Post-GDP World? Rethinking International Politics in the 21st Century

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economic statistics and market governance.

Abstract

In contemporary politics, the power and status of a country are intimately connected with

its economic wealth. In particular, the gross domestic product (GDP) has become the

benchmark by which the global pecking order is defined. Initially designed as mere survey

of a nation's income, GDP has become an ordering principle in international governance.

Yet, the convergence of socio-economic, environmental and energy crises currently

questions the sustainability of GDP maximization and its political relevance, strengthened

by a growing consensus among policy makers and experts that GDP is an inadequate metric

of economic success. As countries move beyond GDP and new indicators are introduced,

the overall international political order may also change. In particular, some non-G7

countries may emerge as global leaders in wellbeing, prosperity and sustainable

development. We may be witnessing a gradual shift to a new Bretton Woods, possibly

leading to a profound restructuring of globalization with the emergence of new forms of

supranational regionalism, in which more equitable and sustainable economies will play a

leading role.

Keywords: global governance; GDP; power; alternative indicators; sustainable regionalism.

1

Introduction

In contemporary international politics and global governance, power and status are intimately connected with the size of a country's economy. In his influential book *The Rise* and Fall of the Great Powers, Yale historian Paul Kennedy concludes that economic wealth is arguably more significant than military strength when it comes to determining a country's global status (Kennedy, 1989). In particular, the gross domestic product (GDP) has become the key parameter to assess a nation's global status. For instance, membership of the Group of 7 (G7) is based on a country's GDP. The current definitions of 'superpower,' 'middle-power' or 'emerging power' are all determined by GDP. The commonplace distinction between 'developed' and 'developing' world, which has defined international aid, finance and trade policies in the 20th century, is also a result of GDP (Rist, 2010). When allegedly 'poor' nations reach a certain level of GDP, they are automatically relabelled as middle-income or developed countries. This opens access to the most important global governance institutions. For instance, South Korea and Mexico became members of the Organization for Economic Cooperation and Development (OECD) respectively in 1994 and 1996, after years of major GDP growth, the first two hitherto 'developing' nations to do so. Brazil, China, India, Mexico and South Africa were invited to join the G7 in 2007, through the so-called Outreach 5 arrangement. Later they transitioned seamlessly into the G20. All these countries owe their fame and prestige to either their aggregate GDP or to their GDP growth rates. And this applies to new global clubs too. The acronym BRIC (later expanded to BRICS) was introduced in the international political debate by a 2001 report published by Goldman Sachs to describe the then fastest growing economies, Brazil, Russia, India and China (and now also South

Africa) (O'Neill, 2001). Their analysis was based on estimates of GDP growth, according to which the economic output of these economies would surpass that of the G7 by 2050 and thus create a new planetary leadership. More recently, the same logic was applied to another group of emerging economies, once again through a GDP-based acronym, MINT, alerting the investment community that the real leaders of the future may very well be Mexico, Indonesia, Nigeria and Turkey (O'Neill, 2013).

Global economic policies are also driven by GDP, predominantly through the intermediation of institutions such as the International Monetary Fund (IMF) and the World Bank, which assess the world economy through the lens afforded by this statistic (Fioramonti, 2013). Following the Bretton Woods conference of 1944, the international financial institutions have been mandated to enforce a type of GDP-based governance, so much so that when GDP growth rates in a country are in distress (what is conventionally known as a 'recession') the World Bank or the IMF are sent in to advice and often coerce national policy makers, with crucial impacts on democratic governance. These institutions' technical advice to governments is largely informed by the goal of GDP maximization as a way of attaining development and stability.

Yet, in the past few years, there has been a growing debate about the adequacy of GDP as a measurement of economic performance, let alone human welfare (Fioramonti, 2013; 2014, Costanza et al., 2014). Indeed, GDP suffers from a number of weaknesses. It only measures output, without considering the value of inputs and the cost of negative externalities. As a consequence, GDP incentivizes governments to exploit natural resources and pollute, given

that the human, social and environmental costs therein are not featured in the national accounts. A country that depletes its energy and environmental resources for industrial output is seen as productive by GDP. By contrast, a country that preserves nature and curbs excessive consumption may very well be punished in the GDP framework (Repetto, 1989). Moreover, GDP only counts transactions that occur within the formal economy, hence disregarding all economic activities that are informal, voluntary in nature and are performed within the household. Yet, as the OECD has confirmed, all these non-GDP activities contribute significantly to a nation's economic performance, in some cases accounting for over 50% of the economy, while adding in multiple ways to a society's wellbeing (Miranda, 2011; Nadeem and Koh, 2011). GDP is also blind to how income is distributed across society: not only is it an aggregate figure (in which growing poverty levels among the many can be offset by increasing income among the few), but its focus on the formalization of economic exchanges and economies of scale can contribute to reducing safety nets for the poor and weakening small businesses. In the absence of corrective systems like higher taxation for top-earners, GDP-based policies are likely to produce a concentration of wealth in a few hands, as has been the case during the last high-growth decades (Wilkinson and Pickett, 2009; Piketty, 2014).

Although relatively useful in the postwar period, when environmental and social concerns were less widespread, GDP has become highly inadequate as a tool to design economic policy for a generation increasingly concerned with social wellbeing and climate change.

Against this backdrop, numerous calls have been made to move beyond the current GDP framework (Costanza et al., 2014). In 2015, the United Nations (UN) promulgated the new

Sustainable Development Goals (SDGs), a roadmap towards an alternative development paradigm for the world.

But if countries move beyond GDP, how will international politics be affected by such a shift? Interestingly, the 'beyond GDP' debate is occurring at time in which the world experiences a convergence of crises, from climate change to energy depletion (and rising oil prices), along with growing concerns about inequality and human wellbeing. This may very well lead to significant changes in global politics.

This article discusses how GDP contributed to shaping international politics in the 20th century. It reviews how this number made it into global politics since the moment it was introduced as a tool to fight the Great Depression and to guide the United States' involvement in the Second World War. Then it reviews the main criticisms against using GDP as a policy tool and provides an overview of how potential alternatives would contribute to restructuring international politics in the 21st century. New leaders may emerge if different indicators were taken into account when re-designing global institutions. Moreover, new forms of governance, especially innovative processes of supranational regionalism, would possibly replace the current version of globalization.

How GDP shaped international governance in the 20th century

Economic wealth has a significant impact on a country's status and power in international affairs. For instance, the British political economist William Petty, who in 1652 conducted the first-ever attempt to measure national wealth, viewed the measurement of national

income as key to support Britain's projected power in the world (Petty, 1986).

It is therefore not surprising that GDP (initially known as Gross National Product, GNP) and the national income accounts, which are the statistical survey upon which GDP is based, became critical elements of the 20th century's struggle for power. Although GDP was introduced in the mid-1930s though the cooperation of American and British economists to fight the Great Depression, it was only in the early 1940s that it gained traction in international politics. This is because the US government used the accounts to plan the American involvement in the Second World War. Thanks to the GDP accounts, the government could identify equilibria between the objectives of military mobilization and the need to keep internal consumption growing. This allowed the US to wage the war simultaneously on two fronts (Europe and the Pacific) while boosting rather than strangling its economy. To their surprise, American investigators learned after the war that Hitler's military production targets were unrealistically disconnected from the overall performance of the German economy, a deficiency caused by the lack of sophisticated systems of national accounts (Lundberg, 1971). According to the economist John Kenneth Galbraith, the GDP accounts were the equivalent of 'several infantry divisions in their contribution to the American war effort' (Galbraith, 1980). In the words of analysts Clifford Cobb, Ted Halstead and Jonathan Rowe, 'the degree to which the GNP evolved as a war-planning tool is hard to exaggerate':

In the United States the Manhattan Project got much more glory. But as a technical achievement the development of the GNP accounts was no less important (Colb, Halstead

As the conflict neared the end, the US was left with an intact (and in some cases even stronger) industrial sector, a notable level of savings (vis-à-vis the indebtedness of all other countries involved in the war) and rising consumer demand, which created the conditions for America's postwar expansion. The Bretton Woods conference of 1944, which redesigned the world system and instituted international financial institutions such as the IMF and the World Bank, sealed GDP's footprint on global politics by elevating it to the global parameter of good economic policy. Such an institutional setup allowed for the GDP accounts to be 'exported' to the rest of the world, especially after the United Nations inaugurated its international standards for national accounts in the early 1950s (Fioramonti, 2013; Costanza et al., 2014).

The influence of GDP on international politics was further reinforced during the Cold War, when the measurement of economic performance turned into a fundamental ingredient of the political struggle between the USA and the Soviet Union. Perhaps more than the arms race, it was the ambition to ensure economic success that constituted the essence of the capitalism-socialism contest. GDP had been invented to gauge the size and scope of market economies and was calculated in terms of market prices. The Soviet Union, by contrast, rejected the market economy and had developed a different metric, the so-called material product, which reflected the characteristics of a command economy and inevitably privileged some economic activities (e.g. industrial production) at the expenses of others (e.g. services) as the former were considered to constitute the backbone of the socialist

economy.

For over four decades, each bloc defended the validity of its measurements. Starting in 1950, the Central Intelligence Agency (CIA) began to investigate Soviet measures of national income with a view to discrediting them: their objective was to minimize the USSR's alleged economic development and its potential expansion. Foreign economic intelligence was essential to estimate the magnitude of military threats, to anticipate the intentions of enemies and undermine their capabilities and, most importantly, to project the relative strength of the West vis-à-vis the East (Noren, 2003).

By using GDP to recalculate the Soviet national accounts, the CIA reports did a great deal to ease concerns about the USSR's capacity to overtake the US as the largest economy in the world. When the CIA reported in 1963 that real GDP growth in the USSR had been a fraction of what officially declared, US President Johnson dispatched a delegation to present the findings in West European capitals and reassure his allies (Noren, 2003). When party leaders Nikita Khrushchev and then Leonid Brezhnev put forward their agricultural programmes in the 1950s and 1970s respectively, the CIA published GDP estimates to demonstrate how these production goals could not be met (Noren, 2003). When in 1958, the Communist Party declared that the Soviet Union would lead the world in both absolute and per capita output by 1970, the CIA promptly recalculated official statistics and pronounced these plans unfeasible (Noren, 2003). Because of mounting criticisms, both internally and internationally, the Soviet Union decided to abandon its previous methodology and began to compile official GDP statistics in 1989. The stated purpose was

to supplement the Marxist-Leninist-based indicators with a new measure that would broaden and deepen the analysis of social reproduction, as well as facilitate international comparisons (Kostinsky and Belkindas, 1990). At the same time, it may not have been coincidental that the adoption of GDP held the promise of helping 'push up' the numbers of economic output because of the rapid growth of the services sector in the late 1980s (Fioramonti, 2013).

In the early 1990s, from 'national' the gross product became 'domestic'. This signalled an important political change in support of economic globalization. Traditional GNP referred to all goods and services produced by the residents of a given country, regardless of whether the 'income' had been generated within or outside its borders. It meant that, for instance, the earnings of a multinational corporation were attributed to the country where the firm was owned and where the profits would eventually return. With the introduction of the gross 'domestic' product, this calculation changed. GDP is indeed territorially defined, which means that the income generated by foreign companies is formally attributed to the country where it is generated, although the profits may not remain there. This shift in metrics was partly responsible for the economic boom of many developing nations throughout the 1990s. In a sense, one may argue that the very notion of 'emerging market' was a by-product of both the shift in production processes in industrialized nations as well as the introduction of new metrics to capture such a shift, rather than a profound change in how global wealth was distributed. For some, the statistical reconfiguration produced by GDP simply hides the fact that 'the nations of the North are walking off with the South's resources, and calling it a gain for the South' (Cobb, Halstead and Rowe, 1995, p.6).

It was during this period that GDP was 'constitutionalized,' that is, formally integrated into international institutional processes. The European Union (EU) championed this through the introduction of the Stability and Growth Pact, which tied the member states' capacity to sustain public expenditure to the performance of their GDP (the so-called Maastricht criteria). Fixed ratios to GDP were identified for deficit and debt: the EU thus gave GDP the 'power' of law, in so far as this number would dictate the contribution of member states to the common budget, what economic policies would be pursued and the extent to which social investment could be afforded.

Beyond GDP in the 21st century

As we have seen, the second half of the 20th century elevated GDP to a fundamental ordering principle of global governance. Since the Bretton Woods conference in 1944, GDP was instituted (via international financial institutions) in the governance processes of virtually all countries around the world, becoming the global parameter for success and prestige, especially after the end of the Cold War. In many respects, GDP proved a powerful tool to support the globalization of the market economy and the standardization of economic policies globally. The flaws of GDP had been known for many years, however. One of the architects of the GDP system, the economist Simon Kuznets, had raised concerns about the policy implications of this indicator as far back as the very first collection of national income statistics in 1934 (Kuznets, 1934). Over time, numerous economists had been warning against the inadequacies of GDP and its improper use in policy (Fioramonti, 2013). Yet, for decades, such a critique bumped against the general

euphoria of high growth rates, remarkably in the 1960s, when it seemed implausible that GDP maximization would contribute to environmental degradation and social inequalities. Early studies on the risks associated with over-consumption and with short-term gains at the expense of long-term wellbeing were largely disregarded by mainstream economists and politicians (Meadows et al., 1972). The turn of the millennium, however, has brought some of these criticisms right into the global political debate, also due to climate change, energy depletion and social inequality.

Towards a new Bretton Woods?

In 2008, the French government established a Commission on the Measurement of Economic Progress and Performance (chaired by Nobel laureates Joseph Stiglitz and Amartya Sen), which triggered a global political debate. The same year, the OECD and the European Union promoted a new initiative by the name of 'Beyond GDP' and, in 2009, the European Commission released a formal 'communication' entitled *GDP and Beyond:*Measuring Progress in a Changing World (European Commission, 2009). In 2010, British Prime Minister David Cameron called on the UK Office for National Statistics to complement GDP with measures of wellbeing. Paraphrasing a famous speech given by Robert Kennedy during the presidential elections of 1968, Cameron argued that:

Wellbeing can't be measured by money or traded in markets. It's about the beauty of our surroundings, the quality of our culture and, above all, the strength of our relationships. Improving our society's sense of wellbeing is, I believe, the central political challenge of our times (Stratton, 2010).

A few months later, the US government took a similar stance, with President Obama setting up a panel of Nobel-fame experts to focus on measures of subjective wellbeing (Whoriskey, 2011). In 2012, several African countries pledged a shift away from GDP, arguing for the protection of natural capital to become a leading parameter of economic development (the so-called 'Gaborone Declaration'). A few months later, the Rio+20 Earth Summit provided a global platform for most of these institutional reforms to be discussed. Various alternative indicators were presented, discussed and formally launched, and a long series of commitments to redefine a system of governance in harmony with planetary boundaries were made, in line with the new SDGs. The Chinese president, Xi Jinping, announced in 2013 that GDP will no longer be considered a parameter of success in China, ending a tradition in the Communist Party to reward officials that maximized GDP growth in their localities (News of the Communist Party of China, 2013). A year later, over 70 Chinese cities ditched GDP as an economic policy tool (Wildau, 2014). Even the UN Secretary General Ban Ki-Moon called for a post-GDP framework for the world:

Gross Domestic Product (GDP) has long been the yardstick by which economies and politicians have been measured. Yet it fails to take into account the social and environmental costs of so-called progress. [...] We need a new economic paradigm that recognizes the parity between the three pillars of sustainable development. Social, economic and environmental well-being are indivisible (UN News Centre, 2012).

Although these events did not amount to a new Bretton Woods, international financial

institutions have not been deaf to the call for change. The World Bank, for instance, which had introduced alternative indicators as far back as the 1990s, began to produce regular reports on green economic development, in which it highlighted the importance of complementing GDP with measure of human and natural capital (World Bank, 2014). It also started estimating the costs of environmental degradation publishing figures that produced shockwaves in most countries, particularly India and China, whose economies are heavily impacted by the growing costs of air and water pollution (Mallet, 2013). The Bank has also promoted a global partnership between public and private sectors for the valuation of ecosystem services to the economy, the Wealth Accounting and Valuation of Ecosystem Services (WAVES) initiative, which now includes hundreds of signatories among more and less industrialized nations. Moreover, in line with the SDGs, various UN agencies, civil society movements and private investment groups have started producing various indicators to measure 'inclusive' wealth, natural capital, ecological impacts, prosperity, wellbeing and social progress.

The critique of GDP and the rise of alternative indicators

No doubt that the GDP framework generated evident paradoxes in economic policy and global governance at large. Countries were discouraged from protecting their common goods, their environments and their natural resources. International standards and official economic policies pushed them the other way: towards a massive exploitation of natural wealth, with significant social and human costs. Only a minority of 'developed' nations managed to strike a better balance between the imperatives of GDP growth and social/environmental sustainability, by introducing higher taxes and restrictive laws on the

use of natural resources.

It is because of the negative impact that GDP has had on governance that several scholars and policy makers have been advocating for a shift to a different set of indicators. What most of these indicators have in common is the objective to re-conceptualize our understanding of economic progress by factoring in human, social and environmental dimensions. The first attempt at revising GDP was made by Nobel-prize winning economists William Nordhaus and James Tobin in 1971, when they developed an index called Measure of Economic Welfare (MEW). The MEW tried to 'correct' GDP by adding the economic contribution of households and excluding 'bad' transactions, such as military expenses (Nordhaus and Tobin, 1973). The best-known global synthesis of economic, social and environmental data into a comprehensive measure of economic performance is the Genuine Progress Indicator (GPI). The GPI sees the current flow of services to humanity from 'all' sources as relevant to economic growth, not just the output of marketable goods and services (Daly and Cobb, 1994). The GPI takes into account dimensions such as leisure, public services, unpaid work (housework, parenting and care giving), the economic impact of income inequality, crime, pollution, insecurity (e.g. car accidents, unemployment and under-employment), family breakdown as well as the losses associated with resource depletion and long-term environmental damage. While GDP and GPI followed a similar trajectory between the early 1950s and the late 1970s, thus indicating that conventional growth processes correlated with improving human and economic progress, ever since the late 1970s the world has increased its GDP at the expense of social, economic and ecological wellbeing (Figure 1).

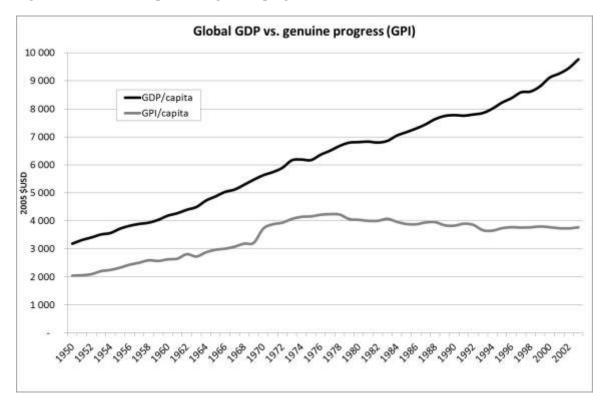


Figure 1 – Global GDP splits from genuine progress in the late 1970s

Source: Kubiszewski et al, 2013, p.63.

Nature adds to economic progress and wellbeing in multiple ways. It makes available goods that are then marketed, as is the case with produce in agriculture. It also provides critical ecological services such as water provision, soil fertilization and pollination, which make economic growth possible. GDP is blind to these inputs and disregards the costs that manmade production processes impose on natural systems, like pollution. Yet, these costs are real and have a direct bearing on human wellbeing and economic performance. The World Bank estimates that, despite impressive GDP output in the past half century, the costs of environmental degradation have mostly cancelled out global economic growth (Figure 2).

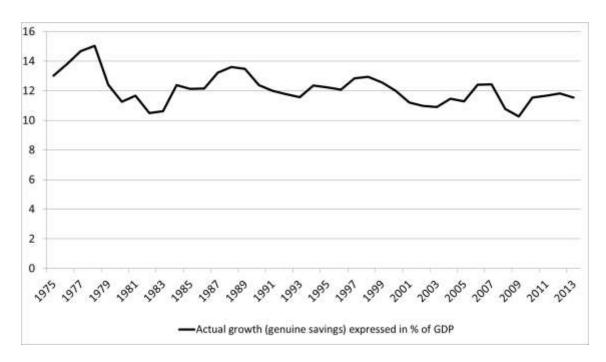


Figure 2 – Global GDP growth flattens when environmental damage is accounted for (genuine savings)

Source: author's elaboration on World Bank's data provided through the World Development Indicators 2013 and accessed via Data Market.

A number of indicators available at the national level also demonstrate the contradiction between GDP and sustainable economic development. One of these is the ecological footprint produced by the Global Footprint Network, which shows how GDP growth has been traditionally achieved by spending down the planet's biocapacity, that is, the capacity of ecosystems to produce useful biological materials and to absorb waste materials generated by humans. The Environmental Performance Index produced by Yale University ranks countries according to their capacity to protect ecosystems and natural resources as well as protect human health from environmental harm. The Human Development Index, compiled by the UN Development Programme since the early 1990s, complements GDP by

including estimates of life expectancy and education in rating a country's economic achievements. In 2010, the UN University launched a Human Sustainable Development Index. The results showed that highly industrialized countries, which enjoy some of the highest human developments in the world, do so at a huge environmental cost for themselves and for humanity (Togtokh and Gaffney, 2010). Similar conclusions were reached by the Happy Planet Index developed by the UK-based New Economics Foundation in 2006, which complements the ecological footprint with life satisfaction and life expectancy. The index has shown that high levels of resource consumption do not produce comparable levels of wellbeing, and that it is possible to achieve high levels of satisfaction (as measured in conventional public opinion polls) without excessive consumption of the Earth's natural capital.¹

New indexes of multidimensional social development have also been produced. The Social Progress Index, for instance, rates countries according to a set of 'foundations of wellbeing', which include access to knowledge, physical wellness and ecosystem sustainability. The Legatum Prosperity Index marries income with various measures of governance, social capital, health and education, and economic opportunity.

4.1 Scenarios for a post-GDP world

3.1 Global leadership after GDP

GDP contributed in many different ways to design international governance in the 20th century. In particular, it did so by establishing the parameters for economic success and providing parameters for the distribution of power in global institutions. As such, GDP was

instrumental to creating the world's pecking order. But what would global leadership look like in a post-GDP world? If we take into account some of the alternative indicators discussed above, we can identify a clear pattern: the new leaders would be countries inspired by social-democratic ideals and committed to progressive environmental governance. The best performing nations according to these alternative indicators are also some of the least unequal societies in the world, those with the best social security systems for their citizens and a long tradition of strong social ties and vibrant civil society. Table 1 presents a selection of alternative G7 groups based on post-GDP indicators.²

Table 1 – Possible 'G7 clubs' according to alternative indicators

G7 of Sustainable	G7 of Wellbeing	G7 of Environmental	G7 of Prosperity
development	(Source: Foundations of	performance	(Source: Legatum
(Source: Ecological	Wellbeing, Social	(Source: Yale	Prosperity Index)
footprint/ Happy Planet	Progress Index)	Environmental	
Index/Human		Performance Index)	
Development Index)			
Costa Rica	Norway	Switzerland	Norway
Colombia	Switzerland	Luxembourg	Switzerland
Panama	Sweden	Australia	Canada
Iceland	Iceland	Singapore	Sweden
South Korea	Netherlands	Austria	New Zealand
Uruguay	New Zealand	Germany	Denmark
Turkey	Denmark	Spain	Australia

The only official G7 countries to be included in any of these post-GDP rankings are Germany and Canada, but only for environmental performance and prosperity respectively, as they have dropped out of the lead in the other categories (in particular, Canada has been reversing its traditional good performance in environmental governance). Interestingly, the world's largest economies in GDP terms have completely disappeared from all lists. The US ranks 10th in prosperity, especially because of its poor track record in safety and

security, 36^{th} in wellbeing and at the very bottom in sustainable development, due to its massive ecological footprint. China is the 51^{st} country in terms of overall prosperity, mainly because of governance issues and a poor democratic record, the 92^{nd} in wellbeing and at the very bottom for environmental performance (118^{th}).

Indicators focusing on wellbeing and prosperity highlight the leadership role of socialdemocratic countries, especially in Europe and in the South Pacific (e.g. New Zealand and Australia). Switzerland and Norway are the best performing countries in Europe, following by Iceland. European Union (EU) member states such as Sweden, Austria, Denmark, Germany and Spain are also part of the lead. To an extent, this demonstrates that the EU would continue showing significant leadership in a post-GDP world and attests to the fact that Europe, despite its internal crises, is still a region of human, social and environmental wellbeing. The combination of 'footprint' indicators with estimates of human development underlines the important role played by Latin American nations, especially in so far as they have been able to marry longevity, good health and education with limited impacts on the environment. With these alternative indicators, Asia largely disappears from the global leadership map, especially its regional powerhouses. Neither Japan (a G7 member) nor China or India (members of the G20 and the BRICS) makes it to top seven. The same applies to Russia. None of these GDP powers would even make it to a potential G20, with Japan only ranking 21st on both wellbeing and prosperity. Singapore is the region's bestperforming country in terms of environmental performance and prosperity, but fares at the bottom in the other fields.

Although no African country appears in any of these top rankings, the best performers of the continent are Botswana and Mauritius. Botswana leads the continent in prosperity, sustainable development and wellbeing, while Mauritius is a regional leader in both wellbeing and environmental performance. Such a leading role by these countries perhaps comes as no surprise, given that Botswana and Mauritius are the continent's best performing countries in most governance dimensions. While GDP attributed leading status to heavy polluting, highly unequal and deeply corrupt nations such as South Africa and Nigeria, alternative indicators help identify better governed, more sustainable and more accountable nations in a hitherto relatively underdeveloped continent.

Alternative indicators highlight the performance of countries with a more progressive approach to human and ecosystemic wellbeing. For instance, all industrialized countries ranked above are members of the Kyoto Protocol (with the exception of Canada, which pulled out in 2011) and have made pledges to reduce carbon emissions significantly. Also the only 5 countries in the world to have met the UN goals for development (0,7% of their GDP) aid appear in the table above (Norway, Sweden, Denmark, Luxembourg and Netherlands). What if the G20 was made up of the nations with the highest levels of 'sustainable progress' in each continent? Would the world stand a better chance to address inequality and climate change?

From globalization to regionalization

The transition to a post-GDP world is happening at a time of major political, social and economic shifts. Besides supporting new leaders in global politics, this process may also

lead to the emergence of a new form of supranational regionalism, which may very well replace globalization as the defining feature of the 21st century.

There are several factors pointing towards this possibility. The first variable is economic contraction. As we have discussed, the global economic crisis has largely called into question the ability of the GDP framework to guarantee economic stability at the global level. By contrast, there is much evidence that the vicious cycle of debt and consumption, which is supported by the GDP approach to economic development, has been one of the main causes (if not singlehandedly the main cause) of the economic collapse in 2007-2008 (Roubini and Mihm, 2010). While GDP-based policies have pushed countries to increase economic interdependence, thus generating an unprecedented level of material wealth, technological innovation and trade volumes, they have also made economic systems vulnerable to systemic shocks. Moreover, while accelerating economic growth at the planetary level, they have also exacerbated inequalities within and across countries (Credit Suisse, 2013; Piketty, 2014). Nowadays, national economies have become unable to tackle socio-economic imbalances, especially when they are caused by global economic dynamics. As a reaction against this, communities are rediscovering the importance of local economic empowerment. Throughout crisis-ridden Europe, for instance, alternative currencies have become more common, particularly as they privilege local economic development and shield against the centralized monetary control of the Euro (Fioramonti, 2013). It is possible that some regions of the world (particularly the European Union) may agree on the introduction of financial transaction taxes, which will discourage speculation and reward long-term productive investment. Although migration is often described as a

global scale phenomenon, most migration actually happens within regions and, more often than not, across countries sharing a border (UNDESA, 2012). Because of the economic crisis, we have seen an increase in short-term, short-distance migration as opposed to the long-term intercontinental flows that had dominated previous periods. As the global economic crisis worsens, especially in the global North, it is not impossible that global flows of economic migrants will slow down, superseded by short-distance (and potentially short-term) migration within the same micro-regions. To paraphrase a famous bestselling book celebrating globalization, one may say that the world is likely to become much less 'flat' in the next decades (Friedman, 2005).

The second factor is climate change. Despite the hesitation with which the international community has been pushing the post-Kyoto agenda, it is inevitable that new regulations will be introduced to limit the emissions of greenhouse gases in both industrialized nations and so-called developing countries. Some nations have already introduced carbon taxes, which are likely to become more stringent and punitive in the near future (Randers, 2012). With the stalemate affecting the Doha round on global trade, the negotiations for a new climate regime have become the actual terrain of confrontation to design the future of the global economy. As the climate change regime supersedes the current world trade system, the exchange of goods and services is likely to experience a slow but steady re-localization, in which 'mileage' will begin to make a difference. Geographical distances will matter ever more in the process of designing a climate-compatible trading system, which means that what can be produced and consumed regionally/locally will become more profitable than what can be shipped across the planet. Innovative reforms in corporate governance are also

attesting to a (gradual) shift in the way in which businesses operate in a post-GDP world (Sukdhev, 2012). As natural capital accounting, transport costs and environmental impacts become central in the business paradigm of the 21st century, production and consumption may become increasingly regional.

The third factor is energy. The sudden increase in oil prices in 2007-2008, which drove up food prices and exerted a ripple effect through the global economy, was a critical driver of the global economic crisis (Rubin, 2009). According to the estimates of the International Energy Agency, the near future will require a fundamental shift in our economic systems as cheap energy will be much harder to find. Indeed, the IEA believes that conventional crude output from existing fields is set to fall 'by more than 40 million barrels per day by 2035.' As a consequence, out of the 790 billion barrels of total production required to meet projected demand, 'more than half is needed just to offset declining production' (IEA, 2013, p.4). The IEA also anticipates that oil prices will continue to rise, notwithstanding the slowing down of the economy. As regards natural gas, the IEA forecasts significant growth over the next decade, particularly in the USA, with production leveling off in the 2030s as output starts to recede (IEA, 2014). Moreover, research has shown how natural gas (which is composed largely of methane) can add tremendously to greenhouse gas emissions (Howarth et al, 2011). Ultimately, the IEA believes the world economy requires an immediate reduction in energy-related emissions, as current projections (including the potential contribution of natural gas) are consistent with a global average temperature increase of 3.6 °C, much higher than the internationally agreed margin of 2°C. In their view, a business-as-usual scenario will exhaust the climate compatible carbon budget by

As fossil fuels run out, the extraction of under soil resources becomes more complex and expensive (because of both physical constraints and regulations) and the world accepts drastic emission reductions targets, renewable sources of energy are likely to become more prevalent than they are today (Heinberg, 2011). It is unlikely, however, that renewable energy will be able to sustain the system of transport and international freight that we have now, as solar, wind and geothermal sources are not amenable to long-distance transportation. By contrast, they will allow local businesses to produce energy locally and exchange it within a certain degree of proximity. As energy production is diversified and localized, its distribution will follow the geophysical features of each territory. As renewable energy can be produced anywhere on the planet, macro-grids may need to be redesigned into intelligent micro-grids, which reach users within a given area thus reducing the amount of energy dispersion caused by long-distance transportation.

Evidently these three factors are mutually correlated and reinforce one another. Energy costs make a business-as-usual economic recovery much less likely. Climate change makes it imperative to switch to less polluting renewable forms of energy. Environmental regulations make globalized markets less likely to stay profitable in the long run, which means that business activities will refocus from the global to the regional/local level to seek new profits. At the same time, such a transition to localized forms of production and consumption does not necessarily mean a resurgence of national protectionism. As this new economy will need to be embedded in the geographic, climatic and ecosystemic conditions

of each territory, national borders are likely to stay porous. As a matter of fact, regional cross-border exchanges may very well become more common than they are now. By exchanging energy locally, contiguous communities across national borders would push for further integration. This drive for regional integration may be particularly strong in large nations, where distances from the periphery to the centre are wider than those between cross-border peripheries. Territorial continuity will matter a great deal, which means that geographically homogenous areas will have an incentive to build common infrastructure, regardless of whether they reside within the same nation or cut across multiple countries. Micro economic regions are therefore likely to mushroom and may easily have spill-over effects also in the political and social field. While nations will remain the key locus of governance, they will most likely transition from being monopolists of regulation to being facilitators of bottom-up integration. In turn, they will find themselves connected with each other through the web of micro-regions spanning across their borders.

The localization of the economy would also shift the way in which business operates nationally. As the global market becomes less profitable, business will have an incentive to trade locally and regionally. In some cases, it will be more profitable to commerce with neighbouring communities in a foreign country than with other far away communities within the same nation. In the current top-down regulatory framework, regional trade has only prevailed in Europe, where a common market has become a daily reality for goods, services and workers. In South America, Asia and especially Africa, by contrast, most trade volumes are directed outside the region. Although regionalization has generated new avenues for intra-region trade, the profitability of global markets has discouraged a serious

refocusing of business activities within regions rather than across them. Thus, the prospect of a global contraction of economic activity may very well reinforce business integration at the regional level.

The type of 'deep' regionalism that would emerge out of this process would be fundamentally different from the one we have at the moment. It will be driven by bottom-up pressures rather than by top-down regulations. It will rise organically as public institutions, businesses and civil society reorient themselves as key drivers of a new economic paradigm. In many regards, the shift to localized economic empowerment will reinforce regionalism as the main locus of sustainability. Nations will have an incentive to support the establishment of 'sustainability corridors' across borders, in terms of infrastructural development, energy production and exchange as well as market integration. As local webs of energy and economic interdependence grow within these micro regions, nation states will find themselves reciprocally entangled in macro regions of territorial continuity. Some of these may very well be as large as entire continents, in a gradual shift from 'from globalization to continentalization' (Rikfin, 2011, p. 61).

Conclusion

GDP has long been the yardstick by which countries have been rated, power has been distributed and global governance has been institutionalized. This has contributed to producing the global political system of the 20th century, while standardizing economic policies around the world. At the same time, GDP has generated paradoxes in how countries and the global economy treat natural resources as well as human and social

wellbeing. As remarked by the OECD,

If ever there was a controversial icon from the statistics world, GDP is it. It measures income, but not equality, it measures growth, but not destruction, and it ignores values like social cohesion and the environment. Yet, governments, businesses and probably most people swear by it (OECD Observer, 2005).

In an age characterized by rampant inequality, environmental degradation, energy depletion and economic instability, the GDP framework is increasingly questioned. This criticism has exited academic circles to become mainstream among many politicians and global policy makers. The shift towards a post-GDP world may fundamentally redesign global governance. The current form of globalization, with its reliance on cheap energy, has been encouraged by the GDP framework, especially as far as this metric of economic performance does not take into consideration the social and environmental costs of pollution, long-distance transportation and natural resources consumption. A post-GDP system will question the sustainability of a globalized economy and will force governments to re-invent the global economy on a different scale. Leadership may also change. Indeed, alternative indicators suggest that, if GDP was to be replaced (or even complemented) by different measures of economic progress, this new form of accounting may have an impact on the global pecking order. Conventional powers, both in the West and in the East, would rank way below countries that have been more efficient at building equitable and sustainable economies. If global clubs like the G7 and the G20 were to take into account factors such as wellbeing, sustainability and prosperity, their composition would change

dramatically. Regionally, South America would climb to the top, together with Europe and the South Pacific. At the EU level, a post-GDP scenario would logically result in a revision of the Maastricht criteria and a different set of policies on, for instance, the post-crisis austerity measures. For instance, if a post-GDP set of indicators were to include the value of the informal economy and the variety of household and community services provided free of charge, the measured income of many European economies would increase significantly (Miranda, 2011). The infamous acronym PIGS, describing the allegedly inefficient economies of Portugal, Ireland, Greece and Spain, may also need some rethinking. In China, the inclusion of household production of non-market services improves by 50% in per capita terms when compared to the US. As the OECD argues, these calculations are 'particularly significant for comparisons of "richer" and "poorer" countries' (Nadeem and Koh, 2011, p.3).

A post-GDP world, of course, is just a possibility. This article proposes a reflection on how the shift towards a new system of metrics of progress may affect global governance, considering how intimately intertwined the GDP framework and the current system of international relations are. With the convergence of economic, social and environmental crises it appears as if business-as-usual is not an option. Abandoning GDP to embrace a new idea of progress may very well be the first step towards building a better world for all in the 21st century.

References

Cobb, C., Halstead, T. and Rowe, J. (1995) 'If the GDP is Up, Why is America Down?,'

- Atlantic Monthly, October 1995, p. 6.
- Costanza, R. et al. (2014) 'Time to leave GDP behind', Nature, 505: 283-285.
- Credit Suisse (2013) Global Wealth Report 2013. Zurich: Credit Suisse.
- European Commission (2009) 'GDP and Beyond: Measuring Progress in a Changing World, COM/2009/0433 final.
- Fioramonti, L. (2013) *Gross Domestic Problem: The Politics Behind the World's Most Powerful Number*. London: Zed Books.
- Fioramonti, L. (2014) *How Numbers Rule the World: The Use and Abuse of Statistics in Global Politics*. London: Zed Books.
- Friedman, T. (2005) The World Is Flat. London: Allen Lane.
- Galbraith, J. K. (1980) 'The National Accounts: Arrival and Impact', in N. Cousins (ed.), *Reflections of America: Commemorating the Statistical Abstract Centennial*.

 Washington, DC: US Department of Commerce, Bureau of the Census.
- Heinberg, R. (2011) *The End of Growth. Adapting to Our New Economic Reality*. Gabriola Island: New Society.
- Howarth, R., Santoro, R. and Ingraffea, A. (2011) 'Methane and the Greenhouse-Gas Footprint of Natural Gas from Shale Formations', *Climatic Change*, 106 (4), pp. 679-690.
- IEA (2013) World Energy Outlook 2013. Executive Summary. Vienna: International Energy Agency.
- IEA (2014) World Energy Outlook 2014. Executive Summary. Vienna: International Energy Agency, 2014.
- Kennedy, P. (1989) The Rise and Fall of the Great Powers. London: Vintage.

- Kostinsky, B. and Belkindas, M. (1990) 'Official Soviet Gross National Product

 Accounting,' in Measuring Soviet GNP: Problems and Solutions, report from the

 conference sponsored by the CIA's Office of Soviet Analysis, pp183-192. Made

 available by the University of Michigan:

 http://babel.hathitrust.org/cgi/pt?id=mdp.39015018981400;view=1up;seq=10

 (accessed 5 July 2015).
- Kubiszewski, I. et al. (2013) 'Beyond GDP: Measuring and Achieving Global Genuine Progress', *Ecological Economics*, 93 (2013), pp.57-68.
- Kuznets, S. (1934) 'National Income, 1929–1932', Report presented to the 73rd US Congress, 2d session, Senate document no. 124, page 7. Reprinted as "National Income, 1929 1932, NBER Bulletin 49, 7 June 1934.
- Lundberg, W. (1971) 'Simon Kuznets' Contribution to Economics,' *Swedish Journal of Economics*, 73 (4), pp. 444-459.
- Mallet, V. 'Environmental Damage Costs India \$80bn a Year', *Financial Times*, 17 July 2013. Available online: http://www.ft.com/intl/cms/s/0/0a89f3a8-eeca-11e2-98dd-00144feabdc0.html (accessed 5 July 2015).
- Meadows, D. et. al. (1972) The Limits to Growth. New York: Universe Books.
- News of the Communist Party of China (2013) 'President XI promises to shake GDP obsession in promoting officials', 1 July 2013. Available online:

 http://english.cpc.people.com.cn/206972/206974/8305576.html (accessed 5 July 2015).
- Nordhaus, W. and Tobin, J. (1973) 'Is Growth Obsolete?', reprinted from M. Moss. (ed.)

 The Measurement of Economic and Social Performance, special issue of Studies in

- Income and Wealth, 38 (1973), pp. 509-532.
- Noren, J. (2003) 'CIA's Analysis of the Soviet Economy,' in G. K. Haines and R. E. Leggett (eds), Watching the Bear: Essays on CIA's Analysis of the Soviet Union. Washington: Central Intelligence Agency.
- O'Neill, J. (2001) 'Building Better Global Economic BRICs', *Global Economics Paper No.*66. New York: Goldman Sachs.
- O'Neill, J. (2013) The BRIC Road to Growth. London: London Publishing Partnership).
- OECD Observer (2005)'Is GDP a Satisfactory Measure of Growth?', Issue 246-247, 2004-2005. Available online:
 - http://www.oecdobserver.org/news/archivestory.php/aid/1518/Is_GDP_a_satisfactory_measure_of_growth_.html (accessed 5 July 2015).
- Petty, W. (1986) The Economic Writings. Fairfield, NJ: Augustus M. Kelley.
- Piketty, T. (2014) Capital in the 21st Century. Cambridge MA: Belknap Press.
- Randers, J. (2012) 2052. A Global Forecast for the Next Forty Years. White River Junction: Chelsea Green.
- Repetto, R. et al. (1989) Wasting Assets: Natural Resources in the National Income Accounts. Washington: World Resources Institute.
- Rifkin, J. (2011) The Third Industrial Revolution (Basingstoke: Palgrave).
- Rist, G. (2010) *The History of Development. From Western Origins to Global Faith*. 3rd Edition. London: Zed Books.
- Roubini, N. and Mihm, S. (2010) Crisis Economics: A Crash Course in the Future of Finance. New York: The Penguin Press.
- Rubin, J. (2009) Why Your World is About to Get a Whole Lot Smaller: Oil and the End of

- Globalization (New Work: Random House, 2009).
- Stratton, A. (2010) 'David Cameron aims to make happiness the new GDP', *The Guardian*, 14 November 2010. Available online:

 http://www.theguardian.com/politics/2010/nov/14/david-cameron-wellbeing-inquiry (accessed 5 July 2015).
- Sukdhev, P. (2012) Corporation 2020: Transforming Business for Tomorrow's World.

 Washington, DC: Island Press.
- Togtokh, C. and Gaffney, O. (2010) 'Human Sustainable Development Index', *Our World*, 5 November 2010. Available online: http://ourworld.unu.edu/en/the-2010-human-sustainable-development-index (accessed 5 July 2015).
- UN News Centre (2012) 'Ban: New economic Paradigm Needed, Including Social and Environmental progress,' *UN News Centre*, 2 April 2012. Available online: http://www.un.org/apps/news/story.asp?NewsID=41685#.VZbGJIU5vP8 (accessed 5 July 2015).
- UNDESA (2012) Trends in International Migrant Stock: Migrants by Destination and Origin. United Nations database, POP/DB/MIG/Stock/Rev.2012. New York: United Nations.
- Whoriskey, P. (2011) 'If You Are Happy and You Know It...Let the Government Know', *The Washington Post*, 29 March 2012. Available online:

 http://www.washingtonpost.com/business/economy/if-youre-happy-and-you-know-it-let-the-government-know/2012/03/29/gIQAlSL2jS_story.html (accessed 5 July 2015).
- Wildau, G. (2014) 'Small Cities Steer Away from GDP as a Measure of Success,'

Financial Times, 13 August 2014. Available online:

http://www.ft.com/intl/cms/s/0/a0288bd4-22b0-11e4-8dae-

00144feabdc0.html#axzz3FvlTScZh (accessed 5 July 2015).

Wilkinson, R. and Pickett, K. (2009) The Spirit Level: Why Greater Equality is Better for Everyone. London: Allen Lane.

World Bank (2014) The Little Green Data Book 2014. Washington, DC: World Bank.

Endnotes

¹ See www.happyplanetindex.org, accessed 5 July 2015.

² This selection is purely indicative and, although relying on the latest available data, it by no means suggests that there are no other countries that may quality for alternative G7 groupings.

³ Botswana and Mauritius are indeed the best performing countries on the Ibrahim Index of African Governance and Transparency International's Corruption Perceptions Index.