitude to work.

4.1. Economic depression and work sharing

Mechanization brought higher labor productivity to both agriculture and manufacturing, meaning more output could be produced per hour of work. This productivity increase was used partly to increase wages and consumption, and partly to reduce weekly hours of work.

The economist Paul Douglas analyzed the worker's situation in US industries over the period from 1890 to 1926 and found that typically they had used around 30% of the gain in labor productivity

to reduce weekly working hours (Douglas, 1957). The struggle for reducing weekly working hours in the U.S. continued successfully all the way up to the mid 1930s. This debate can today be an inspiration for discussing which path to choose for the future (Cross, 1993; Hunnicutt, 1988; Beder, 2000).

Many American manufacturers supported shorter work hours, and some, like Henry Ford, even introduced it voluntarily because performance *per hour* increased with fewer hours of work. In politics, shorter hours were advocated by the *Technocracy Movement* on ideological grounds, namely that increased free time could save traditional American institutions and values, including individual freedom (Hunnicutt, 1988: 286).

However, the main pressure for shorter work time came from the trade unions. Their arguments were multifaceted, citing both the benefits for workers of getting less exhausted at work and the benefit of having more time for leisure. Shorter working time was also seen as a way to push for higher wages, since it would result in fewer working hours being offered on the labor market.

This support for shorter work hours in the 1920s intensified with the depression of the 1930s as a measure to cope with unemployment through work sharing, that is, the "redistribution of the existing volume of employment" (Keynes, 1970: 332). In 1933, the US Senate passed a bill to reduce the workweek to 30 h, a measure that initially had been endorsed by the newly elected administration of President Franklin D. Roosevelt. But business leaders, cabinet officials and economists had concluded that the 30-h week was impractical. They backed away from work sharing and lobbied intensively against it. As a result, the bill was never signed into law. Instead of *work sharing*, the Roosevelt administration's "New Deal" turned to *work creation* as its prescription for more employment through economic recovery (Cross, 1993; Beder, 2000; Hunnicutt, 1988: 191).

4.2. The new consumption deal

How the 30 h week would have worked in practice was never tested. Instead the Roosevelt administration launched a watereddown, mixed program of public works and industry codes that urged businesses to combine a modest work time reduction with increased hourly wages. The political focus turned toward creating more work through ever-increasing consumption, aimed at keeping pace with gains in labor productivity. The success of this effort at reducing unemployment appears to have been limited (Taylor, 2011). In 1937, the standard workweek was established at 40 h and has remained around that level in the USA. During the 1970s and 1980s, average annual working time in USA even increased somewhat, mainly due to fewer weeks' vacation (Schor, 1991: 30).

After settling at the 40 h workweek, the strategy of the US government was that leisure should be less time intensive and more goods intensive and in general be more commercial. In the early 1930s, some had warned against this trend, fearing that this commercial leisure "may be ever less satisfying, and hence less desirable, as it becomes ever less active, creative, personal and connected to others" (Hunnicutt, 1988: 312).

A major expansion of commercial advertising accompanied the political and economic strategy of increased consumption and the abandonment of work sharing and the 30 h workweek. Advertising's central function is "to create desires — to bring into being wants that previously did not exist" (Galbraith, 1999: 127). In 1932, Bernard London began advocating another essential growth driver: planned obsolescence. He even urged governments in the USA and Europe to promote deliberate reduction in products' life by law (London, 1932; Slade, 2006). Since the Second World War, such advertising, marketing and planned obsolescence in itself became

an important part of the fast-growing professional economy. But above all, it became the driver to keep consumption growing fast enough to stay abreast with labor productivity gains (Cross, 1993; Hunnicutt, 1988: 42). Easy access to cheap loans and credits has become another driver of consumption growth, trapping people in a vicious cycle of 'consume and work'.

Even heads of state stoop to directly urging citizens to consume more, as exemplified in the 1950s by the famous statement, ascribed to President Eisenhower: "It is a duty of every American to consume" (Goudzwaard, 2004). Top politicians have repeated the same mantra, whenever people's hesitation or satiation poses a barrier to GDP growth in a country.

The official political purpose of consumption growth is to combat unemployment and collect more tax revenues, but behind the curtain hides a fear of a revival of the 1930s' demand for a work sharing solution to unemployment.

4.3. GDP and alternatives

Simon Kuznets, who pioneered the statistical concepts behind the GDP in the 1930s, warned against using it as a measure of how well a country and its citizens are progressing. When asked directly, most economists today agree that the GDP has severe shortcomings as a measure of progress but few of them object to its dominant use as a yardstick for economic policy.

One crucial failing of GDP is that expenditures on both positive and the repair of negative aspects of development are added to the total. This explains how nominally growing economies can reach a point of negative marginal benefit, a feature Herman Daly has called "uneconomic growth" (Daly, 2007). A shortcoming of special relevance to this paper is the fact that GDP does not "reckon leisure time as an element of income and consumption" (Myrdal, 1973: 184). There are many good reasons to search for alternative indicators of progress and well-being, but no excuse for waiting for the 'perfect' indicator before stopping the extensive use of GDP (van den Bergh, 2009).

In the wake of World War II, economists and politicians came to virtually worship this one indicator, GDP, as the measure of how well a society is doing. The divine view of growth in GDP was illustrated in a 1952 commission report to US President Truman, where 'Growth' was stated as the divine goal, spelled with a capital 'G'! (Galbraith, 1958). Ironically, the more meaningless this indicator becomes as a measure of people's well-being, the more the political fetishism of GDP seems to increase. The shortcomings of GDP have led to numerous attempts to establish a better single indicator. The more moderate attempts are based on modifying GDP by weeding out its most severe absurdities, but still expressing the parameters in monetary units, for example the "Genuine Progress Indicator" (GPI) (Talberth et al., 2006). For the USA, the GPI shows no genuine progress over the last 35 years despite a more than doubling of the GDP.

It is becoming feasible to develop more relevant well-being indicators by directly registering the ultimate benefit perceived by individuals. This is the basis of an emerging discipline that investigates and somehow quantifies 'happiness' or 'satisfaction' (Layard, 2005), Quantifying happiness or satisfaction comes with relatively large uncertainties. However, when comparing nations or when analyzing trends over time, the direction of change is less uncertain. For example, the percentage of US citizens registered as 'very happy' has not increased since 1945 despite a tripling of real income per capita (Layard, 2005). Similarly, other studies in affluent nations suggest no correlation between well-being and consumption or GDP per capita (Speth, 2008: 132; Jackson, 2005).

Similar observations result from comparing countries with different income or GDP per capita: Up to a certain level, growth in GDP per capita does seem to increase happiness and satisfaction, although with diminishing returns. Above a level around \$10,000 per year, satisfaction increases very little, if at all, with continued increase in GDP per capita (NEF, 2009), although GDP and associated environmental pressures continue to increase. Several years ago the Organization for Economic Cooperation and Development (OECD) began to look for alternatives to the widely used GDP and recently came up with an indicator called the *Better Life Index*, composed of 11 parameters found to be essential for quality of life (OECD, 2011).

Recent decades have seen an increased skepticism about the relevance of GDP and the search for other indicators of progress has intensified (GlobeScan, 2010), even among heads of state in Europe, such as for France (Stiglitz et al., 2009) and more recently for China (Economist, 2011).

The dilemma seems to be that the definition of GDP is *relatively precise*, even though its content as a measure of well-being is *erroneous*. Happiness as an alternative measure of well-being seems to be *more correct* in content but with *larger uncertainties* about defining and measuring it.

4.4. Rebound effect

In the absence of political will to limit and degrow production, it is hard to imagine any hope for sustainability. Given the present obsession with economic growth, technological progress toward mitigating environmental problems like climate changes tends to be immediately reabsorbed by growth in population and consumption. Investments in technological resource efficiency and renewable sources spur productivity and hence further GDP growth, eating up part of the technological gains through what is termed the *Rebound Effect* (Sanne, 2000, 2006; Alcott, 2005; Polimeni et al. 2008; Herring and Sorrell, 2009). The solution to this would seem to be policies that turn such resource productivity gains into more leisure in the same way that this paper has advocated taking labor productivity gains as leisure (Nørgård, 2009).

If human societies continue to pursue GDP growth instead of happiness, this obsession, along with the rebound effect, might bring us to the perpetual state of "marginal misery", that Malthus anticipated more than 200 years ago (Malthus, 2008).

4.5. Recent trends in work pattern

In the early 1900s the USA was a pioneer in the western world in turning labor productivity gains into more free time. However, this development came to a halt after the 1930s with the standardization of the 40 h workweek.

After World War II, Europeans caught up with and surpassed the Americans in shortening work time — not so much in low weekly hours, which in the 1980s settled at around 37 h per week, but rather in annual work time. By 2009, the annual average for all employees in the US was 1770 h. In Japan, the annual average was 1710 h. In Europe, the UK, Germany and Denmark have average annual work hours of 1650 h, 1390 h, and 1560 h, respectively (OECD, 2010). These figures include part-time employment, defined as having less than 30 hours per week. In the Nordic countries, paid work hours per working-age person are essentially the same as thirty years ago, while paid working hours per family have increased as a result of women moving from non-paid work at home to employment in the professional economy (Sanne, 1995).

For politicians pursuing high GDP growth, the present situation in affluent Europe can appear frightening and challenging. There is essentially no growth or even a decline in population, and a very small reserve to join the labor force. In Denmark, for instance, 77 percent of women and 84 percent of men in the working age

(16–64 years old) are already in the professional labor force. For the USA corresponding percentages are 69 and 90 (OECD, 2010). Considering the long educational time, future growth in GDP per capita can be obtained only from 1) increasing work time and 2) labor productivity gains, the latter of which can be hard to maintain at two percent per year, especially in the now dominant service sector.

On the other hand, for politicians aiming at combining better environment with a more satisfying lifestyle through a policy of degrowth, the outlook is more positive, as illustrated by the New Economic Foundation's vision of a future for the UK with a 21-h workweek (NEF, 2010). Reintroducing work sharing is a key factor here. Labor productivity gains and energy productivity gains from improved technology could then be used for a general slow down at work as well as during leisure time, instead of consuming ever more goods and services. Fortunately, this sustainability quest appears to fit well with trends in public preferences as shown in Fig. 2.

5. Leisure and the environment

A common misinterpretation of the survey results shown in Fig. 2 is that if people's preferences for more leisure are fulfilled, then they will consume more. In principle, this is not possible. If people choose to turn productivity gains into more leisure *instead* of more income, they can't have both, and their consumption will remain constant.

5.1. Work-leisure preferences

In today's Europe there seems to be discrepancies between people's preferences and the hours they actually work, as illustrated in the case of Denmark by Fig. 2.

Since 1964, the National Institute of Social Research in Denmark has conducted extensive surveys on how Danes use their time and how they would like to use it (Platz, 1988; Körmendi, 1990). One of the survey questions asked of around 2000 participants concerned peoples' preferences for more income or reduced work time. As seen from Fig. 2, the fraction preferring less work appears to have grown over time, reaching seventy percent in 1987.

In the 2002 survey, however, the institute left out just this one question, without explanation, interrupting this long time series. Fortunately, in 2007, another institute, (IFKA, 2007), took up the

same question in their surveys and showed a continuation of the trends, which now indicates seventy-three percent would prefer less work. In the two early surveys there was a remarkably high fraction of undecided, which the institute ascribes to the fact that they were conducted as personal interviews with a specific reply option of "don't know" (Platz, 1988: 90).

Similar trends, of people preferring non-consumption benefits like more leisure over more consumption, are observed in other affluent countries, particularly in the Nordic countries (Sanne, 1995, 2007). These survey results showing how people would like to use the productivity gains should be of vital interest in politics. Instead they are seldom quoted. They appear unsettling to most politicians, whether on the right or the left wing, who continue to be obsessed with growth in GDP.

Why don't people work less, if they want to? The answer is partly that few employers offer such choice and partly because of social pressures (Sanne, 1995: 74; Galbraith, 1973: 236). The labor market is not free and in most cases involves a choice between say 40 h per week or zero. The quest for equity, solidarity and sustainable development calls for collective agreements on work time.

In his 'General Theory of Employment,' the British economist, John Maynard Keynes, acknowledged that one school of economics saw the solution to unemployment in redistributing the existing volume of employment (work sharing). But despite his vision of his grandchildren's leisurely life (Keynes, 1931), Keynes found in 1936 this policy to be premature (Keynes 1980: 332). He argued that given the choice, people would prefer increased income over more leisure, although this argument has later been questioned by historian Hunnicutt (1988: 326).

5.2. How to spend extra leisure time?

The American historian Gary Cross has stressed the importance of not turning all extra leisure time into idleness but into "Democratic Leisure", a concept discussed in the early 1900s' struggle for shorter hours (Cross, 1993: 3). There are two aspects to the concept: "a balance of work with time free from economic obligations and a form of leisure that provide the widest possible choice, access, and participation". It is not a matter of having no work at all in the professional economy or insisting on a purely non-commercial leisure. Rather, it is a matter of finding a new balance that provides optimal happiness at an ecologically sustainable level.

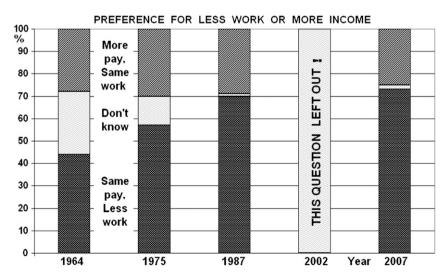


Fig. 2. Preferences for more pay or less work in Denmark. Sociological surveys over decades show an increasing preference for turning productivity increase into more leisure rather than more income and hence consumption. Sources: (Platz, 1988; Körmendi, 1990; IFKA, 2007).

Most people in affluent countries now spend their professional work in the service sector or other sectors where the aim for decades has been to relieve people of hard physical work. Because of the sedentary nature of much modern work, there maybe a tendency for people to choose physical leisure activities like gardening, biking or craft that provide an additional health benefit (Nørgård, 2005). This also creates opportunities in the professional economy to provide services in the way of commercial fitness facilities and the like.

5.3. Environmental impact of more leisure

Reducing work hours in the professional economy affects energy consumption and other environmental impacts in several ways:

- The shorter time at the work place reduces energy consumption there.
- Income and therefore consumption, including energy, will be reduced
- The extra leisure time will tend to require more energy. But the amount will depend on how leisure is spent.
- 4) The time added to the amateur economy can produce low energy outputs within sectors like transport, food and care that substitute for higher energy outputs from the professional economy.

A recent micro-analysis for Sweden indicated that a ten-percent reduction in work time would result in an eight-percent reduction in energy consumption, mainly due to the lower income and thus lower overall consumption (Nässén et al., 2009). The projected increase in energy consumption resulting from the extra leisure time was found to be an order of magnitude smaller. An even larger effect was found in a macro-analysis, comparing different countries. That study found that Americans could reduce their energy consumption by some 20% if they reduced their annual work time to the lower European work level (Rosnick and Weisbrot, 2006).

While more leisure time does not guarantee a lower environmental impact, the above analyses point toward a large effect. And less work time does offer unique opportunities to combine significantly reduced environmental impact with improved quality of life — if the extra leisure is spent appropriately. For example, driving a car has one of the highest rates of energy consumption per hour, about 50 kWh, while in contrast, spending an hour reading a book only consumes around one kWh (Jalas, 2002). By comparison, 1 h less spent at work in Denmark is estimated to save an average of roughly twenty-five kWh of energy consumption at the work place (Nørgård, 2009).

Extra leisure time can be spent not only with lower energy intensity but with negative marginal intensity by enabling people to slow down. Reducing car speed from 130 km per hour to 80 km will not only save about half the energy *per km*, but the slower speed can save about two-thirds of the fuel consumed *per hour*. Using some of the extra free time to walk or cycle to work instead of commuting by car can save significantly more and in the process improve health and well-being (Nørgård, 2005).

Since the *rate* of energy and material throughput is a major source of environmental impact, 'slowing down' in general maybe considered a necessary strategy to achieve sustainability through degrowth.

It is striking, that most of the debate and analysis on the environment have been rather late in integrating this with reducing working hours (Gorz, 1983; Victor, 2008; Jackson, 2005; Schor, 2005; Sanne, 2000; Schmidt, 2009). Besides the above analyses, Juliet Schor has contributed the recommendation to "work less,

spend less, emit less and degrade less" (Schor, 2011: 112). The New Economic Foundation's vision of the 21-h workweek also links its proposal to the environment (NEF, 2010).

In all likelihood, the strong preference for more leisure illustrated in Fig. 2 primarily demonstrates people's wish to have a better life of their own, not to save the climate. If the respondents in these surveys were made aware of the collective environmental benefits, the preference for leisure might have been higher. Or to put it another way, governments should encourage and support such voluntary contributions as a democratic contribution to solve environmental problems like global warming.

5.4. The fourth way to secure employment

With labor productivity growing at around two-percent annually, securing employment has become a major challenge, and plays a key role in economic policies. The measures available can be listed follows:

- 1) Increase public and/or private investments.
- 2) Increase private and/or public consumption.
- 3) Reduce working time to coincide with the amount of production needed

In 1945 Keynes considered the investment policy as a kind of "first aid" to prevent unemployment but he saw the third option, less work hours, as the "ultimate solution" (Keynes, 1980: 384, Walker, 2007). A fourth measure can, however, be added, namely:

4) Reduce labor productivity.

In contemporary political economy, where growth in production has top priority, it may seem eccentric to set aside some of the potential labor productivity of the professional economy. Reduced labor productivity is not, however, completely unheard of, even in the professional economy. For example, governments and employees demand — and employers provide — better working condition with respect to safety, health, relaxation, etc. at the cost of some labor productivity. This way of improving satisfaction in the work process by holding back a portion of labor productivity is certainly one relevant option for preventing unemployment resulting from productivity increases (Galbraith, 1999: 245).

Another version of waiving labor productivity has emerged in recent decades. Ecological tax reforms that lower income tax and increase taxes on resource consumption, pollution and other kinds of environmental damage are advocated to protect the environment and reduce unemployment (Daly, 1996: 89). Such tax shifting tends to improve efficiency in resource throughput but reduces labor productivity. Similar changes toward less resource use and better environmental protection can be achieved by direct legal actions or consumer preferences, as exemplified by organic agriculture, which in general is more labor intensive than conventional agriculture but less resource intensive. Organic farming could be made even more ecologically sustainable and more labor intensive by including reduced CO2 emissions in their requirements for certification.

6. About amateur economy

The fourth option for preventing unemployment by reducing productivity, discussed above, is especially relevant to the degrowth economy advocated in this paper. In a degrowth economy, the reduced labor productivity is achieved by taking back some of the production from the capital-intensive professional economy and returning it to the more labor-intensive amateur economy. We assume here that the desire for less working time

does not necessarily reflect a wish to spend all the extra leisure time sitting idle or consuming passive entertainment.

Experience shows that people in Europe are quite active in their leisure time, perhaps a reminiscence of the deep-seated Protestant work ethic. One of the drivers for these activities maybe restoring "the benefits and values that work has lost to the machines" (Hunnicutt, 1988: 86). Craftsmanship, creativity and worker control can be cultivated in individual hobbies as well as in voluntary joint activities. Further examples of creative and enjoyable leisure activities are presented in recent books by Schor (2011), Latouche (2004) and Schmidt (2009).

6.1. Whole efficiency of amateur economy

Usually the terms labor productivity or labor efficiency are used to denote the product output per labor hour of input. Sometimes the term resource productivity is used, referring to output of products per input of certain natural resources such as energy. If, however, we look at the whole economy, as illustrated in Fig. 1, these are too narrow definitions of efficiency. Here the ultimate benefit is not *only* the output products in the form of goods or services (Schor, 2011: 146), but also — and often more importantly — the satisfaction from the *process* of producing the output. The ultimate cost is the sacrifices of the natural environment.

The lower labor productivity in the amateur economy entails spending a longer time providing a product. With today's economic focus on the *product* output, this is perceived as a negative aspect. But by shifting the focus to the production process, and the joy and satisfaction from there, this evaluation changes. The benefit is also time spent in a happy and satisfying way.

6.2. Individual amateur economy cases

We can illustrate the efficiency of the whole economy with the example of the production of a chair. If woodcraft is your hobby, you might decide to enjoy making it yourself. Doing this gives you two different satisfactions:

- 1) Satisfaction from the *work process* of making the chair, spending say 50 happy hours of your leisure time.
- 2) Satisfaction afterward from using the *product output* the chair including its personalized features and fond memories of its making. In the professional economy, your share of the output would be the "cool" purchasing power of the salary.

In an amateur economy, the satisfaction of making can often be the dominant part of satisfaction. The environmental footprint per chair might be the same as if you were making the chair in a factory, but the long happy leisure time you have chosen to spend on making it, instead of working in a factory - that is, the low labor productivity — keeps your labor from being highly productive at a factory, making the equivalent to maybe twenty chairs during the same time. This might not conserve resources *per chair* but it does *per hour*, and furthermore gives more 'units of happiness' per unit of resources consumes.

Another example is spending leisure time writing contributions to Wikipedia, the open Internet encyclopedia (Schor, 2011: 150). Such activities are enjoyable by definition since the contributors have hardly any other reason for doing them. The environmental cost is very low, much lower than that at an average work place.

A final example is from transport sector, where people increasingly are choosing to bicycle or walk instead of going by motorized transport systems like car, bus or train. This choice is mostly not based on saving money, but more for personal health and well-being. Going by bicycle or foot might take more of your

time than by car. But considering also the time you spend working to afford to buy and run a car, plus the time you might need for exercise at fitness center, the time balance may even be reversed. The health benefit of choosing bus or train instead of private car is that you will usually be 'forced to' also walk or bike to get to and from the transit stops.

6.3. Collective amateur economy cases

In the professional economy, labor productivity gains have been achieved not only by technological means, but also by scheduling the work more tightly, leaving fewer random breaks in the work and thus less opportunity for social interactions. This might be one reason why many people prefer to spend their leisure time in collective activities with friends, relatives, neighbors and colleagues (Jackson, 2009; Schor, 2011; Latouche, 2004).

The fact that less work in the professional economy gives more individual freedom does not necessarily imply that people spend the extra free time in solitude, engaging in their own hobby, as illustrated by the cases above. The time will often be spent with friends, neighbors, etc. in various kind of community-based social enterprises, such as 'local farmers markets, slow food cooperatives, sports clubs, libraries, community health and fitness center, local repair and maintenance services, craft workshops, writing centers, etc'. All such community activities form a kind of amateur economy, which Tim Jackson has termed a 'Cinderella economy', indicating that it plays an important role in the whole economy yet "sits neglected at the margin of the consumer society" (Jackson, 2009).

A growing number of people engage in voluntary, non-paid work. For example, in 2004 around 35 percent of Denmark's population participated in some organized voluntary work for the benefit of someone other than the participants themselves or their family. On average, they spent 200 h over the year in such organized collective activities. The fields of activity can be administrative, educational, physical or coaching work in NGOs, sports clubs or other organizations. Caring for children, elderly and sick people is another field attracting volunteers (Ibsen et al., 2008).

Such social and community activities can be very resource efficient. They provide energy savings and social satisfaction by organizing car pooling, better conditions for walking and biking, food growing gardens, caring for other people, etc. usually all in the local community, eliminating much of the need for motorized transport.

Already at the turning point in 1930s it was being debated how to organize the emerging leisure activities democratically (Cross, 1993: 99). The public sector can provide facilities for such local community activities, for instance sport fields, education facilities, land for allotment gardens, small paid staff, etc. Part of the rationale for such provision is that it prevents people's loneliness from leading to crime, drug abuse, and other negative consequences, which are often used as arguments against lower work time.

7. Happy degrowth reflections

It should come as no surprise that the policies of degrowth are in many respects counter to the present growth policy. The following are some of my subjective reflections on the paper.

7.1. Elements of degrowth policies

Recognition of the bio-physical limitation of the planet gives moral and political legitimacy to a demand for equal right to the use of these natural gifts. Greater equity also ensures more total human satisfaction (Daly, 1996: 84; Wilkinson and Pickett, 2010) relative to the environmental cost — that is to say, a better whole economy.

Technologically, there are no insurmountable barriers to designing our houses, appliances, means of transport, and other goods to last three to five times longer, and thereby to reduce the use of both work time and natural resources correspondingly. The same applies to energy consumption. The main barrier to such environmentally benign systems are not technological, but a political quest for growth in GDP. Applying these technologies of durability can lead to a significantly better whole economy.

With work time in the professional economy reduced to 10–20 h per week, there will be plenty of leisure time available to spend in the amateur economy, enjoying meaningful activities as an outlet for the surviving Protestant work ethic. – Or the extra free time could be spent in idle chatting on politics, people, nature, etc., all contributing to new kinds of wealth (Schor, 2011; Latouche, 2004), and to a better whole economy.

Children are naturally a source of enormous enjoyment and satisfaction, but population density obviously also constitutes a basic cause of ecological sacrifice. The balance between the ultimate benefits and ultimate cost of people on the earth is hard to determine, but with fewer people than 7 billions, it will be a lot easier to make a better whole economy.

Cooperation at a local and global scale should be promoted, while competition can be de-emphasized. In economics, competition is usually justified as a means to spur growth in GDP and hence increase ecological pressure. Cooperation can contribute to a better whole economy.

The changes suggested in this paper are politically quite radical, but can in most cases be implemented stepwise, instead of infinitely postponing *any* change till *all* changes can be made simultaneously. As such the changes suggested constitute viable leverages for pursuing a happy degrowth.

7.2. Re-balancing the virtues

The two Protestant virtues of working hard and living frugally, mentioned in Section 3.2, were in the longer run incompatible. This had been recognized by the clergymen in the early years of Protestantism, but did not unfold until industrialization when technology increased labor productivity dramatically. The dilemma was not much debated in the last part of the Nineteenth Century, when shortening work time and improving living conditions were both generally welcomed.

However, the 1933 work time debate in the USA, was in a sense a plebiscite on which of the two virtues to hold on to: hard, productive work or frugal living. At that time, the struggle for shorter work hours offered a critique of, and alternative to, the new "gospel of consumerism" (Cross, 1993: 83; Hunnicutt, 1988: 86). In the end, though, the *ideal* of hard work prevailed over frugality. The virtue of living frugally, was more or less politically abandoned, and has gradually been reversed, making consumption a virtue.

Things would look quite different — and more consistent with living on a limited planet — if the balance of those venerable virtues shifted to favor a frugal and less wasteful life and to relieve the pressure for long, industrially-productive work time.

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