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Building sustainability through greater happiness

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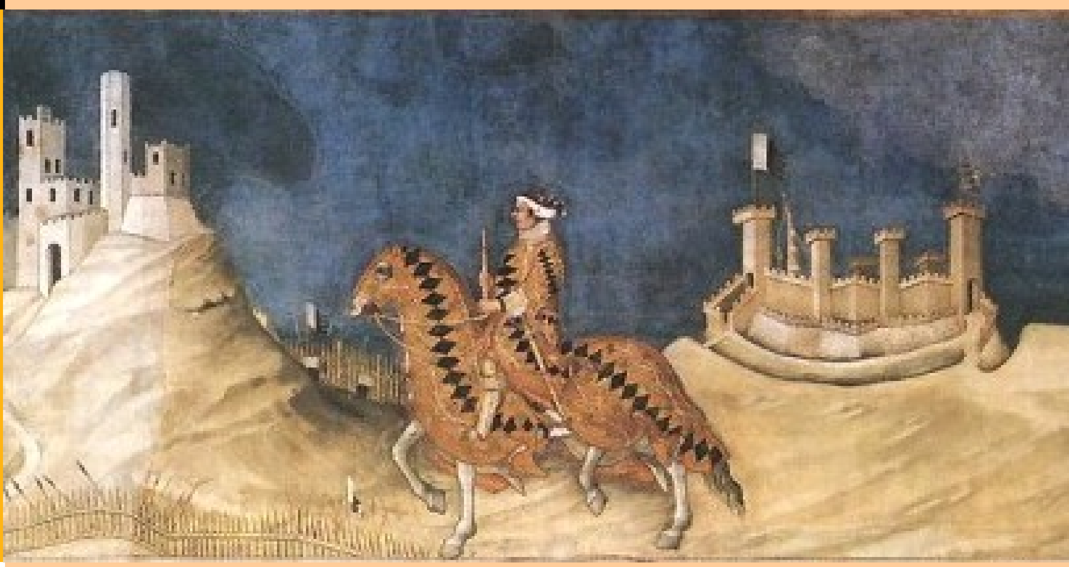

Building sustainability through greater happiness

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Abstract

The current unsustainable growth of the world economy is largely a consequence of the crisis of social capital experienced by much of the world's population. Declining social capital leads the economies to excessive growth, because people seek economic affluence as compensation for the emotional distress and loss of resources caused by scarce social and affective relationships. To slow down economic growth requires an increase in social capital that is a fundamental contributor to happiness. From a wide range of possible approaches to increasing present happiness, this article suggests policies that would shift the economy to a more sustainable path. It focuses on a more *politically* sustainable set of proposals for a green 'new deal' than some of those currently under discussion.

Keywords
Common good; environmentalism; ecologism; economic growth; green economy; happiness; negative endogenous growth; private affluence; social capital; social stress; well-being.

JEL codes: A13, D63, D90, E20, F01, I31, O10, O40

1. Introduction

In recent years climate variability has increased and extreme phenomena have intensified, helping increase the attention paid by the western public to warnings on global warming and other possible ecological crises. Documentaries and books on eco-friendly practices and lifestyles have gained popularity, as a growing number of people seem to realise that:

> Prudential regard for planetary health requires that the North accepts not only a slow-down in growth but an actual reduction in material standards of living, at least according to conventional measures. This would … set more realistic aspiration by the South … (Marglin, 2013: 151)

People increasingly perceive that we are already operating beyond the safe space defined by the planet's boundaries (Rockström et al., 2009). A 'green new deal' (FitzRoy et al., 2012) and a more sober life-style are increasingly perceived as necessities. In sum, the *cultural* influence of ecologism seems to be expanding in western countries.

Nevertheless, its *political* influence seems to be stagnant. There is no global trend towards greater electoral success for political parties which prioritise environmental sustainability, and ecological issues have not gained higher priority in the agenda of traditional parties. In 2011, immediately after the Fukujima disaster, German polls indicated that the Greens would receive about 27% of votes. Yet, in the national elections of 2013 the party obtained a mere 8%. Most analysts agree that the root of this disappointing result was the proposal by the Green Party to legislate for a weekly Vegetarian Day in all public cafeterias — a proposal that, while well-intentioned, provoked a dramatic negative reaction by the public.

This example is paradigmatic of the political difficulty encountered by attempts to shift towards a greener economy. When the limits to our planet are translated into limits to our daily life, they soon become politically unsustainable. The problem lies in the difficulty of gathering a political consensus. How to solve this conflict between the growing ecological awareness and the rejection of attempts to build a more eco-friendly economy? Will achieving a green new require a catastrophe?

This article explores such politically-feasible solutions. Section 2 describes the declining happiness and social capital that has accompanied three celebrated recent cases of economic growth in rich and poor countries: the US, China and India. It argues that economic growth systematically tends to erode social capital, although the coexistence of economic growth and social crisis challenges conventional economic wisdom. Section 3 outlines an explanation of this paradoxical coexistence, using the Negative Endogenous Growth (NEG) analysis to argue that economic growth can be fed by social crisis. Section 4 provides empirical evidence supporting the NEG viewpoint. Section 5 underlines the role of NEG processes in developing countries. Section 6 discusses evidence regarding people's time preferences and its implications. Section 7 explores some policy implications of the argument, while section 9 summarises concrete policies for building social capital.

2. Puzzling trends

The US, China and India share some disquieting trends. Happiness (or subjective well-being) has been diminishing in the US in the past three decades (Bartolini et al., 2013) and since the '90s in China and India (Bartolini and Sarracino, 2014a; 2014b). The relevant time series, ending at the latest in 2007, are not affected by the global crisis that began in 2008. This evidence is puzzling for the conventional economic wisdom. The Easterlin paradox — showing that subjective measures of well-being do not increase with economic growth — has led some social scientists to suggest that the nexus between well-being and economic growth is not as robust as previously thought. Criticisms of GDP as an indicator of well-being have spread even among economists. Many now accept that liberation from poverty may be a necessary but not sufficient requirement for happiness (e.g. Constanza et al., 2014).

There is no doubt that China and India are experiencing an accelerated liberation from mass poverty. This is why the decline in Indian and Chinese subjective well-being is more astonishing than that in America. Since the 1990s, Chinese GDP per capita has grown by about 10% a year, significantly improving living conditions for millions. The World Bank (2014) estimates that Chinese growth has dramatically reduced the number of people living on less than US$1.25 per day. Since the early 80s, more than half a billion people in China have been lifted out of absolute poverty. Between 1990 and 2010, the percentage of the rural population with access to improved water sources rose from 56% to 85%, and the yearly growth of household final consumption expenditure was on average 6.5%.[1] Indian figures are similar, just slightly less triumphal. If there are two countries where economic growth should have played a significant role in people's well-being, they are China and India. Instead, between 1990 and 2007, average life satisfaction substantially dropped in both countries.

The coexistence of economic growth and declining social capital is challenging for conventional economic wisdom, which for the past twenty years has argued that social capital fosters growth, particularly through the abatement of transaction costs (Putnam et al., 1993; Knack and Keefer, 1997; Helliwell and Putnam, 1995; Narayan and Pritchett,1997; Zak and Knack, 2001), with little recognition of the possible long-term coexistence of economic growth and declining social capital.

US growth rates of the past three decades — envied by most of the Western countries — have been paralleled not only by a decline in self-reported happiness but also by a rampant diffusion of mental illnesses, especially anxiety and depression (Twenge, 2000; Wilkinson and Pickett, 2009; Diener and Seligman, 2004). As for social capital, American indicators over this time exhibit an increase in communication difficulties, in fear, in a sense of isolation, in mistrust, in familial instability and generational cleavages, and a decrease in solidarity, honesty and in social and civic participation (Putnam, 2000; Bartolini et al., 2013; Paxton, 1999). Similarly, in China and India, trust, associational activity and various measures of civic behaviour declined (Bartolini and Sarracino, 2014a, 2014b).

Indeed, the coexistence of growth and declining social capital seems to be a global phenomenon. Bartolini and Sarracino (2014c), using time series of various time horizons from a large sample of countries, show that trends in social capital and economic growth are negatively related over time: the more vigorous a country's growth, the more likely the decline of its social capital. The causal analysis outlined in this study suggests that economic growth has a significant negative impact on social capital, depending on the speed of increase in income inequality. Growth appeared to erode social capital only in the third of countries experiencing the most rapid increase in inequality, whereas in the rest of the sample this relationship was not significant. This suggests that it may be the rapid increase in income inequality that explains why growth tends to destroy social capital.

How to explain this scenario of increasing social poverty and economic abundance? Is there a relationship between social crisis and economic dynamism?

3. Negative Endogenous Growth

According to the NEG (Negative Endogenous Growth) thesis, growth can be both the cause and the consequence of the decay of social and environmental assets. NEG models recognise not only the relevance for people's well-being of the negative externalities that the growth process — and the related expansion of the market sphere — bring about, but also the important role that negative externalities may play in feeding GDP growth (Bartolini and Bonatti, 2002, 2003, 2008). In fact, the erosion of environmental and social assets caused by increased market activity limits the possibility of benefiting from them, thus inducing consumers and producers to search for substitutes in the marketplace. More generally, growth is conceived as a substitution process whereby market goods and services progressively replace declining non-market sources of well-being and compensate for the negative effects of the increased marketisation of society. This process can be described as a self-reinforcing loop: the externalities generated by the expansion of market activities stimulate households and producers to compensate for them by buying more goods and services, thus feeding this expansion. Consistently with this approach, GDP growth may 'go too far', in the sense that its acceleration may result in more detrimental effects on people's well-being than benefits.

The mechanism is based on the idea that money offers many forms of protection — real or illusory — from a poverty of social capital, in particular of interpersonal relationships. If the elderly are alone and ill, the solution is a care-giver. If our children are alone, the solution is a baby-sitter. If we have few friends and the city has become dangerous, we can spend our evenings at home, fulfilled by all kinds of home entertainment. If the frenzied environment of our cities distresses us, we can lift our spirits with a holiday in some tropical paradise. If we quarrel with someone, we can hire a lawyer to defend ourselves from his/her harassment. If we don't trust someone, we can pay to have him monitored. If we are afraid, we can protect our possessions with security systems. If we lack satisfying relationships, we can seek a form of identity or compensation through consumption, success or our work. Advertising reminds us that if we are afraid of failure, we can reassure ourselves through buying: 'I consume, therefore I am'. In advertising, products are perfect substitutes for love, although in the real world, they obstinately refuse to exhibit any emotion.

These private goods promise to protect us from the decay of resources that were once common and free: a liveable city, relatively free of crime, with more trust and communication among neighbours, a social fabric of neighbourhoods, and companionship for children and the elderly. The advertising industry offers protection from our fears of exclusion in a world of difficult relationships, and the resulting expenditures force us to work and produce more, generating economic growth. When social ties break down, the economy of solitude and fear becomes a driving force of the economy.

The same argument applies to the quality of the environment. Vacations in unspoiled environments offer us the clean air, seas and rivers that we can no longer find in our unliveable cities.[1] The economic growth generated by these social mechanisms can in turn fuel environmental decay, as emphasised by Marglin and many others. I define NEG capitalism as that type of organisation which tends to produce this decay of social capital and environmental goods.

[1] Other environmental examples include, double glazing as a defense against noise; the use of mineral water as a substitute for tap water; the purchase of a swimming pool as a response to the deterioration of the local swimming water. Expenditures for pollution abatement or prevention, for the treatment of illnesses caused by pollution, for soil restoration, for global warming mitigation (as investment in energy saving, green transport, and conservation agriculture), for emergencies and reconstruction after extreme climate events, are a direct response to environmental degradation.

Thus the traditional view of growth tells only the optimistic part of the story, according to which the luxury goods of one generation become the standard goods of the next generation and these, in turn, become the basic needs of the successive one. The history of economic growth abounds with examples of this kind. But the obverse of this story is one of goods that are free for one generation, become scarce and costly for the next generation and luxury goods for the subsequent one. Goods that were available for free (or almost so) to our grandparents and often our parents, but now have a cost, include clean natural environments or simply human curiosity.

4. Evidence

The strong association between social capital and well-being (SWB) is documented by the evidence from micro-data on happiness (Helliwell and Putnam, 2004; Helliwell, 2006; Bruni and Stanca, 2008; Becchetti et al., 2008). Bartolini and Sarracino (2011) show in a large sample of countries that in the long run, average well-being is more likely to grow in countries where social capital grows than in countries where the economy grows. In China, India and the US, the decline in average SWB is largely predicted by the decline in a range of measures of social capital. Thus erosion of social capital (Putnam, 2000) may be an important component of the explanation of the American (Bartolini et al., 2013), Chinese (Bartolini and Sarracino, 2014a) and Indian (Bartolini and Sarracino, 2014b) versions of the Easterlin paradox. In all these countries, the other important explanation is the growing importance of social comparisons, exacerbated by a context of rapidly increasing income inequality. Despite their great differences, China, India and the US share decreasing sociability and increasing income comparisons as main drivers of the decline in well-being. In turn, such drivers appear to be connected to an increasing orientation toward materialistic values.

The NEG view that the decline of social capital and the increase in working hours are connected by bi-directional causality is supported by empirical evidence. Bartolini and Bilancini (2011), using American survey data for 1972–2004, have shown that individuals with fewer and poorer relationships tend to work more. People seem to find in money and work, compensation for the poverty of relationships in their lives. At the same time, those individuals who work more, tend to have fewer and poorer relationships, because work takes away time and energy that could instead be allocated to relationships. The US may be the paradigmatic example of this mechanism in the light of three decades of declining social capital and increased working hours. American society may be trapped in a vicious circle, in which the poverty of social capital causes an increase in hours worked, which in turn causes a greater poverty of social capital.

The NEG approach can also shed light on some well-known US-EU differences in trends between 1980 and 2000. In western continental Europe, the economy grew less than in the US and market work hours diminished whereas in the US they increased. If social capital trends really help explain these differences, then we should expect to find that these goods evolved more positively in Europe than in the United States. The same should be true for the happiness trend. In fact, this is exactly what happened. In general, social capital and happiness grew (weakly) in Europe (Sarracino, 2012). Interestingly, these US-Europe differences are mirrored by differences in trends in materialism, increasing in the US and decreasing in Western Europe in the period 1980–2005 (Bartolini and Sarracino, 2013). NEG capitalism seems well rooted in the US but less so in Europe. The inability of the American economy to generate happiness and leisure time, as well as its parallel capacity to generate environmental voracity and growth, mean that growth may be a symptom of the disease of social capital.

American growth in the past few decades has been boosted by investment in public and private security, paid for at the expense of social capital. Even entertainment has lost its social character, with the home entertainment sector experiencing an impressive boom. US expenditures on formal activities of social control and dispute resolution exhibited an explosive increasing trend during the last decades of the 20th Century. Putnam (2000) attributes such an explosion to the decline in social trust over that same period. Since the 1980s, spending on security rose rapidly as a share of US GDP, a trend reflected in a 40% increase in police and guards and a 150% increase in lawyers and judges over the levels that would have been projected in 1970 (Putnam, 2000: 146).

The growth of these sectors must be framed within the secular trend to expand the 'transaction cost sector' documented by Wallis and North (1986) for the US economy. They estimated that the (private plus public) transaction cost sector was 26.1% of US GDP in 1870 and 54% in 1970. This growth — paralleled by the decline in peer monitoring and informal sanctioning provided by social capital — has further accelerated since the 1970s. According to Jayadev and Bowles (2006), the proportion of the workforce employed as work supervisors and guards (police, corrections officials and security personnel), after remaining stable since 1948, grew from 10.8% of the US labour force in 1966, to 13.4% in 1979 and to 17.9% in 2002. The astonishing increase in the US prison population, from 200,000 adults in 1973 to 2.2 million in 2009, has resulted in an incarceration rate of nearly 1% - a rate described as 'historically unprecedented and internationally unique' (NRC, 2014: 2**).**

5. Developing countries

Even if previous examples mostly concern developed countries, industrial revolutions probably offer the clearest example of association between economic growth and massive social and environmental cleavages. Despite their variability across time and space, they all share some regularities, beginning with the British: rapid urbanisation, erosion of traditional institutions, environmental devastation, reduced farmers' access to land, massively increased labour market participation, and increasing income inequality.

A long-standing tradition in development studies has identified the erosion of traditional institutions, environmental devastation and reduced access to land, as 'push' factors. These factors force farmers to feed the ranks of the urban migrants who form the cheap urban labour force indispensable for rapid industrial take-off. In Polanyi's (1968) view, economic development is the effect and cause of the erosion of local communities, cultures and environmental resources, the decline of which releases the energies that fuel the growth process. This analysis sees rapid industrialisation as the cause and the consequence of the shift from production and consumption patterns, largely based on common resources, to market-based patterns.

Despite its originality — being the first transition to capitalism managed by a communist party — China is no exception to the regularities shared by the other industrial revolutions. The diminished water flow and pollution of the Yellow river basin — the core of Chinese agriculture — resulting from industrial expansion are the contemporary version of the environmental devastations that accompanied the British Industrial Revolution. The expropriation of agricultural land for industrial purposes, that provokes thousands of riots every year, has the same effect as the British enclosures in boosting urban migration.[2]

China mirrors — on a Chinese scale — the features typical of all industrial revolutions. The same applies to India's rapid changes in values, with urbanisation linked to the erosion of social capital in rural areas. Moreover in China, urban immigrants (between 100 and 200 million, depending on the estimates) have lost most of the safety nets derived from communitarian relationships. Bartolini and Sarracino (2014a) document both the decline in social capital and the upsurge of materialism in China.

However, declining social capital is not an ineluctable consequence of economic growth. There are counter-examples in both the developing and developed worlds. Both well-being and social capital grew in western continental Europe since the '80s, (Sarracino, 2012) and Brazil since the '90s, (Bartolini and Sarracino, 2014c). Interestingly, both areas share trends in income inequality that are very different from the upsurge of inequality experienced in India, China and the USA. In Brazil, income inequality decreased while in Europe it increased much more slowly than in the US over the past few decades. The explanation is found in the literature emphasising the negative impact of high inequality on social capital (Costa and Kahn, 2003; Alesina and La Ferrara, 2006; Knack, and Keefer, 1997; Bjørnskov, 2006).

6. Do people care about future generations?

[2] Since the early 90s, China faced a proliferation of 'mass incidents' (cases of civil unrest officially recorded) that rose from under 9,000 in 1993 to 180,000 in 2010. A substantial share of such incidents is due to protests against the expropriation of agricultural land (Knight, 2013).

In the environmentalist scenario, the conflict between private economic affluence and common poverty — which is at the core of the NEG approach — takes place in the long term. Current affluence imposes overexploitation of local and global commons, thus threatening their sustainability and the living standards of future generations. This situation violates all plausible criteria of equity in the intergenerational allocation of resources.

All streams of environmentalism converge on these claims. Yet, they diverge in answering the following question: who is responsible? Two different answers have been provided: the people or the socio-economic system.

According to the first answer, the problem lies in people's time preference. The threats posed by the current spoiling of resources simply reflect the low importance attributed to the living standards of future generations by a humanity obsessed by its own conditions. This perspective amounts to stating that people have high rates of time preference, or high discount rates (Pearce et al., 1990; Bromley, 1998). It locates the root of the sustainability problem in human nature, i.e., in alleged inter-temporal greed. Such an explanation can be labelled 'naturalist': an approach that rests entirely on the assumption that the behaviour of economic systems reflects the time preference of individuals.

By contrast, the second answer — also widespread in environmentalist debates — attributes unsustainability to a failure of economic, political, social or cultural organisations. People prefer a more sustainable economy, but this option is thwarted by some systemic failure. Some blame the media and science for distorted information,[3] others blame market

[3] Some scientists or scientific institutions have been accused of producing reports that intentionally distort the evidence for economic interests. One of these examples is the Heartland Institute of Chicago, a conservative think tank claiming that global warming does not have human causes, has

failures, [4] global corporations[5]or capitalism tout-court.[6] The explanation that some failure of our social institutions prevents the economic system from reflecting the time preference of individuals can be labelled 'institutionalist'.

NEG models share the institutionalist view by showing how the economic system can transform people's concern for the future in an unsustainable economy. In a world in which well-being depends on things that can be bought, and also on things that nobody sells, only the former can be accumulated privately. Commons, by contrast, can be accumulated only collectively. In this situation, one's private strategy to protect his/her descendants is to accumulate (and leave them) the only possible asset: the private good. However, this search for private wealth feeds growth and the negative externalities that result in an unsustainable future. Thus, the greater the concern for future generations, the lower the confidence in collective action, and the worse will be the condition of future generations.

The increased accumulation of private assets results in an unintentional worsening of environmental (and social) quality, thus producing a decline in well-being across

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limited dimensions and presents benefits beyond costs. (http://climatechangereconsidered.org/). Another example concerns the American Enterprise Institute, an ExxonMobil-funded think tank, that offered rewards to scientists articles emphasizing the shortcomings of a report from the UN's Intergovernmental Panel on Climate Change (IPCC) urging governments to adopt policies against global warming.

[4] Definition given by Nicholas Stern (2007)

[5] According to this view, the multinational corporations are responsible of producing environmental threats ranging from the oversized role of fossil fuel in the energy supply, to the adoption of GMOs, to the promotion of consumerism (see for instance Shiva, 2013, Latouche, 2009). These positions are supported, for example, by the antiglobalization movements who fiercely accuse the global corporate capitalism of multinationals (Boveé and Dufour, 2005).

[6] See , for example, Naomi Klein (2011) http://www.thenation.com/print/article/164497/capitalism-vs-climate.

generations. In this context, the dynamics of the economic system do not reflect the time preference of individuals because the system amplifies future risks the more individuals are concerned for future well-being.

As for collective action, in general the economy becomes more important in people's lives, the lower their confidence in the capacity to solve those fundamental problems that can be solved only collectively. Since sustainability is certainly among such problems, if individuals have low confidence in the effectiveness of collective action, they will consider sustainable behaviours to be futile and expensive. In this scenario, people will adopt individual solutions to provide their descendants with the necessary tools to face future difficulties. Yet, the aggregate result of such private defensive strategies is to increase shared future difficulties.

The perceived ineffectiveness of collective action generates a failure to coordinate actions among individuals belonging to the same generation, leading to an over-exploitation of commons. NEG models describe inter-temporal choices of individuals who believe they live in a world in which collective action does not work. NEG capitalism encourages people in rich economies to expend their efforts in trying to make money instead of attempting to build a more liveable world, in spite of the fact that what they really need is a more liveable world. Thus, collective impotence fuels the race for money.

Since politics is the main form of collective action, this approach suggests that the trend of declining trust in political institutions in western countries — and the related loss of confidence in the ability of societies to prevent global and local ecological crises — may boost the accumulation of private assets, thus feeding an unsustainable growth path.[7] The decline of trust in political systems may mirror a declining capacity of western political systems to make decisions reflecting the interests of the majority of citizens. Political scientists have defined contemporary political systems as post-democracies, meaning that the growing influence of economic elites in the political decision-making process has caused the exercise of political power to regress to a pre-democratic situation, based on the prerogative of closed elites (Crouch, 2004). Gilens and Page (2014) provide strong empirical support to this thesis. Analysing hundreds of American policy issues, they conclude that the US is dominated by a rich and powerful elite, while average citizens and mass-based interest groups have little or no influence on policy decisions.

Time preference is an empirical matter. The few estimates of people's preferences for the future provide no support to the view that people consider damaging the future as a reasonable price to pay for current well-being. Bartolini and Sarracino (2014d) estimate the relationship between individuals' current well-being and their expectations about conditions for future generations. If people are scarcely concerned with the long-term, their future expectations — whatever they are — should have a weak or null influence on their current well-being. However, if people have a strong preference for future well-being, their current well-being should be heavily affected by their future expectations. This study finds that expecting the worst (the best) for future generations has a very large negative (positive) impact on subjective well-being. The result suggests that perceptions of the living conditions of future generations is an important component of people's well-being, thus supporting the

[7] There has been a sharply declining trend in confidence towards political institutions in the US since the 1960s (Lipset and Schneider, 1983; Putnam, 2000; Bartolini et al, 2013). The trend has been similar in Western Europe (Sarracino, 2012) and Australia (Papdakis, 1999).

view that current problems of sustainability are due to a failure of socio-economic organisation to reflect people's time preference, and not to inter-temporal greed.

7. Policy implications

So far, this article has presented the problems of sustainability and decreasing happiness as two sides of the same coin: the inability of the economic system to reflect people's preferences. Systematic coordination failures lead the economy to excessive growth, fed by the reactions of individuals to an economy that is more aggressive toward social and environmental assets than they would desire. The result is an excessive allocation of our time, attention and environmental resources to the economic sphere of life.

The unprecedented increase in productivity created by capitalism can be allocated to increase output or leisure. Through most of modern western history, it seemed reasonable to expect that a substantial portion of the productivity gains would increase leisure. For instance, Keynes (1930) predicted that by 2030 the average working week in Britain would amount to only fifteen hours. However, especially in the last 30 years in the West, the bulk of productivity gains has been allocated to increasing output rather than leisure. Economic growth has broken it promise of increased time, as well as well-being.

According to NEG models, if the allocations produced by economic systems reflected preferences, the growth rate of the economy would be lower in both developing and developed countries. In rich countries the optimal growth rate is zero. In other words, the spontaneous tendency of an affluent economy is to allocate all productivity gains to increase leisure time. How plausible is this view?

Western societies are organised according to an economic priority. The economy is boosted by all possible means, beginning with children's education, since schooling is aimed at and shaped by the labour market. Powerful media stimulate consumption fantasies and spread the idea that having more money is the solution to most personal and social problems, while urban organisation is aimed at production and consumption. And yet, despite all this, average growth rates have diminished in western countries in each decade since the 1950s. Such growth as remains has depended in the past three decades on the continuous creation of speculative bubbles.[8] The NEG approach suggests that the only reason why affluent economies continue to produce some growth may be that they generate an ever greater distress.

All in all, the real surprise is that economies so obsessively supported by social and cultural organisation grow so slowly. This suggests that the NEG scenario of affluent economies spontaneously tending to static output may be plausible if social organisation were shaped by new priorities of social capital and well-being.

Recently, a debate has emerged concerning 'secular stagnation' — long-term slow growth — that may involve developed economies (Teulings and Baldwin, 2014). This debate indicates that there may be a growing awareness among economists of a new era of low growth for rich countries. So far, however, the resulting policy prescriptions (ranging from not using monetary policy to avoid bubbles, to fostering labour market participation, etc.) unfortunately point to an even greater boosting of growth. In brief, the reaction to declining growth is to stimulate growth. While we are still struggling with the consequences of an

[8] See for instance Turner (2014).

enormous credit bubble, these reactions clearly indicate the difficulty of moving away from indefinite growth. The awareness that our future depends on realistic proposal for a post-growth society is still in its infancy. This problem partly affects the environmentalist world as well.

Currently, a part of ecologism communicates the following message: there is a trade-off between present and future well-being. To protect the future, one has to have less in the present; sacrifices are needed. Consistent with this message, environmental policy proposals are largely based on the imposition of limits: to pollution, production, hours of work, types of food, etc. In this way ecologism does not propose an alternative to growth; it simply proposes giving up the growth project. This lack of a clear alternative creates the difficulty in gathering a consensus.

Eco-friendly reforms presented as sacrifices appear expensive and burdened by a great uncertainty in both their results and the timing of the risks they seek to avoid. Thus, the appeal of reforms rests on the uncertain perception of the proximity and dimensions of a possible catastrophe. This uncertainty continually raises doubt that this is the right time for a green 'new deal'. Given current socio-economic problems, we wonder whether we can postpone costly changes.

The political message of environmentalism in rich countries should be 'a better present creates a better future'. We do not need to have less, but more of what we really need: more time, more quality of relationships, of the environment, of life. What is needed is not reduction in our standard of living but a change in our patterns of consumption and production, currently excessively centred on private goods. This suggests a more politically sustainable perspective for the protection of the environment. If a change is aimed at an improvement and not at sacrifices made in the name of uncertain and possibly remote risks, it is much easier to gain public support and acceptance of limits. In any case, the policies that I propose are not based primarily on the imposition of limits but on the active construction of social capital.

An objection generally raised to any project of reducing consumption is that it would increase unemployment. Yet, this objection is valid only if the decrease in consumption influences labour demand labour but not its supply. In fact, a world of people who want to consume a lot is a world of people who have to work a lot to pay for consumption. This is why the choice of favouring consumption as the means of alleviating unemployment does not work. Consumerism has a negative effect on unemployment by increasing the labour supply. While it does increase the number of jobs, it also increases the need for people to work. We need to stop this vicious cycle of 'spend more – work more'. The method is, on one hand, to reverse the social decay that forces us to spend as a defence against it, and on the other, to create a culture that allows us to overcome the illusion that buying is the solution to most of our problems.

So a possible remedy for unemployment is to organise a society where there is less need to work. We need to shift from an economy based on the promotion of market needs to an economy based on their containment and the promotion of non-market needs. The goal is to support lives that are worth living with less and not more money.

8. Policies for social capital

High income inequality negatively affects well-being, exacerbating income comparisons and damaging social capital, while policies aimed at reducing inequality enhance well-being by reducing social comparisons and fostering social capital. Other examples of policies for social capital involve urban life, working life, advertising, and health care.

First, urban policies. Since cities first existed, relationality stood at the centre of their organisation. The space for creating relations was the common space, symbolised by the city square, a place where citizens of all ranks could meet. Cities were built for people: all streets were pedestrian. Then, a few decades ago, automobiles appeared and transformed the human environment into a dangerous place for human beings. Cars have invaded common urban spaces with the disastrous effect of destroying the social fabric. The cities we have built are a good example of NEG processes, because they are powerful destroyers of environmental and social assets and, precisely for this reason, powerful producers of economic growth. In modern cities, things of quality (beautiful homes, smart nightspots, enticing shops, entertaining shows) are private and costly, whereas common and free things (the social climate or the streets and squares, which are noisy, polluted and dangerous because of traffic) are degraded.

My proposal is to transform the contemporary 'economic' cities into 'relational' cities (see Rogers et al., 2010; Peñalosa, 2004; Montgomery, 2013). The latter are based on a reorganisation of space and mobility. The key elements are the following. Private cars must be drastically restricted as a structural measure, in order to encourage all residents to use public transport. There must be a great number of squares, parks, quality pedestrian areas, sports centres and so forth. The ideal pedestrian areas are near water: sea sides, lakes, rivers, streams, canals. These areas must criss-cross a city to form a pedestrian and cycling network.

There must be as many wide footpaths and bicycle paths as possible. Cities must be surrounded by a wide swath of publicly-owned land on which parks and housing can be built.

As for work, research shows that satisfaction with our job is a fundamental component of life satisfaction. Job satisfaction depends heavily on the quality of the relationships we experience at work, and this in turn is strongly influenced by the organisation of work. The tendency of the latter over the past 30 years has utterly neglected these aspects, and has generally resulted in an increase in stress, incentives, competition, pressure, conflicts and controls. This tendency does not produce either better relationships or happier or more productive workers. In fact, many studies document a strong relationship between productivity and the well-being of workers. Workers who are more satisfied are more (not less) productive, they make fewer mistakes, they are more punctual and cooperative, more effective as problem-solvers (Deluga and Mason, 2000; George, 1995; Judge et al., 2001; Diener and Seligman, 2004). In short, unhappy people work poorly. It is therefore possible to combine well-being and productivity by focusing on organisational models largely based on non-monetary motivations and facilitating compatibility between work and non-working life. Work should become more interesting and less stressful. It must be perceived as having a purpose and as a means for building relations and social contacts.

Advertising has a profoundly negative influence on people's well-being, outlook and relationships. This influence is greater in children than in adults (Schor, 2005). The amount of advertising to which we are exposed should be drastically reduced, especially that targeting children. A high tax on advertising and a ban on television ads targeting children should be seriously considered.

Finally, a suggestion on healthcare and schooling. Schooling is narrowly focused on the development of cognitive capacities. It should be radically rethought in order to provide emotional and relational education, which it currently discourages (Diener and Seligman, 2004; Marks and Shah, 2004). As for health, studies show that happiness heavily affects health and longevity (Diener and Chan, 2011). Thus, healthcare systems are the end stations of distress. Unhappiness tends to turn into health problems, thus creating pressure on healthcare systems, whose costs grow increasingly unsustainable in Western countries. We may spend too much on healthcare, when we could obtain better results through policies aimed at increasing well-being. Furthermore, the quality of the relationship between the patient and the medical personnel is critical to the effectiveness of therapy. But there is a gap to be filled between the importance of relational aspects in therapy and their current priority in the education of the medical workforce and in the organisation of health care.

In conclusion, overcoming post-democracy and reversing the current trend to the reduction of trust in political decisions are crucial to any project for sustainability. An appropriate combination of public financing of political parties, of regulating their access to the media and of stringent limits to their spending could limit the current dependency of political parties on financing from big business (Crouch, 2004).

The above policy proposals are mainly addressed to developed countries. Space precludes discussion of policies for fostering social capital in developing countries., Just one such initiative is that implemented by the mayor of Bogotà at the beginning of this millennium, which shows that a relational city project can be implemented even in developing countries (Peñalosa, 2004). Such projects are indeed even more vital for developing countries, since their cities are quickly expanding and the way they are constructed will influence well-being for many generations. Moreover, the success of the Cuban model of healthcare — with the same results in longevity and infant mortality as US healthcare which costs 96% more than Cuba's — is largely based on a relational idea of medicine and may be an interesting example for developing countries (Fitz, 2012; Dresang et al., 2005; Cooper et al., 2006). In general, there is no trace in the studies quoted here that social capital is a luxury good that only rich countries can afford. Social needs are crucial also to the well-being of people in developing countries.

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