A High-Stakes Shift: Turning the Tide From GDP to New Prosperity Indicators

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Turning the Tide From GDP to New Prosperity Indicators

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Abstract

For more than half a century, Gross Domestic Product (GDP) has been viewed as the dominant indicator of economic and social progress. Its visibility and increasingly widespread use have contributed to the incorrect identification of economic growth (that is, increased GDP) with improved well-being for all. GDP's supremacy as an indicator is being challenged, however: around the world, its limits are being questioned and solutions proposed for overcoming them. Given the broadly accepted idea that indicators affect reality, changing them is a high-stakes issue. Potentially, re-fashioning progress indicators may change our representations of the world, redefine our ends, and reinvent the means by which we pursue them. Such a change is part of a complex transformation currently taking place in our economic, social, political ideological systems.

The four sections of this paper put forward the argument that the debate over new progress indicators is symptomatic of an historical turning point, and for this reason deserves careful attention. The first section reviews the specific context in which national accounting was established as an economic policy tool rooted in post-war social compromises. The second section discusses the three major justifications for the search for alternative indicators: social goals which economic growth captures inaccurately or not at all; the gap between economic growth and subjective assessments of "life satisfaction"; and, finally, the complex and urgent issue of the environment. The third section presents a concise overview of existing indicators that claim to supplement or replace GDP, dividing them among the three categories of justification described above and demonstrating the inextricable link between methodological and normative questions. From this follows the fourth and final section, which addresses the core questions raised by GDP and the problem of replacing it, and examines the hypothesis that our societies are at an historical turning point in which new compromises are emerging, in ways not yet entirely discernable to social actors.[a,b]

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For more than half a century, Gross Domestic Product (GDP) has been considered the main indicator of economic and social progress. Its existence, its visibility and its popularity have all led to its overuse, and even abuse: economic growth – that is, higher GDP – is almost constantly conflated with improved wellbeing. Today, though, GDP's hegemonic reign as a wealth indicator is being challenged. Its limits, as well as possible ways of overcoming these limits, are currently a matter of widespread reflection. This debate may be located within an already lengthy tradition of academic research; it has gathered momentum as numerous citizen-sector organisations express unease over the traditional "going for growth" paradigm and gained profile as it is discussed and examined by large institutions such as the UNDP, UNEP, OECD, European institutions, German Council of Economic Experts or the French Council of Economic Analysis, as well as and Nobel prize winners such as Joseph Stiglitz or Amartya Sen (Stiglitz et al., 2009).

The stakes in this debate are very high if seen from the now broadly accepted perspective that the indicators we choose affect our reality. The very process of quantification is not neutral: "Quantification, understood as the totality of socially accepted conventions and of measurements, creates a new way of thinking, representing, expressing the world and acting on it. […] Statistics, and, more generally, all forms of quantification (for example, probability or accounting), reconfigure and transform the world; by their very existence, by their propagation and by their use in argument, whether scientific, political or journalistic" (Desrosières, 2008: 11)[1]. To re-fashion the indicators we use to gauge prosperity is, potentially, to change the way we represent the world, to redefine our ends and reinvent the means we use to pursue them. By doing so, we are not adding a room or demolishing a tower in some castle in the air: such transformations imply complex changes to our economic, social, political and ideological systems.

In this chapter, we argue that the debate over new prosperity indicators signals a turning point in history, and as such deserves close attention. We shall demonstrate this in four steps. First we recall how GDP emerged from a specific historical context, in which national accounting was established as a tool of economic policy, rooted in post-war social compromises. While this historical context explains the accounting conventions of the era, the changed world in which we now live has made these conventions seem uncomfortably circumscribed.

If the post-war generation saw the growth of market activity as a central source of wellbeing and GDP as an indicator of progress, the challenges we face in the 21st century have made the quantification of "progress", "well-being" and "prosperity" more complex. In the second step in our argument, therefore, we introduce three major issues specific to our era which justify the search for alternative indicators: first, the growing importance of social goals to which economic growth cannot respond in a fully satisfactory way; second, the disconnect between economic growth and subjective evaluations of life satisfaction; and, finally, the urgent and complex problem of the environment.

As awareness of these new challenges has grown over the decades, numerous highly creative approaches have emerged, producing a host of quantified indicators that might complement or

[1] All translations are our own.

replace GDP. The third section will therefore present a concise overview of existing indicators designed to that end, categorised according to the three issues identified above, and then outline the main questions each indicator would raise with its use. These questions are either explicitly axiological; that is, they have to do with the values implicit in these indicators, or may seem purely formal in that they have to do with the choice of units of measurement, or methods of aggregation. But our examination will show that methodological and normative questions are inextricably linked.

The fourth and final step in our argument will explore the fundamental concerns that underpin this debate. We will flesh out the hypothesis that our societies are at an historical turning point that will give rise to new compromises not yet fully understood by those involved. In this respect, our current situation may be compared to the period preceding the development of national accounting and the Fordist growth regime. Given the far-ranging effects of the introduction of GDP as an indicator, could new prosperity indicators act as a catalyst to precipitate the sea change? What forces are resisting this impending change? What principles are emerging to maintain coherence? We will also explore the dangers of "governance by indicator", which has been gaining currency over the past twenty years, and which is motivated by the (debatable) line of reasoning that would regulate human relations using managerial standards and judge all activity, directly or indirectly, by criteria of performance, efficiency or profitability. Seen in this light, the stakes are very clear: we must distinguish between new prosperity indicators that essentially perpetuate the system they (rhetorically) claim to supersede and those that truly offer an alternative. This question has a political dimension: will new indicators help to propagate a debatable principle of governance or will they be a Trojan horse that cracks the citadel of managerial reason?

1. The specific historical context of GDP[2]

Gross Domestic Product, commonly known as GDP, is the total monetary value of all the finished goods and services produced (and inventoried) by an entity (generally a State) in a given period (generally a year). It is thus a comprehensive evaluation of monetary flow. National accounting may record activity in three different ways, whose totals are equivalent: production, income and expenditure. In this way, GDP is a concept that can be represented by a number, and when this number increases from one year to the next, that increase, minus inflation, is called "economic growth". These data are obtained through specific accounting conventions, which, like all conventions, are subject to debate, in that they are ways of simplifying reality in order to better understand it.

National accounting was established in the wake of the Second World War, and the conventions it adopted reflected the beliefs and knowledge of that time, as well as the state of labour relations and political compromises. Several factors determined the way national accounting was established: the aftermath of recession and war; labour-management and social welfare agreements; the growing dominance of the United States; the two opposing models of market economy and planned

[2] This section echoes and elaborates on previous publications; see Cassiers (1995; 2009). For more on the Fordist model (1945-1975), see numerous works by the Regulation School, in particular Robert Boyer (1999). For a concise overview of this school of thought, see Boyer (2008).

economy; the Keynesian revolution; the consolidation of the role of the nation-state; the expansion of social security. Presenting these elements sequentially inevitably produces a somewhat arbitrary and reductive account; nevertheless, the brief review offered below will demonstrate the coherence of the system they helped to form.

In Europe, the Great Depression and the four years of war that followed brought massive unemployment, wrought havoc on the economy and inflicted significant hardship on the majority of the population. Europeans emerged from this era with a strong desire for material wellbeing. The labour-management pacts forged at that time reflected the idea that workers would play an integral part in the pursuit of increased productivity, and that employers would share the benefit of that increased productivity between salaries and profit. Economic growth was thus fashioned as the cornerstone of social concord.

The United States, which had become the leading Western power, provided aid for European reconstruction through the Marshall Plan, which came with a certain number of conditions. First, in opposition to the satellite countries of the USSR, countries that accepted Marshall plan aid had to adopt market economy principles, and justify the aid they received with quantifiable data. In 1950, the OEEC, an institution created alongside the Marshall Plan (and the predecessor of the OECD), published a standardised accounting system that would serve as the model for national accounting in the West.

National accounting was explicitly designed as the tool of an economic policy, whose main goals included controlling growth. The Great Depression had led to a general consensus that markets could not spontaneously create full employment, while the war and the imperatives of post-war reconstruction created a *de facto* increase in public interventionism. In this context, the work of J. M. Keynes was taken as a theoretical foundation for re-conceptualising the role of the State. At the same time, socialist unions and public opinion influenced by the model prevailing in the East both exerted pressure to push the market economy towards a "mixed-economy" in which the market was still the driving force but in which the State intervened to curb its excesses and compensate for its deficiencies. It was thus generally acknowledged that, even in a market economy, it was incumbent upon the State to steer economic activity, at least to some degree. Steering requires a dashboard, and business accounting provided the blueprint for that dashboard. Or, to use another simile, national production was the central conduit linking businesses to consumers, passing, where necessary, through the State; a circulatory system in which currency was the lifeblood. This choice arose from a specific historical context: to the east, planned economies were establishing another accounting system to meet need in the absence of a market.

The role of the nation-state, with its centralised powers, was strengthened in other ways, as well. Representatives of these states came together to create major international organisations such as the UN, the IMF and the World Bank, and international agreements such as Bretton Woods. The international monetary system fashioned through this process granted states a great deal of autonomy in the implementation of national economic policies. This new understanding of the State is known by a variety of names: the Keynesian State, in reference to its embrace of growth-oriented economic policy; the Social Welfare State, in reference to the labour conventions that arose in concert with it, bringing with them a battery of social protection and wealth-redistribution mechanisms; and in reference to its role as a buffer against life's uncertainties (for individuals) and economic downturns (for businesses).

These different elements combined to form a system dependant on the growth of monetary flow, which was necessary to prevent social unrest, to justify the role of union representatives, to support the expansion of the Welfare State through tax revenues, and, on the international level, for the symbolic power of the Nation-State.

In the three decades that followed the end of World War II, the standard of living rose considerably, inequalities shrank and the middle class grew across Western Europe. An increasing portion of the population entered the ranks of the "average citizen", whose incomes were reasonably represented by GDP per capita. During this "golden age", most were convinced – or allowed themselves to be convinced – that the goal of continuous revenue growth was possible and desirable. In economic theory, the development of growth models that relied on mathematical instruments justified the existing system while increasing the need for standardised accounting. Research focused more on refining econometric models than on the underlying theoretical principles that tied well-being to revenue growth, much less on the ecological limits to permanent growth, which were then still barely perceptible.

Few were the voices warning of *The Limits to Growth* (Meadows et al., 1972). A handful of people cautioned that infinite growth in a finite world was impossible (Georgescu-Roegen, 1971) and denounced as absurd the idea of a society whose sole objective was to accumulate material goods (Illich, 1973). These warning calls were met with favour by a minority of the population (student movements, alternative lifestyle movements and the self-management movement), but were stifled when the West was hit by the economic crisis of 1973, which moved the reasoning of every actor in the economy back to square one: businesses sought to shore up profits; unions fought wage decreases; individuals set aside alternative aspirations and focused on staying employed. The State, unable to galvanize the economy or support its social policies without maintaining its tax base, pursued the growth of monetary flow. Over the next thirty years, State governments, encouraged by major institutions such as the IMF and the OECD, strove mightily to increase GDP. This occurred even as the problematic nature of this pursuit became more clearly apparent – strains on the environment became acute; growing inequalities weakened the legitimacy of the process; certain factors determinant of quality of life were destroyed with increasing wantonness.

2. The indicator falls behind: GDP in today's context

Circumstances have changed profoundly since the thirty years of growth that followed the end of the Second World War. If the post-war generation saw market growth as crucial to wellbeing and read GDP as an indicator of progress, today's perspective has been complicated considerably.

First, the goal of economic growth was dissociated from that of the equal distribution of the wealth it generated as economic policy began to shift at the end of the 1970s, starting with Reagan and Thatcher in the United States and in England and then spreading to most countries in Western Europe[3]. The thirty-year period that followed the end of WWII was characterised by decreased inequality (thanks to progressive taxation and the expansion of social welfare programs), allowing most members of society to identify as "average citizens". Beginning in the 1980s, however, the income spread increased, creating a dissonance between the image conveyed by official figures (GDP per capita) and the reality experienced by most individuals. Within the OECD, the income of the richest 10% is, on average, now nine times greater than that of the poorest 10%. The past twenty years have been marked by a significant rise in income inequality and relative poverty. Over three-quarters of OECD countries have been affected. The Gini coefficient, calculated using OECD averages, increased by 10% (from 0.29 to 0.32) between the mid-1980s and the end of the 2000s (OECD, 2011a).

These trends have begun to cast doubt on the idea that economic growth is inherently beneficial to social progress. Numerous academic studies have questioned the theoretical and empirical foundations underlying the assumption of a causal relationship between growth and the reduction of inequality and poverty. To argue that growth is a means of increasing the "economic pie" to be shared is to postpone indefinitely the difficult question of redistribution. As Amartya Sen observed in the 1970s, the fact that GDP per capita fails to include any consideration of redistribution is enough to disqualify its use as a measure of wellbeing (van den Bergh, 2009).

The rise of inequality was accompanied by a resurgence of the poverty, exclusion and social ills growth was believed to have attenuated. Increased per capita GDP and the health of societies no longer advanced hand-in-hand. Development as it has been pursued over the past thirty-five years has failed to overcome unemployment while increasing job insecurity and workplace stress, and has encouraged consumer behaviour that leads to obesity, cardio-vascular diseases and cancer. This frenzied pursuit of material possessions has failed to address the problems tormenting teenagers (suicides are increasing) and families (family instability and single-parent homes are on the rise).

These observations partly explain why subjective measurements of life satisfaction are largely stagnant and sometimes diminishing, while GDP is still on the rise. Easterlin (1974) was the first to highlight this paradox, which has since been amply demonstrated and discussed. In most Western countries, real GDP per capita has nearly doubled since 1973, with no significant increase in life satisfaction[4]. In addition to those noted above, other factors may explain this phenomenon, such as the relativity of any measure of well-being. Because individual and collective aspirations are constantly compared to the achievements of others (through mimesis) and scaled up (due to habituation), economic growth can never completely fulfil them (Cassiers, Delain, 2006; van den Bergh, 2009; Layard, 2011; Clark, Frijters, Schields, 2008). As observed life satisfaction stagnates in

[3] This political and ideological turning point is examined in greater detail in previous publications; see in particular Cassiers, Lebeau (2005) and Cassiers, Denayer (2010). The Regulation School has also dealt with these questions at length. See also Marglin, Schor (1989).
[4] Updated data from Cassiers, Delain (2006)

almost all rich countries, questions emerge about the goals of our development model and whether it actually serves the well being of all. Is this stated goal merely a false pretext to increase market activity – in other words, the activity registered by GDP accounting?

This question has taken on new urgency now that human activity has begun to endanger other living species to the point of threatening a large number with extinction, now that it has eaten away at the resources that will be handed on to future generations. Environmental concerns become more pressing with every passing day. Rockström et al. (2009) have detailed the scope of these threats in nine different fields; among them, biodiversity, the nitrogen cycle and climate are the most imperiled. In terms of renewable resources, humanity's ecological footprint ceased to be sustainable in 1976, and currently exceeds the earth's capacity to sustain it by some 50% (Global Footprint Network, 2012). The relationship between per capita GDP and environmental damage remains controversial. Some argue that the former will initially cause the latter to increase but that green technologies will ultimately reverse this trend (OECD, 2011b), an optimistic perspective that has been challenged with increasing vigour: numerous recent works (for example, Jackson, 2009; Costanza et al., 2013) distinguish between relative decoupling (pressure on the environment *growing less rapidly* than GDP) and absolute decoupling (environmental pressure *decreasing* despite continued economic growth). The latter appears to be impossible within our current state of knowledge.

The three issues outlined above – redistribution and social progress, life satisfaction, the environment – are of such magnitude that an indicator intended to represent the goals of a society cannot ignore them. However, as an abundant literature has reminded us in recent years, GDP takes them into account with difficulty, or not at all (see in particular Gadrey, Jany-Catrice, 2006; Méda, 2008; Stiglitz, Sen, Fitoussi, 2010; van den Bergh, 2009; 2012; Cassiers, Thiry, 2009). This is the case for several reasons: first, GDP entirely disregards the question of the redistribution of wealth within society. Second, national accounts record and evaluate activity according to conventions which alternative criteria may have rendered inadequate (for example, remunerated and volunteer work are treated as totally different) and do not properly account for outcomes in terms of social progress, well-being or life satisfaction. Finally, by booking only flows (as opposed to stocks) and by neglecting to account for the depreciation of natural resources, GDP is functionally blind to environmental problems. With this in mind, and given the realities we currently face, continuing to pursue GDP growth as an absolute end as we have in the past seems increasingly irrational.

This, then, is the quandary we face today: the problems cited above are common knowledge. In some cases, they have even been quantified: as discussed below in section three, numerous indicators have been invented over the years to measure the scale of these problems, to raise awareness about them, and to provide social and environmental policy tools to address them. And yet none of these alternative or supplementary indicators has succeeded in replacing GDP, or at least putting its significance into perspective. Despite its weaknesses, despite its inability to faithfully reflect the end goals of development considered from a contemporary perspective, GDP has retained its supremacy. We will discuss possible reasons for this puzzling state of affairs further on, in section four.

3. A multitude of indicators, methods, actors and values

Creative responses to the inadequacies of GDP have produced a wide range of indicators used in a wide range of fields, including social progress, wellbeing and the environment. These indicators express an equally wide range of visions and interests, as they are being promoted by a vast array of institutions, including major international organisations like the UN, the OECD, the EU or the World Bank; not-for-profit organisations such as the World Wildlife Fund; and community and academic organisations. Their aims differ broadly, as well; for example, they may be designed for informational purposes, to assess or guide policies or to establish goals. These different goals require different levels of abstraction and aggregation: while the rate of obesity or the rate of natural resource extraction are more or less raw measures of major social phenomena, indicators such as the Index of Economic Well-Being (IEWB) or the Genuine Progress Indicator (GPI) seek to capture complex phenomena that are multi-dimensional in nature. Such phenomena may also be quantified using scoreboards, such as the set of indicators the Belgian Federal Planning Bureau uses to measure sustainable development, or by using aggregate indicators. These may either be hybrid – weighted averages of diverse variables (such as the UNDP's Human Development Index) – or may be calculated from a single unit, as is the case with financial indicators such as Adjusted Net Savings (ANS) or the Inclusive Wealth Index (IWI), or indicators that use physical units of measurement, such as the Ecological Footprint.

This goal of this chapter is not to provide an exhaustive index of this cornucopia[5]; rather, we shall focus on a few indicators that, due to the motivations behind them, their design, or those promoting them, promise to address, at least partially, the failure of GDP to account for redistribution, social progress, subjective wellbeing and the environment. We will then examine some of the problems associated with these indicators, which, though they appear at first glance to be methodological in nature, show upon further examination the extent to which values are implicit in measurement[6].

A multitude of indicators

Numerous indicators have been used to attempt to address the gap between social progress and growth of GDP. Whether they are scoreboards or aggregate indicators, they take into account a range of sub-dimensions, including inequality, poverty, employment and work, income, health, education, housing and justice. The HDI, which adds life expectancy and education to real income per capita, is probably the most emblematic of these attempts to consider *outcomes* rather than monetised production. But the high-profile global success of the HDI should not overshadow the plethora of lesser-known initiatives from which it emerged, most of which came from academic institutions and citizen-sector organisations. The Index of Social Heath (ISH), for example, was designed by American sociologists to supplement the State of the Nation report presented annually to the US Congress, which included only economic and financial indicators. More recent initiatives around the world include the BIP-40 (the *Baromètre des Inégalités et de la Pauvreté,* an indicator of

[5] See especially: Gadrey, Jany-Catrice (2007); Sen, Stiglitz, Fitoussi (2010); FAIR (2011); IWEPS (2011); Fleurbeay, Blanchet (2013); Hak et al. (2012) and Thiry et al. (2013).

[6] We previously defended this thesis in Cassiers, Thiry (2009) and Thiry, Cassiers (2010).

inequality and poverty) and the ISS (Indice régional de santé sociale, or regional community health indicator) in France, Buen Vivir in Equador and the New Zeeland Social Report.

In another category, indicators have been designed to address the gap between GDP and wellbeing, seeking to reflect the way people feel, either collectively or individually, in a systematic manner. Some collective indicators are based on consultative or deliberative processes, and address both objective and subjective aspects of wellbeing, such as the American Community Indicators movement, the Canadian Index of Wellbeing or the British "Measuring National Well-Being" programme. By the same token, Bhutan, having conducted a series of investigations and debates on how to define and measure them, evaluates societal conditions necessary for happiness through a Gross National Happiness Index (Ura et al., 2012). On the individual level, these indicators generally take the form of surveys, and chiefly examine subjective aspects of wellbeing; examples include the Happy Life-Expectancy index, the Satisfaction With Life Index and the Eurobarometer of Life Satisfaction. As we shall see below, while these indicators are illuminating, their methodologies have been critiqued and they should be used with caution.

The urgent nature of the ecological problems we face has also sparked numerous initiatives. The Ecological Footprint mentioned above has probably received the most media attention, thanks in large part to a global campaign by the World Wildlife Fund. It expresses the impact of human activity – both consumption and waste production – on renewable resources in terms of global hectares. Like other "footprint" measurements (water, carbon, etc.), the Ecological Footprint is designed as a warning signal that conveys the urgent necessity of adapting human behaviour to the physical constraints of the planet. Another approach, which more closely resembles traditional accounting methods, and has been embraced by major international institutions, consists of "greening" traditional economic indicators. The OECD's recent work on green growth is an example of this (2011b); as is the World Bank's Adjusted Net Savings index, which measures the net creation or destruction of wealth in monetary terms, giving equal status to natural, physical and human capital. Across the world, government statistics and census offices have shown interest in developing supplementary accounting systems; for example, the National Accounting Matrix with Environmental Accounts (NAMEA) in the Netherlands.

As social progress, subjective wellbeing and respect for the environment are arguably highly interconnected considerations, certain authors have chosen to bundle some or all of them into a single indicator. The Index of Economic Well-Being (IEWB) is a good example: based on the premise that a society's wellbeing depends on many factors, monetary and non-monetary alike, it measures consumption, the accumulation of various resources, inequalities and economic security. The Index of Sustainable Welfare also embraces diverse aspects of wellbeing (consumption, environment, inequalities, etc.) but has opted to monetize all of its measurements. Conversely, the Happy Planet Index (HPI) – a recent attempt to gauge ecological and social conditions as well as subjective wellbeing – is an entirely non-monetary indicator. Following the example of the HPI, the Sustainable Society Index (SSI) assesses personal development, social equilibrium, the environment and sustainability in one hybrid index, as does the OECD's Better Life Index, which has innovated by letting its users weight the elements in the index themselves. The UNDP has also begun considering the possibility of including environmental considerations in the HDI (UNDP, 2013).

Each of these indicators highlights, in its own way, factors that must be taken into account when measuring prosperity, and in this sense they are all stepping stones on the path that leads beyond GDP. None of them, however, has yet succeeded in replacing GDP. Their very diversity may be at fault, since the actors promoting them are sometimes at odds with one another, as their objectives and values are not always compatible (see Thiry et al., 2013). These differences are apparent in the choices they make about quantification.

Quantifying prosperity: methods reflect values

"What counts?" The components we choose for a given indicator are a reflection of what we value, and require us to confront many different worldviews from the outset. But who is the "we" assigning the value? Considering the multitude of different ideas of prosperity, Amartya Sen suggests that *access* to sources of emancipation and quality of life should be the priority, and that actors should be left to choose the form these take, according to their particular situations. Nussbaum, by contrast, suggests a list of "fundamental entitlements" that includes bodily integrity, the capability to form one's own idea of what a good life is and control over one's environment.

In addition to the questions of "what counts" and "who decides", the question of "how to count" arises at different levels: the choice of subjective or objective measurements; the form of indicator; the choice of weighting; and the advantages and disadvantages of monetisation – these key examples deserve further examination.

Should wellbeing be approached as entirely subjective, as a function of objective characteristics, or as a mixture of the two? While objective preconditions for quality of life are no guarantee of individual happiness, accounting for subjective perspectives alone is not sufficient to address inherently collective questions such as social relations or the environment. Mixing objective variables and subjective data is not easy, however. The latter, based on surveys, are not always temporally or geographically comparable. Life satisfaction in Mali and life satisfaction in Norway do not speak to the same reality. Moreover, responses to the question "overall, do you feel happy?" can vary greatly depending on phase of life.

The question of format is equally germane: is a single figure better than a scoreboard? The precision offered by a scoreboard of distinct indicators can serve to develop targeted policies, while the simplicity of a single-figure indicator is a better tool for political mobilisation. Certain voices in the current debate over format have criticised single figures for being difficult to interpret, as they cover so many diverse dimensions. It has been suggested that the multiple dimensions of prosperity should be treated separately. But the choice to separate the various dimensions can never be only a matter of intelligibility and use; it reflects and feeds a whole set of conceptions about the world. The work of the Stiglitz Commission is a good example (Stiglitz et al., 2010) of this: the Commission examined the expansion of national accounting to include a measurement of quality of life and the measurement of sustainable development as separate questions, without addressing how they might be connected to and delineated from one another. In this way, they sidestepped any contradictions that might have arisen from such a comparison: for instance, how to reconcile individual preferences in the present (the pleasure of driving a SUV), the current collective good (mounting congestion in cities as many different kinds of self-interest collide) and the wellbeing of future generations (threatened by CO_2 emissions)? If indicators influence reality, then building them without considering how these questions interact will, in the end, prevent us from thinking about and living the social and the ecological as integral to quality of life (Cassiers, Thiry, 2009).

Single figure indicators, by their nature, require weighting, which is generally critiqued as an arbitrary practice. In response to this accusation, some have proposed weighting that is transparent and adaptable to specific situations, as does the IEWB. Others, influenced by national accounting, use market prices to weight an indicator's dimensions, as is the case with the ANS. However, monetisation resolves the problem of arbitrariness in appearance alone[7]: the reality of imperfect markets means that monetisation is never neutral.

This is true for several reasons: first of all, some goods and services are not traded on the market, so monetising them is just as arbitrary as weighting them would be. This raises the question of the limits of monetisation: can everything be assigned a market value? In ecological terms, monetising the environment raises an important question about humanity's relationship with nature, in that assigning a market price to parts of nature reduces them to commodities, establishing an instrumental relationship to the world.

Furthermore, market price is not always the most appropriate way to evaluate goods that *are* traded on the market. Does a rise in price reflect better quality, or inflation? Moreover, market prices do not take externalities into account. Market prices do not include the harmful collective effects that production and/or consumption might generate. Some have proposed using external or social cost as a response to this problem, but critics have objected that this raises its own set of questions: for example, what does loss of biodiversity cost? Answering that question supposes that the current and future impact of production on biodiversity have already been identified – which is not the case.

Assigning monetary value is in this way a fundamentally axiological exercise. Monetary indicators make the market the prime determinant of value, while non-monetary indicators allow value to be determined elsewhere, be that in the life experiences of individuals or in the finite nature of the ecosystem. Adopting market prices as the accounting unit for an indicator that claims to reflect prosperity better than GDP allows supply and demand – driven by the maximisation of profit and utility – to determine value. Is prosperity redefined on this basis capable of transcending a materialist conception of prosperity?

A brief inquiry into what appear to be purely methodological questions about indicators – the fields covered, objective and/or subjective approaches, form, aggregation, weighting and units of account

[7] The arguments contained in the following paragraphs are treated in more depth in Thiry, Cassiers (2010).

– reveals that worldview is implicit in any choice of measurement. The search for a new prosperity indicator is thus an opportunity to strive for agreement on the goals of our development.

4. Beyond GDP: what is at stake?

This leaves us in a highly contradictory position: the limitations of GDP are increasingly obvious; alternative indicators exist and are being promoted by numerous actors; and yet the ascendancy of GDP remains. The debate has begun, however, and it will progress; the direction it takes may help shape future development models.

The lack of consensus on an alternative to GDP, either in the form of a single indicator or a scoreboard, is a reflection of our society's uncertainties; the self-reflection currently under way in some way resembles the thought processes preceding the emergence of national accounting. It is possible that a new social compromise is already emerging, in ways not yet intelligible to its participants, whose orientation is still open to change. Those concerned by this process are numerous, and so are their end goals, which may be quantified in many ways that are more or less in line with their initial intentions. The quantification process is a proving ground, and as such, should be approached with caution, since inappropriate methodological choices can easily deflect indicators from the ends they were intended to serve.

This risk is amplified by the historical context in which these debates are taking place. Indicators have the potential to play a key role in the redefinition of prosperity, and yet they are also cogs in a system of governance that seems to be contributing to the very problems this redefinition seeks to overcome. Among available indicators it is therefore important to identify those capable of effecting deep changes and to unmask those merely offering a whitewash solution.

Society in transition; coherence emergent

As we have said before, the current context recalls in many ways the period of reflection preceding the establishment of national accounting and the social compromises of the 1940s, which coalesced around the principle of economic growth. The variety of indicators available today is symptomatic of a fragmentation of systems of action and value, as if the whole of socio-economic reality were once again under construction. Just like GDP in its time, the indicator (or set of indicators) that emerges from this search may lead to new social compromises and contribute to redefining prosperity.

At this point, the various elements in play have yet to cohere around a single principle strong enough to play the role exercised by economic growth in the thirty years that followed the Second World War. The only consensus right now is a negative one: it seems increasingly obvious that growth in its current form is unsustainable, even to its most fervent defenders. Based as it is on over-indebtedness (private and public), it is an incubator of cyclic social and economic crises, making it inherently unstable. In the current context of extreme competitiveness, it is no longer synonymous with social and geo-political peace. Adding the pressure it puts on the planet's finite resources, it seems downright suicidal.

Observing the limits of growth and its measurements is the common ground shared by alternatives to GDP, but it is not sufficient to produce a common project, to which there remain several impediments. First, the issues being contested are so different from one another that it is difficult to unite them in a single system of action and analysis, as Keynesianism was able to do within Fordism. Moreover, the debate's participants have disparate, even antagonistic, goals (Thiry et al., 2013). Finally, historical events have left contemporary society at a kind of impasse – despite the numerous critiques levelled against it, GDP remains an indispensable point of reference for many: governments use growth forecasts to determine structural investments; social security financing depends on revenue growth; private investors are sensitive to business climate, which is tied to GDP; individual savings decisions are influenced by the overall economic climate; GDP determines the mood - optimistic or pessimistic - of financial institutions; finally, it is still generally accepted that insufficient growth causes economic instability and higher unemployment (Lachaize, Morel, 2013). It is therefore not surprising to observe that the indicators most likely to be adopted in the near future are those whose methodology and use are in line with the perspective and goal of GDP growth (Thiry et al., 2013).

Moving beyond the dominance of GDP involves more than debating alternative measures. It requires becoming aware, through these alternatives, that times are changing; it demands also that new values be used to reach new compromises. Today's debates rightly remind us that our measuring tools are not natural law, but rather the product of historically and geographically situated conventions. These debates have also brought new participants to the table, whose proposed indicators translate into political and axiological demands; in this way, they are helping us to collectively redefine the goals of our societies.

However, these debates bring certain risks with them. Challenging growth and GDP might lead to a too-hasty adoption of alternative solutions, driven by a sense of urgency about the need for change rather than by considered reflection and debate. Drift from issues of substance (what choices are right for society?) towards methodological questions (what is the best way to weight or aggregate data) is another risk, as it could lead to the dominance of experts' voices in the choice of new measures of prosperity. The power this choice brings with it is not negligible, since the abstract concept of prosperity is so closely linked to the way it is measured: to quantify prosperity is to define it. The respective roles of experts and members of society should thus be clarified. Indicators are built on the bedrock of values, but their highly technical nature often makes them inaccessible to the general public. Thiry et al. (2013) have chronicled how difficult it is to make such debates truly democratic.

The Sustainable Society Index (SSI), presented in section three, provides a good example. This indicator was originally (in 2006) composed of 22 sub-indicators, all non-monetary. In a review conducted two years later, four sub-indicators were removed (soil quality, waste recycling, Ecological Footprint (EF), and international cooperation) and six added (air quality, energy consumption, material consumption, organic farming, Adjusted Net Savings (ANS) and GDP). While the authors clearly announced the changes, their normative impact went far beyond a simple refinement of measurements. With the addition of ANS and GDP, monetisation, whose implications were examined in section three, was introduced. Moreover, the ANS is rooted in an understanding of sustainability radically different from the one motivating the EF, which has been eliminated from the SSI (Thiry, Cassiers, 2010). Whereas the EF emphasizes the ecosystem's physical limits (strong sustainability), the ANS offers a sum of the variations in different kinds of wealth (produced capital, human capital and natural capital), implying that depletions to natural capital can be made up for by increasing investments in other categories of capital (weak sustainability). Thus, while the SSI changed neither its name, nor the definition of its overall purpose, its values and representations of sustainability were incontestably modified by the change in methodology, and its critical scope significantly reduced.

This example is a reminder of the democratic issues at stake in the debate over indicators. Individuals and groups with diverse interests and goals are grappling with this question; new compromises are being forged; at the same time, it is clear that indicators carry implicit values and can have a long-term influence on the dominant conception of prosperity and how it is mobilised. It is crucial, then, that all participants be able to follow and position themselves within these debates. To this end, the values implicit in the construction of indicators should be made explicit in a systematic fashion.

The risk of misappropriation

The impact of indicators upon society cannot be accurately assessed without taking into account the systems in which they are rooted and which they are helping to fashion. The question of whether they are the instruments of an expanding doctrine of governance is not a neutral one. The nature of such a doctrine must be clearly grasped, since it threatens to stifle the attempts at social innovation emerging from the current debate on indicators. We may shed light on this question by examining the large-scale change in the role of the state and modes of exercising power that took place in our societies after the era of prosperity that followed the end of the Second World War came to a close.

As noted above, economic policy took a new turn at the end of the 1970s, a shift that came hand in hand with a doctrinal shift toward globalisation and financialisation. The rise to power of Reagan and Thatcher threw previous principles of social democracy into question. The re-establishment of free markets reduced the role of labour dialogue and consultation mechanisms. The liberalisation of the movement of capital restricted the nation-State's field of action. State intervention was also called into question. Keynesian macroeconomic regulation, public ownership of companies, the degree of progressive taxation, the scope of social welfare, the strict regulation of the private sector – all these were named as barriers to be dismantled. Government reform was constrained and re-conceptualised to follow a business model: the client-citizen was to receive efficient service from public entities, which were to be evaluated on the basis of their performance. The term "good governance" became widespread as the public equivalent of "good management" in the private sector. States were seen through the lens of competition and were subject to benchmarking. No authority appeared to have the power to effectively impose rules or to coordinate the decision-making processes handed off to the private sphere.

The role of indicators has expanded considerably in this context, both as incentives and as tools for flexible coordination. But indicators mean even more than that: without them, it would be impossible to assess, to compare and to incite performance-based competition following the imperative of profitability – itself defined in quantitative terms. Indicators assume and impose the comparability and commensurability of things and activities, and their very existence and use in this way helps to propagate the competition-based organisational model.

The power of indicators continues to increase as competition becomes the watchword in areas of life once spared the dictates of productivity. Financing for many institutions of higher learning, for example, has come to depend how well the fields of study they offer score in terms of "return on investment". Practices of social solidarity have also been affected by the principle of profitability and the quantitative evaluation it requires: in the slipstream left as the active welfare State recedes, indicators are now used to assess the costs of an unemployed person, a student or an old age pensioner.

These examples show that indicators, as they are applied to society, are a force reshaping numerous aspects of existence. Indeed, they may almost be seen as the cornerstone of a model in which managerial norms have been transposed onto society as a whole, pervaded by a spirit of competition: "benchmarking is based on the managerial presupposition that all organisations – public and private, (inter-)State and non-governmental, economic and social – constantly aspire to excel and can only be competitive if they participate in competition, and thus functions by establishing competitive relationships and patterns in non-commercial sectors traditionally regulated by rules of cooperation". (Bruno, 2010: 42).

Thus, while the need to move beyond GDP has become obvious, the ascension of the doctrine of governance may be impeding this from happening. After all, national accounting has the merit of existing, and of internal coherence. Its compatibility with business accounting has helped push managerial standards beyond their original sphere of influence.

Indicators are not merely indispensable tools in the expansion of the managerial model: they legitimate the application of this model to society: "any exercise of political power is accompanied by a discourse of legitimation (...) The tenor chosen for this discourse sounds the tone for government action and sets an order of priority for the political problems it intends to solve (...) Some fifteen years ago, 'results-based governance' (understood as a performance measurement for State action based on how well it meets numeric targets set by pubic policies) emerged as the new brand of legitimation" (Ogien, 2010: 5). Numbers have become the cornerstones of the decision-making process.

A model in which indicators structure decision-making sees human activity through the lens of quantitative rationality; indeed, the ubiquitous use of quantification has helped to de-politicise the political. Quantification has disguised convention and doctrine as a logical axiom. Justifying choices about society by arguing for the need for profitability or quantified performance occludes the political nature of these choices, making them seem impossible to contest on non-numeric grounds.

And yet, this new mode of organisation is contestable, and on many grounds. First, it implicitly sees individual members of society in terms of cost and benefit. Rather than focusing on links between economic progress and the equitable sharing of the fruits of growth, this "new logic considers populations and individuals from the narrower perspective of their contribution and cost to international competition" (Dardot, Laval, 2010: 366). Moreover, this mode of organisation feeds and reinforces the problems attendant on our obsession with growth. It relies on the simultaneous increase in the mobility of capital and the flexibility of labour, which often makes labour more precarious. It heightens inequalities. It poses an active threat to the natural world. Because it is founded on competition, it makes social cohesion difficult. More fundamentally still, it makes the market into a central reference point, reducing the idea of prosperity to fit the narrow framework of competition, in which actors are judged according to their market performance, expressed in monetary terms.

The debate over indicators is society's laboratory, a proving ground for a new definition of prosperity. A unifying principle is being tested there: competition for all, following the imperative of productivity. Given how questionable this principle is, and how difficult it is to challenge – as political choices are justified in technical terms and as the spheres in which legitimate power is exercised are decentralised – we must proceed with clarity, sensibility and caution.

Our first task is to expose the essentially political nature of a model whose great strength is to appear as a naturally legitimate principle of efficiency rather than as a new form of power. Within this model, indicators facilitate the spread of a "strategy without a strategist", to use Foucault's expression. We are in no way arguing for the existence of a conspiracy; rather, "what must be pictured here is a logic of practices, often disparate, which puts into play techniques of power (...) little by little, without any single instigator of this 'push toward a strategic goal,' the multiplication and widespread adoption of all these techniques sets a general course" (Dardot, Laval, 2010: 276). It is important to be aware of this strategic pressure so as not to fall into perceiving this mode of organising society as a naturally occurring phenomenon. Revealing the ideological scope and bearing of this managerial system, which ultimately holds no one globally accountable, opens a space for critical thinking.

Our next task is to identify indicators from among those being proposed in the current debate that might be capable of bringing about real change. In other words, indicators grown from the seeds of the system they claim to challenge must be distinguished from those whose conceptual and methodological foundations allow them to offer a true alternative. This distinction would save us from tinkering at the margins of the current accounting system in the continued belief that it is capable of providing an adequate response to the fundamental problems facing the 21st century. One example of the pitfalls of this way of thinking may be found in the Stiglitz Commission's ambiguous proposal that monetised assessments of volunteer and domestic work be integrated into national accounting. While it would allow society to recognise previously marginalised activities, and for that reason might be welcomed as a social advance, it also denies the true nature of these activities – namely, that they are voluntary and unremunerated – by subjecting them to the laws of the market.

We therefore conclude by suggesting that indicators may be a point around which a legion of scattered forces for change can rally to resist society's reduction to profit-driven principles of governance, that they may be seized upon as the Trojan Horse that finally cracks the citadel of GDP and national accounting, bearing not arms, but the aspiration to greater humanity, altruism and possibility.

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