# Spotlight

## We Can't Eat GDP: Global Trends on Alternative Indicators

The Gross Domestic Product (GDP) is the best-known "number" in economic governance. It drives national policies, sets priorities in the social fields (e.g. there exists a ratio between GDP and how much spending in welfare is considered appropriate by many countries) and ultimately affects the societal landscape of a country (e.g. by determining labour-business relations, work-life balances and the type of consumption patterns adopted by citizens). The type of industrial model supported by GDP dominates physical and infrastructural geography, from the shape of cities and their relation with the countryside to the management of parks and natural resources. Marketing strategies, advertising and lifestyles are permeated by its influence. Yet, we cannot eat GDP: this number is indeed an abstraction of real wealth and a very skewed measurement of economic performance, let alone human welfare. Therefore, a variety of alternative indicators was created to promote different ideas of progress and incorporate concepts like sustainable development and wellbeing.

### Gross Domestic "Problem": why GDP doesn't add up

GDP is not a measure of "all" economic activities. Because of its design, it only counts what is formally transacted in the market, which means that other economic activities occurring in the "informal" economy or within households as well as a variety of services made available free of charge, from volunteering to the ecosystem services provided by nature that allow our economies to function, are not counted as part of economic growth (Fioramonti 2013, p. 6f.). This generates evident paradoxes. Take the case of a country in which natural resources are considered common goods and made available for public access, people exchange goods and services through informal structures (e.g. barter markets, second-hand markets, community-based exchange initiatives, time banks, etc.) and most people produce what they consume (e.g. through low scale farming, off-the-grid systems of energy distribution, etc.). This country would be rated as "poor" by GDP, because this number only registers an economic performance when natural resources are marketized and services are provided at a cost. GDP encourages us to destroy "real" wealth, from social connects to natural resources, to replace it with money-based transactions. As reported by the Organisation for Economic Co-operation and Development (OECD), "[i]f 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 2004-2005).

## New indicators for a post-GDP world

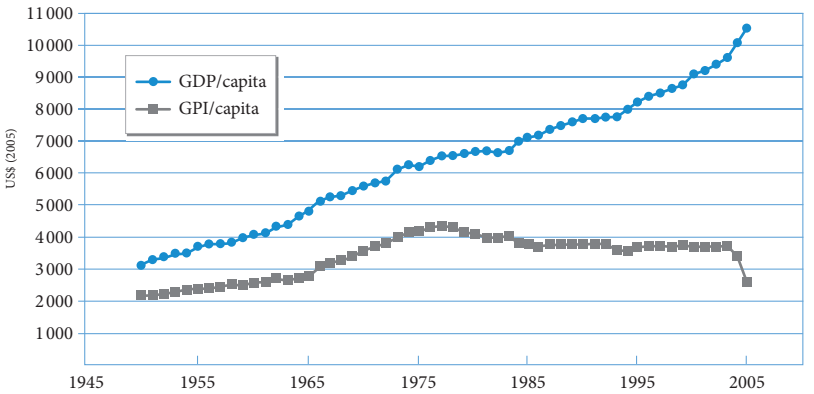
There is growing agreement among scholars and policymakers that we need to move beyond GDP. In 2004, the OECD launched a reflection on wellbeing indicators at the World Forum on Statistics, Knowledge and Policy. In 2007, the EU hosted a "Beyond GDP" conference and released a communication two years later. In 2009, a commission set up by former French president Sarkozy and chaired by Nobel laureates Joseph Stiglitz and Amartya Sen published a comprehensive report on measures of economic performance and social progress (Stiglitz/Sen/Fitoussi 2009). A number of governments have set up similar commissions ever since.

Alternative indicators have mushroomed in the past decades. A first attempt was made by Nobel laureates William Nordhaus and James Tobin in the early 1970s, when they developed an index called Measure of Economic Welfare, which "corrected" GDP by adding the economic contribution of households and excluding "bad" transactions, such as military expenses (1973, p. 513). The economist Robert Eisner published a Total Incomes System of Accounts in 1989 with a view to integrating GDP with non-market activities such as household services and informal economies (1989, p. 13). This process of partial revisions culminated with the Genuine Progress Indicator (GPI), introduced later in the 1990s, which was the first systematic recalculation of GDP by measuring a vast array of social and environmental costs/benefits that impact human welfare (Daly/Cobb 1994, p. 482). 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 underemployment), family breakdown and the economic losses associated with resource depletion, defensive expenditures, long term environmental damage (wetlands, ozone, farmland). A paper published in 2013 shows unequivocally that, 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 1978 the world has increased its GDP at the expense of social, economic and ecological welfare (Kubiszewski et al. 2013) [see Figure 1].

While the GPI is the most comprehensive example of a synthetic index combining economic, social and environmental dimensions, since the Rio+20 summit of 2012, there has been a specific emphasis on accounting for natural capital. 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, thus representing nature as having no economic value (Fioramonti 2014, p. 104ff.). Moreover, GDP disregards also the costs that man-made production

**Figure 1: Genuine progress splits from GDP in the 1970s**

Genuine Progress Indicator (GPI) per capita and GDP per capita, 1950–2005




Source: Kubiszewski 2013, p. 63

processes impose on natural systems, like pollution. Yet, these costs are real and have a direct bearing on human wellbeing and our countries' economic performance.

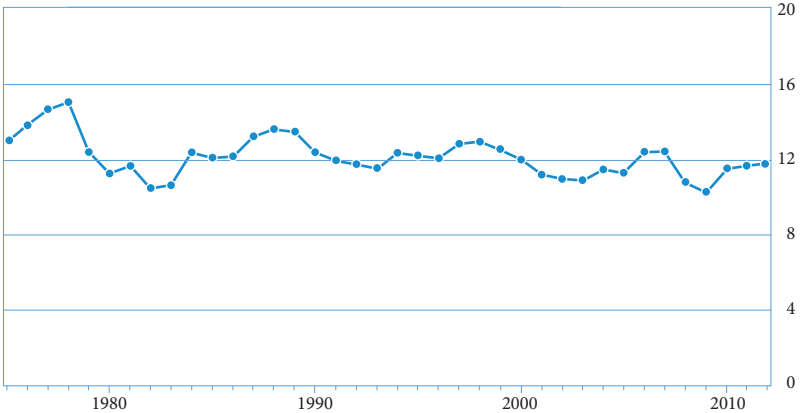
Although the focus on natural capital has become central in the "Beyond GDP" debate, only two indicators have been produced so far. The most recent, the Inclusive Wealth Index (IWI) published by the UN University International Human Dimensions Programme, distinguishes between produced, human and natural capital. In a pilot application to 20 countries, the IWI shows that natural capital is the most significant resource for most countries, especially the least affluent ones. A similar approach to natural capital is adopted by the World Bank's Adjusted Net Savings (ANS), which – unlike the IWI – covers most countries around the world and presents data over a longer period of it. The ANS takes into account the depletion of natural resources and the costs of pollution and balances them against investments in human capital (education) and produced capital that is not used for immediate consumption. The results show that, despite impressive growth in the past half a century, environmental degradation has cancelled out global economic growth [see Figure 2].

Both the IWI and the ANS apply monetary units to the calculation of the value of natural capital. Although this allows aggregating different types of capital (and thus subtract depletion of resources and environmental degradation from GDP), it is by no means the only approach. Other indicators measure environmental damage in physical units. Undoubtedly the best known of these indicators is the Ecological Footprint produced by the Global Footprint Network.

A final group of indicators focuses more specifically on wellbeing, prosperity and happiness. Some of these measurements also use subjective evaluations, normally based on public opinion polls, along with "hard" economic and

**Figure 2: Global economic growth is flat when including the costs of environmental damage**

Adjusted net savings, excluding particulate emission damage (% of GNI), 1975–2012



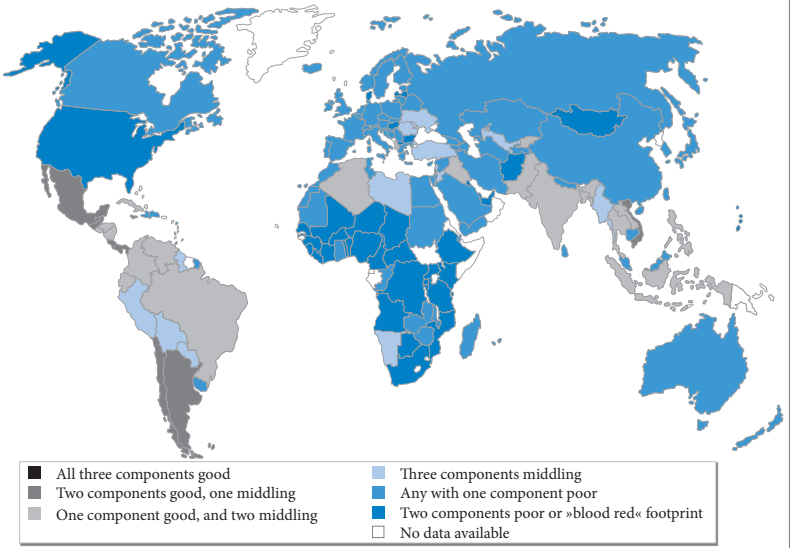

**Note:** Adjusted net savings estimated by the World Bank.

Source: https://datamarket.com/data/set/15bb/adjusted-net-savings-excluding-particulate-emission-damage-of-gni#!ds=15bb!hc7=4z&display=line&include-y=0, 21.10.2014

social data, as is the case with the OECD Better Life Index, the Social Progress Index and the Legatum Prosperity Index. Other indicators look specifically at the national level, e.g. the Canadian Index of Wellbeing or Bhutan's Gross National Happiness Index, which is a comprehensive set of nine dimensions, first calculated in 2008. An interesting attempt to combine measures of welfare with ecological impact is the Happy Planet Index developed by the UK-based New Economics Foundation in 2006. The index complements the ecological footprint with life satisfaction and life expectancy. Ever since its creation, the index has consistently 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 [see Figure 3]. Costa Rica was identified as the most successful country at generating "happy" and long lives, without a heavy impact on the planet's resources. Similar results were achieved by the UN University when it revised its Human Development Index (HDI), which looks at income, literacy and life expectancy, adding an additional parameter of sustainability by looking at selected environmental indicators (UNDP 2014, p. 212ff.). The data showed that countries such as the US and Canada, which enjoy one of the highest human developments in the world, do so at a huge environmental cost for themselves and for humanity. A conventionally poor country such as Cuba and other emerging countries in South America, such as Ecuador, are among those achieving the highest level of human development with an acceptable and replicable footprint.

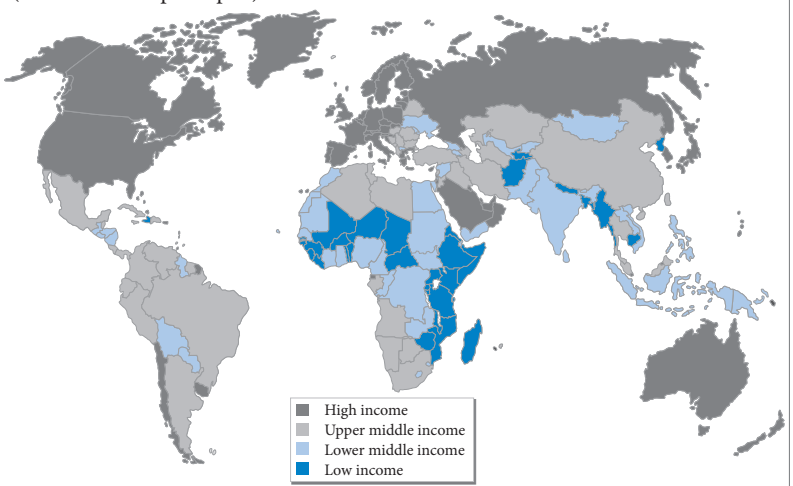
**Figure 3: High levels of satisfaction are not necessarily accompanied by a high level of income**

**The Happy Planet Index 2012**
(based on experienced wellbeing, life expectancy and ecological footprint)




Source: http://www.happyplanetindex.org/assets/hpi-data.xlsx, 22.10.2014

**World Bank Income Groups**
(based on GDP per capita)




Source: http://data.worldbank.org/about/country-and-lending-groups, 22.10.2014

## Conclusion

This brief review of trends in alternative indicators is by no means exhaustive. New numbers are being produced at an unprecedented rate, as new data is made available and shared across the world. We have reviewed the most prominent indicators to date, by dividing them into three loose categories: progress, sustainable development and wellbeing. All these indicators show a similar pattern: increases in GDP have often corresponded to diminishing wellbeing (at least after a certain threshold) and have come at huge environmental and social costs. When these costs are taken into account, most growth the world has experienced since the mid-20th century vanishes. At the same time, these numbers show that it is possible to achieve good levels of wellbeing and social progress without endangering natural and social equilibria.

Some of these indicators are being applied in a wide range of policy fields. UN-sponsored indicators (from the IWI to the HDI) have been integrated into global summits. In particular, natural capital is featuring prominently in the current debate on the post-2015 Sustainable Development Goals. The GPI has been adopted in a handful of states in the US, with a view to designing policies better attuned to genuine progress. More than twenty nations have conducted national reviews of their ecological footprint.

What is needed now is a concerted effort to use the wealth of information provided through alternative indicators to replace GDP as the leading indicator in global economic governance. While on the side of measurement, it seems as if the "Beyond GDP" debate has reached a significant level of sophistication, it is on the policy level that we are yet to see a coherent initiative to redesign the global economy based on a new system of metrics.

## References

Daly, Herman E./John B. Cobb 1994 For the Common Good. Redirecting the Economy toward Community, the Environment and a Sustainable Future, 2nd edition, Boston.

Eisner, Robert 1989: Total Incomes System of Accounts, Chicago.

Fioramonti, Lorenzo 2013: Gross Domestic Problem. The Politics Behind the World's Most Powerful Number, London.

Fioramonti, Lorenzo 2014: How Numbers Rule the World. The Use and Abuse of Statistics in Global Politics, London.

Kubiszewski, Ida/Robert Costanza/Carol Franco/Philip Lawn/John Talberth/Tim Jackson/Camille Aylmer. 2013: Beyond GDP: Measuring and Achieving Global Genuine Progress, in: Ecological Economics, Vol. 93/Sept., p. 57-68.

Nordhaus, William D./James Tobin 1973: Is Growth Obsolete?, in: Milton Moss (ed.), The Measurement of Economic and Social Performance (Studies in Income and Wealth, Vol. 38, NBER, 1973), New York, p. 509-532.

OECD (Organisation for Economic Co-operation and Development) Observer 2004-2005: Is GDP a Satisfactory Measure of Growth?, No. 246-247, December 2004-January 2005, Paris (http://www.oecdobserver.org/news/archivestory.php/aid/1518/Is_GDP_a_satisfactory_measure_of_growth_.html, 11.10.2014).

Stiglitz, Joseph E./Amartya Sen/Jean-Paul Fitoussi 2009: Report by the Commission on the Measurement of Economic Performance and Social Progress, Paris (http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf, 22.10.2014).

UNDP (United Nations Development Programme) 2014: Human Development Report 2014. Sustaining human progress: Reducing vulnerabilities and building resilience, New York.

Lorenzo Fioramonti