

Nature Counts: Accounting for the Environment in National Statistics

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Global “Beyond GDP” agenda

- Long recognized that GDP was not a good measure of wellbeing
- Yet over time, took on increasing importance—focus of attention
- Multiple omissions
 - Inequality
 - Insecurity, leisure, and other aspects of subjective wellbeing
 - Sustainability in all of its dimensions
- Important—what we measure affects what we do; what we don’t measure won’t be acted on
- Sarkozy Commission, OECD Better Living Index
- Now being incorporated in decision making by many governments
 - Including in budgeting by some treasuries

Sustainability

- Best measure of ability to sustain standards of living is captured by wealth
 - Physical capital
 - Human capital
 - Social capital
 - Natural Capital
- Critical problem is *valuation*, determining relevant prices
 - Especially hard in context of biodiversity
 - But even for climate change
 - Debate about the social cost of carbon
- But we know *zero* is not the right price
 - Implicit price we assign when we ignore natural capital

Need for a dashboard

- International Commission on the Measurement of Economic Performance and Social Progress recommended using a dashboard, so that we could at least keep tabs on what is happening quantitatively to key aspects of the environment
- Such metrics should be an important part of our system of national statistics
 - Carbon emissions
 - Key air pollutants
 - Wetlands
 - Other components of natural capital
- Argued for dashboard both because of loss of relevant information through aggregation and because of uncertainties in valuations (thereby increasing uncertainties associated with aggregates)

Multiple uses for quantitative assessments of natural capital and how it is changing

- Discussed in other papers in this session
 - At both national and international levels
- Need to track what is happening—are we living within our planetary boundaries?
 - In what dimensions are we failing?
- To what extent are our policies responsible for what is happening?
 - Measuring natural capital, in its multiple dimensions, directs attention of policy makers towards sustaining and enhancing natural capital
 - To taking into account how different policies might affect natural capital in different ways
 - Policies in many arenas (within many departments of government) affect natural capital

Estimating values

- In some cases, we can provide good estimates (or bounds) of valuations
 - Capturing effects on health and life expectancy
 - Reliable estimates of the effects on health and life expectancy
 - Economic evaluations of these consequences can sometimes be done through *inference* based on choices made in other contexts
 - Methodologies for capturing individual valuations of other aspects of the environment
 - Social cost of carbon, derived from target consistent approach—approaches consistent with achieving globally agreed objective of limiting climate change to 1.5 to 2 degrees C.
 - Appropriate approaches need to take risk into account
 - We've come to appreciate the importance of climate risk—key driver in climate policy
 - Appropriate treatment typically results in a higher value to the decrease in key components of natural capital
 - Higher value to the social cost of carbon
 - Similarly, there are large risks associated with the deterioration of other aspects of natural capital, the degradation of the environment

Aggregation

- When we obtain reasonable estimates of what is happening to various components of natural capital, can use these numbers to assess whether economic growth is sustainable—and to assess whether today's consumption comes at the expense of the wellbeing of future generations
 - Including risks that we are imposing upon them

Promoting national and global dialogues

- Need scientific assessments of the consequences of the changes in natural capital and the magnitudes of the changes in natural capital
- Economic evaluations of these consequences can sometimes be done through *inference*—values derived from valuations individuals place on health—or values individuals assign to environment
- Because of large risk and absence of markets in many of relevant areas, we need policy dialogues to make assessments, to complement assessments made by inference
 - Can “back out” social valuations from these deliberations
 - Example: international decision on climate change—target consistent approach enables us to make inference about societal views about risk
- But to repeat: Zero is not the right number; omission of natural capital from systems of national accounts is a major omission