What makes the Inclusive Wealth Index different to other indices?

Partha Dasgupta: It is important to understand that the IWI is an index based on an analytical framework – many other indices have no such framework. The peculiarity of the IWI is that it focuses on the “means” (or determinants of well-being) not on the “ends” (or constituents of well-being). Indices of overall happiness or well-being are trying to measure the end itself, while the IWI is measuring the means (input or source) to achieve those ends. The definition of sustainability in the IWI is that the overall wealth per capita should not decrease over time, meaning that future members of the society have at least the same amount of wealth (e.g. financial capital, natural capital, and human capital) at their disposal as the current generations have.

For the aggregation and normalisation of different asset classes (manufactured capital, natural capital or human capital) the IWI uses shadow prices (i.e. prices to reflect marginal value to society of an additional unit) rather than market prices. If a country implements a project with a positive internal rate of return, the IWI records a net positive outcome.

Dr. Pablo Muñoz: Among the notable improvements, the 2014 edition extends the country samples from 20 to 140 countries, encompassing about 95% of the world population and 99% of the global GDP. We have also expanded the time span from 1990-2008 to 1990-2010 and we improved our measures of total factor productivity and forest wealth accounts.

Some of our key findings are:

• Empirical evidence shows positive average growth in...
per capita inclusive wealth – and thus progress towards sustainable development – in 85 of the 140 countries evaluated (approximately 60%). Gains in inclusive wealth among the countries analysed were in general smaller than those in GDP and in the Human Development Index (HDI); 124 of 140 nations experienced gains in GDP, while 135 of 140 showed improvements in HDI over the same period.

- Human capital is the foremost contributor to growth rates in inclusive wealth in 101 out of 140 countries. In 27 countries produced capital was the primary contributor. On average, human capital contributed 55% of overall gains in inclusive wealth, while produced capital contributed 32% and natural capital 13%.
- Population growth and the depreciation of natural capital constitute the main driving forces of declining wealth per capita in the majority of countries. Population increased in 127 of 140 countries, while natural capital declined in 116 out of 140 countries. Although both factors negatively affect growth in wealth per capita, changes in population were responsible for greater declines.
- Produced capital, the capital type most measured, represents only about 18% of the total wealth of nations. The remaining capital types constitute 82% of wealth: 54% in human capital and 28% in natural capital.
- After adjusting for carbon damage, oil capital gains, and total factor productivity, the number of overall progressing countries drops from 85 to 62 (out of 140). Results show that all three factors negatively affected inclusive wealth in most of the countries; of the three, total factor productivity adjustments had the greatest negative effect.

### From your experience with the use of the IWI, which data or information gaps in the current IWI are most damaging for its ability to provide sound information to policy makers?

Partha Dasgupta: Climate change effects are difficult to capture and hence remain a limiting factor in policy recommendation. Shadow prices can tell us more if we can measure the full benefits of assets, as some assets produce multiple benefits, which the current shadow pricing system does not integrate yet. We have observed this in our analysis of natural capital assets.

If we want to give better direction to decision-makers to protect the common natural capital, we must not overstate the importance of capital assets for human well-being, and adjust our set of social prices to better reflect reality.

At the moment only ecosystem services with some market values are integrated into the calculations. How well do you think the values represent the services, and what has been their contribution to the IWI? Do you have any plans to go further? What are the main obstacles?

Pablo Muñoz: When accounting for the resource base of a nation, going beyond produced capital, there are many challenges in terms of data and methods to capture the contribution of other asset categories such as human and natural capital.

One example could be for instance the inclusion of ecosystem services resulting from nature. Many of these services are indeed not evaluated in the market, and policies may ignore their importance when implementing projects.

In this edition of the IWR, we “weighted” the contribution of several of the forest ecosystem services by those values reported by the TEEB (The Economics of Ecosystems and Biodiversity) initiative. With the insights of the TEEB report, we improved our approach in estimating the shadow (or social) prices for the “non timber forest benefits”. Estimates report that the value of the services provided by a forest hectare range between US$ 2000 - 3000 per hectare per year. These shadow prices not only capture benefits such as food, but also regulating and recreation services. We hope to keep integrating ecosystem services provided by other types of biomasses.

The loss of species plays an important role in biodiversity production. How can the IWI place a measurable value on the future research lost due to the extinction of species?

Partha Dasgupta: We could have avoided this issue if more environmental objectives were integrated in the Millennium Development Goals. As they were not, we are lagging well behind biodiversity production goals and biodiversity indicators.

Pablo Muñoz: There is still an important body of work to be developed in this area to better reflect how biodiversity is contributing to human well-being in order to make visible such contributions also in the indices of social progress. We are in very early development steps in this area in the IWR.

The issue of social cohesion features strongly in the discussion on Beyond GDP. Do you have any plans to include this issue in the IWI?

Partha Dasgupta: Although social cohesion is not included as an explicit capital category as some people would think appropriate, this does not mean that social capital and social cohesion are ignored by the IWI as they are captured indirectly. The effects of institutional and social factors need to be assessed on a country by country basis.

A teacher’s productivity (e.g. contribution to knowledge-building) is calculated in shadow prices. The shadow prices in this example would measure the additional value for society of hiring an additional teacher. A teacher in Norway and one in Zimbabwe will create comparatively different levels of human capital. In Zimbabwe, poor standards, lack of training, lack of equipment and widespread corruption would mean that the additional value of the teacher is much smaller than it could potentially be. This is not the case in Norway, given the highly developed institutional standards.

Pablo Muñoz: A very important component in the calculations of the IWI is total factor productivity, which captures some of the “social capital” or “social cohesion” of a country. Total factor productivity seeks to measure the real role technological innovation and creativity plays in production, as well as other implicit capital types not yet accounted in building the inclusive wealth of the country. Total factor productivity does not explicitly capture the contribution of one particular asset, but instead captures the contributions of several “missing” assets – assets not explicitly accounted for in our wealth calculations. The total factor productivity growth measures represent the contribution of “residual” production factors to GDP growth after the three types of capital (human, produced, and natural capital) are accounted for. For example, estimates of capture types of social capital, which influence the value of financial capital (e.g. institutions that allow efficient capital allocation) or human capital (e.g. efficient job markets and habits that allow well educated people to find the right jobs).
In the spotlight

To include or to miss out? – The dilemma of which dimensions to include in a sustainability index

Policy-makers and development practitioners have become increasingly aware of the limitations of using GDP as an indicator of progress. In light of multiple economic, social and environmental crises, there is a growing consensus for the need for developing alternative indicators to measuring sustainability and using these in policy making towards progress of our societies. However, sustainability is a very broad concept, and there are many ways in which it can be defined and measured. Famously, the Brundtland Commission* (1987) defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

In order to measure sustainability, a number of key methodological choices must be made.

- Firstly, there is the choice between using a set of indicators vs. one index (or composite indicator). There is an increasing preference for developing composite indicators, because they can communicate complex phenomena simply and powerfully, even though they are more subject to criticism for their potential limitations.

- Secondly, both for indicator sets and indices, one needs to carefully select the component indicators (on which the indicators set or index is based), while adopting a clear conceptual framework.

The choice of indicators for indicator sets and indices is challenging and needs to be driven by a number of considerations. Firstly, developers of indicator sets and indices need to decide on the issues that they want to measure, which will be largely based on the theoretical framework and on the value judgements applied. Secondly, there is the important question of data availability and of the quality criteria for the indicators, as problems could relate to “insufficient robust data” and “consistency of aggregation”.

If an issue is regarded as valuable for inclusion in the sustainability index, it is nevertheless possible that robust data are lacking, and if data are available, the form may not necessarily fit the chosen theoretical framework. In such cases, the developer of the index will need to strike a balance between two challenges: either omitting the issue and its measurements from the index (and implicitly setting its importance or weight to zero), or choosing to include data that lacks quality or does not fit readily into the chosen aggregation framework. Both choices will attract heavy criticism.

For instance, the highly documented environmental sustainability index, the Ecological Footprint, is criticised on the one hand for the methodological choices, which convert every dataset into “global hectares” - a synthetic unit, and on the other hand for encompassing only some measures of environmental sustainability into its framework.

Examples demonstrating the difficulties in striking this balance can be found for any composite indicator that tries to measure economic, environmental and social sustainability:

- The UNU-IHDP and UNEP Inclusive Wealth Index (IWI) measures sustainable development in terms of wealth per capita, which should not decrease over time. In the IWI, wealth per capita not only includes financial or other produced capital but also human capital and natural capital. Instead of applying a standard weighting scheme, the IWI aggregates each category with respective shadow prices (i.e. prices to reflect marginal value to society of an additional unit rather than market prices) as relative weights. The disadvantage of this consistent methodology is the difficulty of integrating issues where shadow prices are difficult to calculate. So for example if a country is reducing its stock of forest, the IWI will show this loss of natural capital using estimates of the lost future timber income and some estimates for “Non timber forest benefits” mainly based on recreational uses of the forest. However it is likely that the loss of forest also goes hand in hand with a loss of biodiversity in the forest and this is currently not captured in the IWI estimates due to lack of data. The same argument applies for issues like social cohesion, where the current estimates are not able to capture all benefits which society derives from social cohesion.

- The World Economic Forum (WEF) Global Competitiveness Index (GCI) calculates the microeconomic and macroeconomic activities that drive national competitiveness. Although the GCI stands as a reliable measure of productivity and economic performance, the WEF has recently recognised that other important elements in the development process must be accounted for, in order for it to accurately measure a sustainable, equitable and just society. By adjusting the GCI by two (social and environmental) sustainability factors, the sustainability adjusted global competitiveness index (SGCI) gives a better understanding of these goals. Each adjustment factor is calculated on the basis of a broad range of environmental and social variables. The weighting of those variables is not performed within a systematic framework but via subjective but
From 1992 to 2010, total global GDP grew by 50%. However, according to the 2014 Inclusive Wealth Report (IWR), when changes in human capital, natural capital and produced capital are considered, global wealth increased by an “anemic” 6% over the same period. Relatively low increases in human capital combined with vast losses in natural capital largely explain this trend, despite enormous growth in produced capital. The Inclusive Wealth Index, first launched at the Rio+20 conference, presents countries with a new approach to measuring their wealth, growth and societal progress in more inclusive and sustainable ways, complementing GDP by quantifying two key but poorly understood components of wealth: natural capital and human capital. It is a joint initiative of the UN University – International Human Dimensions Programme (UNU-IHDP) and the UN Environment Programme (UNEP).

6.11.2014
UN Experts group releases “A World That Counts” report

The Independent Expert Advisory Group (IEAG) on a Data Revolution for Sustainable Development has delivered its report “A World That Counts: Mobilising The Data Revolution for Sustainable Development”. This expert group has been initiated by UN Secretary-General Ban Ki-moon in order to make concrete recommendations on improving data for achieving and monitoring sustainable development. The report makes three main recommendations: First, the promotion of innovation to address data gaps; second, the mobilisation of resources to cope with inequalities between developed and developing countries and between data-poor and data-rich people; and third, the leadership and coordination to improve data quality and to prevent data abuses.

These examples illustrate the complexity of developing a composite sustainability indicator. Despite their inherent limitations, such indices evidently provide useful insights, particularly in tackling important environmental and social factors, which are ignored by single indicators such as GDP. In addition, such indices have the power to summarise complex phenomena in one single figure, which has a great advantage in terms of communication as they easily reach policy makers, the media and general public.

In practice, even indices that miss certain dimensions of sustainability can be used (including for policy making) if the user can dig deep into the sub-indices and identify the root causes of trends in time and among countries, can understand the shortcomings and can resort to complementary indicators when necessary.

If that transparency is available, then comprehensive sustainability indicators can be useful for policy makers to help them understanding the possible trade-offs of decisions that they will take. This has the potential to improve governance and policymaking, integrating wider well-being, social, environmental, economic and progress concerns, improving the added-value of policy and contributions to sustainability.

In brief

10.12.2014
Inclusive Wealth Report reveals weak growth of global wealth

From 1992 to 2010, total global GDP grew by 50%. However, according to the 2014 Inclusive Wealth Report (IWR), when changes in human capital, natural capital and produced capital are considered, global wealth increased by an “anemic” 6% over the same period. Relatively low increases in human capital combined with vast losses in natural capital largely explain this trend, despite enormous growth in produced capital. The Inclusive Wealth Index, first launched at the Rio+20 conference, presents countries with a new approach to measuring their wealth, growth and societal progress in more inclusive and sustainable ways, complementing GDP by quantifying two key but poorly understood components of wealth: natural capital and human capital. It is a joint initiative of the UN University – International Human Dimensions Programme (UNU-IHDP) and the UN Environment Programme (UNEP).

15.10.2014
Real Britain Index - an appropriate measure of living standards?

The New Economics Foundation (NEF) has developed the Real Britain Index (RBI), which aims to provide a more suitable indicator for measuring inflation than the Consumer Price Index (CPI). While the CPI is based on average “baskets of goods” across society, the RBI takes into account the different spending patterns of households, depending on their income. By calculating the real inflation rate for each income decile in the UK, the RBI reveals that especially low earners, but also medium earners have constantly been confronted with higher inflation rates than indicated by the CPI. Between 2011 and 2013, data shows that the earnings of the top 10% have recovered, whereas the poorest 10% have experienced a fall in their income by 14.8%, pointing at the rising inequality within the UK.

More information on the NEF blog.
10.10.2014
EC holds expert conference on “Moving ‘beyond GDP’ in European economic governance”

A high-level expert conference on “Moving beyond GDP in European economic governance” was held by the European Commission in cooperation with the Italian Presidency of the Council. Around 175 stakeholders from national and international administrations, statistical offices and research institutes attended the conference. It provided an overview of the progress made in measuring well-being and societal welfare and discussed whether the Beyond GDP agenda has contributed to improving policy making. In spite of remarkable achievements in the capacity to measure different aspects of development and quality of life, GDP still occupies a central role in shaping and communicating policies. The panels with the outgoing EU commissioners Laszlo Andor and Janez Potočnik also clearly pointed to existing processes like Impact Assessment and the European Semester as the best ways to embed Beyond GDP thinking in policy making.

Kick-off meeting of the Independent Advisory Expert Group: UN initiative on data revolution

The Independent Expert Advisory Group (IEAG) on a Data Revolution for Sustainable Development first met at the end of September 2014. This group has been initiated by UN Secretary-General Ban Ki-moon in order to make concrete recommendations on measures necessary to close data gaps, to see opportunities for new innovations and to strengthen national statistical capacities. The suggestions are expected to significantly shape the post-2015 development agenda. Enrico Giovannini, co-chair of the IAEG, and Eva Jespersen, UNDP’s representative on the IAEG, further stressed that issues such as participation, human security or sustainability are vital components of human development, but not easy to measure. A data revolution should help to improve the measurement of such aspects, both conceptually and statistically.

Find more information
Read the full articles of E. Giovannini and E. Jespersen and on the kick-off meeting of the IEAG.