



Economics Briefing 7

Beyond GDP: Valuing what matters and measuring natural capital – what indicators can we use?

This briefing summarises the debate around GDP (Gross Domestic Product) and alternatives to it. It will explain what GDP is and how it is calculated, consider the problems with GDP, and outline some of the alternatives. It will conclude by exploring the relevance of this debate for environmental NGOs, and suggest some criteria for how environmental NGOs should judge these alternatives.

Introduction:

GDP (Gross Domestic Product) “*measures everything except that which makes life worthwhile*”. These oft-repeated words were first spoken by US Senator Robert Kennedy back in 1968. And yet GDP is still heavily relied upon, not just as a measure of production within the market economy, as it was intended to be, nor even just as a measure of economic performance, but indeed as a measure of the success of society itself. Countries are categorised and afforded privileges on account of their GDP, politicians stand or fall based on the trends that GDP takes during their terms, and influential economists provide policy advice both to developed and developing countries on the grounds of the expected impact on GDP.

What is GDP?

GDP measures the values of goods and services produced within a country’s borders over a given time period, and can be expressed using the following formula:

$$\text{GDP} = \text{consumption} + \text{investment} + \text{government spending} + \text{exports} - \text{imports}$$

Value of goods and services is measured in terms of market prices. GDP is calculated from the National Accounts, which are a systematised, comprehensive set of accounts covering many aspects of a country’s economy. GDP is derived in three ways:

- The sum of the value added during **production** (e.g. the difference in value

between bits of leather and a completed shoe)

- The sum of **expenditures** on final goods and services by households, firms and government (expenditure on the shoe by a consumer counts as a *final good*, but expenditure by a bootmaker on leather doesn't as in this case leather is an *intermediate good*)
- The sum of **income** generated during economic activities (wages, rental income, corporate profits).

In theory, these three different calculations of the GDP should lead to the same number, though differences in data sources mean they are never exactly the same.

Other commonly used measures of the economic activity of a nation include:

- Net Domestic Product (NDP): GDP minus the depreciation of assets and capital (e.g. the amount that one needs to spend on repairing or replacing factories and machines).
- Gross National Product (GNP): The value and goods of services produced through capital owned by residents of a country, regardless of whether that production takes place at home or abroad. The value of a T-shirt produced in China by a British company is counted in UK GNP, but not UK GDP.

There are reasons for arguing that some of these other numbers are conceptually more meaningful as indicators of economic performance, but they have played a subsidiary role to GDP for reasons of pragmatism (NDP, for example is harder to calculate) and politics (in particular, tracing GDP growth rather than GNP growth makes development in developing nations look more

impressive, as much GDP growth in developing countries is actually the result of foreign companies generating profits on their territory).

What's wrong with GDP?

Many criticisms have been levied at GDP. Some are more technical, others criticise GDP not as a measure of production, but rather as it is used as a measure of overall progress and de facto key performance indicator of a nation. The main criticisms are as follows:

1. **GDP includes what is called 'defensive expenditure', i.e. it goes up when money needs to be spent to clean up an oil spill or to buy security alarms.** Neither of these actions contribute to well-being, and often these expenditures are a defence against damage done by other sectors of the economy.
2. **GDP relies on market prices to value things**, which a) assumes that markets correctly price things (see briefing 8), and b) means that services that are not provided by the market (i.e. by the state, households or the informal economy) are not valued appropriately.
3. **GDP ignores issues of distribution** (i.e. the distribution of the benefits / wealth).
4. **GDP captures no sense of futurity or sustainability**, and indeed tends to go up with increasing environmental damage. It does not reflect scarcity of ecological resources, nor debts.
5. **Fundamentally, treating GDP as our key measure of progress implies that the more we consume in the market,**

the better. It means that other things which might be important: e.g. knowledge, leisure, social relations, health, peace, are only considered to the extent that they increase market activity.

What alternatives do we have?

Many alternative 'Beyond GDP' indicators or indicator sets have been proposed. What defines them as being 'Beyond GDP' is that they attempt to somehow comprehensively capture a sense of how well a country or part of a country is doing. They can mostly be divided into three groups:

1. **Adjustments to GDP.** Many early attempts took GDP as a starting point and attempted to add or subtract factors to address the concerns listed above. The main approach of this kind is the Index of Sustainable Economic Welfare (ISEW, also called the Genuine Progress Index, GPI) or Genuine Savings as exemplified in the [World Bank publication 'Where is the wealth of Nations?'](#)
2. **Dashboards and indicator sets.** The majority of 'Beyond GDP' initiatives today propose a set of indicators to capture 'progress', 'national well-being' or 'sustainable development'. These are often structured into between 7 and 10 domains covering areas such as material conditions, social relationships and crime. Sometimes dashboards of up to 10 indicators are produced; other times all the indicators are presented independently (often numbering in dozens). Many official government bodies have or will have such dashboards or indicator sets including the UK, the OECD,

Switzerland, Scotland, and Italy.

3. **Composite indicators.** Some initiatives based on dashboards, such as the Canadian Index of Well-Being and the Italian Quality of Regional Development Indicator (QUARS), produce an overall headline indicator by taking an average of all the component indicators. These tend not to be official initiatives, but the UN has produced a high-profile example, the Human Development Index (HDI).
4. **Subjective well-being approaches.** Many dashboards have incorporated subjective well-being measures – survey data on how people feel about their lives. But some initiatives go beyond this to place subjective well-being as central. They treat survey data from subjective well-being questions (for example asking respondents how satisfied they are with their lives overall) as representing the population's overall assessment of life. Some approaches, such as **nef's Happy Planet Index**, then combine an overall subjective indicator with environmental impact – progress is in effect defined as increasing the amount of well-being achieved per unit of resource consumption.

Horses for courses – which alternative to GDP should we use?

Which of the above four approaches one prefers tends to depend on one's reason for going 'Beyond GDP'. Adjusted GDP measures have proved an effective communication tool in terms of highlighting the flaws in GDP, but – beyond this simple overall message – they are hard to

communicate and interpret, and involve many assumptions about how to price different 'goods' and 'bads'. Dashboards and data sets provide lots of detailed information useful for policy-makers and analysts, but do not help much when making normative judgements. Presented with 60 indicators, it is hard to make a judgement about whether a society is progressing or not. A dashboard is neither likely to capture as much media and public attention nor inspire politicians as a single indicator like GDP. A composite indicator based on such a dashboard could potentially overcome these problems, and has the advantage of being directly linked to the individual indicators within the dashboard. However, producing such a composite is fraught with difficulties in terms of deciding on weighting and determining constituent domains.

The subjective well-being approach avoids this difficulty because, in effect, survey respondents are carrying out their own personal weighting before responding to well-being questions. The argument is that subjective well-being data provides an overall picture by integrating people's experience of all aspects of their lives. Respondents implicitly weight what is important to them. If someone lives in an area with lots of crime, but that does not bother them, then their life satisfaction will not be impaired by it. Conversely, something which might not be measured by objective measures, but is very important to an individual, will influence their life satisfaction.

From an environmental perspective, the debate around alternative measures of progress can be looked at from two perspectives. Firstly, one could focus on ensuring that environmental harm is directly integrated into measures of progress. A society which is increasing its environmental damage would then be shown to be doing

badly. This is the most direct approach. The risk is that indicators seen as 'environmental' are side-lined in policy and treated as secondary to, and indeed, in conflict with, the important business of growing the economy. Furthermore, producing a single indicator combining environmental impact with other elements of progress risks the dangers of what is known as 'weak sustainability' (i.e. the belief that man-made capital is substitutable for environmental capital) – i.e. increasing environmental pressure could be compensated for by increasing quality of life.

The second perspective is to strive for measures of progress that are not overtly environmental but lend themselves to green policy. It is not a given, but over the last 60 years data shows that GDP has a very tight relationship with environmental impact: when one increases so does the other. Subjective well-being, for example, does not. There are countries that achieve relatively high levels of subjective well-being with relatively low environmental impact. Focusing on maximising subjective well-being, if done intelligently, could lead to environmentally beneficial policies such as reducing long-distance commuting, curbing excess wealth, and attempting to tackle materialism. This perspective does not mean that measurements of environmental impact should be ignored. Rather, it ensures that the goal of reducing our environmental harm is not seen to be in conflict with our goals in terms of improving lives.

Further Reading

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The **Marine Socio–Economics Project** (MSEP) is a project funded by The Tubney Charitable Trust and coordinated by nef in partnership with the WWF, MCS, RSPB and The Wildlife Trusts.

The project aims to build socio-economic capacity and cooperation between NGOs and aid their engagement with all sectors using the marine environment.