The Economics of Well-Being
by Justin Fox

Idea in Brief

Since World War II, gross national product and its replacement, gross domestic product, have been the chief measures of national success. Now, though, governments and nonprofit groups are working to devise alternative metrics for evaluating progress.

GDP is under siege for three main reasons. One is that, even on its own terms, it is flawed: It misses lots of economic activity (unpaid household work, for example) and, as a single-number representation of vast, complex systems, is inevitably skewed. Another is that it fails to factor in economic and environmental sustainability. Finally, existing, readily available measures—educational achievement, life expectancy, and so on—may reflect well-being far better than economic output does.

Artwork: Yue Minjun, Noah's Ark, 2006, lithograph and silk screen, 105 x 134 cm

Money isn't everything. But for measuring national success, it has long been pretty much the only thing (other than, of course, sports). The specific metric that has prevailed since World War II is the dollar value of a country's economic output, expressed first as gross national product, later as gross domestic product. This is an improvement over ranking by military victories—the most time-honored gauge. And the era of GNP and GDP has been characterized by a huge global rise in living standards and in wealth.

At the moment, though, GDP is embattled. Economists and national leaders are increasingly talking about measuring a country's status with other metrics and even with a squishy-seeming concept like "happiness." A 2009 study on alternatives to GDP, commissioned the year before by French president Nicolas Sarkozy and led by the economists Amartya Sen, Joseph Stiglitz, and Jean-Paul Fitoussi, has become a global wonk sensation. In October 2011 the Organisation for Economic Co-operation and Development (OECD)—a club of the world's wealthy nations—followed with a "How's Life?" report on "well-being" in its member countries. Each year since 2007 the private Legatum Institute has published a global Prosperity Index, a sophisticated mix of economic and other indicators. Individual nations are getting into the game, with Prime Minister David Cameron of the UK making the biggest waves by unveiling plans to measure national well-being. There are decades-old challenges to GDP as well, such as the United Nations' Human Development Index and the Kingdom of Bhutan's insistence that it is out to maximize not GNP or GDP but GNH—"gross national happiness."

As everyone in business knows, you manage what you measure. So although the replacing-GDP discussion may seem a little airy, its growing credibility in important circles could give it a real impact on economic policy. And it parallels efforts in some boardrooms to use new metrics to measure overall success. So it's worth exploring where the movement is coming from and where it might be headed. (For more on how the expansion of performance metrics leads to new management priorities, see "Runaway Capitalism," by Christopher Meyer and Julia Kirby, HBR January–February 2012.)
From Happiness Calculus to GDP

The story usually begins with Jeremy Bentham, an Englishman who in 1781 outlined a philosophy of utility that assessed the merits of an action according to how much happiness it produced. This was during the Enlightenment, when thinkers sought to replace religion-based rules with rational, scientific guides to decision making and life. Bentham suggested creating a sort of happiness calculus for any action by balancing 12 pains (the pains of the senses, the pains of awkwardness, and so on) and 14 pleasures (the pleasures of amity, the pleasures of wealth).

Although the basic idea of utility took off, Bentham’s approach to it did not. Calculating pleasure and pain in a way that could be compared from person to person was too difficult and messy. Economists, the most enthusiastic adopters of the concept, came to focus instead on the tangible expression of people’s needs and desires: what they were willing to spend money on.

This work reached an apotheosis in the 1930s, with Paul Samuelson’s attempt to explain welfare economics in purely mathematical terms. At about the same time, the economists Simon Kuznets, in the U.S., and Richard Stone, in the UK, were developing the systems of national accounting from which GNP and GDP are derived. They were not really concerned with utility; the main goal was to make it easier for policy makers to manage a national economy through financial crises and wars. But the combination of a straightforward metric, the belief among economists that spending patterns revealed all, and the rise in economists’ clout and prestige was a powerful one. In the 1940s GNP was adopted by the newly formed International Monetary Fund and World Bank as the key indicator of economic growth, and over the years it took on deeper connotations of success and well-being.

For its original purpose—measuring short-term economic fluctuations—GDP is not likely to be supplanted anytime soon. It may even be gaining ground: A major discussion is under way concerning whether the U.S. Federal Reserve and other central banks should in times of crisis focus not on inflation but on GDP growth.

Top Countries by Income

According to the UN’s 2011 Human Development Report, the nations below rank highest in per capita income.

1. Qatar
2. Liechtenstein
3. United Arab Emirates
4. Singapore
5. Luxembourg
6. Kuwait
7. Norway
8. Brunei
9. Hong Kong
10. United States

When one moves beyond short-term ups and downs, though, things get more complicated. “Our gross national product...counts air pollution and cigarette advertising and ambulances to clear our highways of carnage,” Robert F. Kennedy said on the presidential campaign trail in 1968. “It counts special locks for our doors and the jails for the people who break them. It counts the destruction of the redwood and the loss of our natural wonder in chaotic sprawl….Yet the gross national product does not allow for the health of our children, the quality of their education, or the joy of their play.”

Although Kennedy’s critique got little attention at the time, it has since become famous, and deservedly so, because it gives succinct voice to almost all the major criticisms of GDP. The three main strands have been these: (1) GDP is, even on its own terms, a faulty measure; (2) it takes no account of sustainability or durability; and (3) progress and development can be better gauged with other metrics. Let’s look at these points in detail.
Measurement error. Compiling GDP involves making a lot of choices, and even reasonable choices can lead to skewed results. Statisticians understandably favor goods and services that are bought and sold—and thus easily valued by market price—over economic activities whose value must be estimated. Such things as unpaid household work, although clearly of great economic importance, are left out of the calculations. And the value of government programs, including health care provision, is generally underrepresented, as is the value of leisure. Yet the anti-estimate bias is inconsistent: For example, “imputed rent”—an estimate of how much homeowners would pay if they didn’t own their homes—makes up about 10% of the United States’ GDP.

Another element of the inevitable arbitrariness of GDP was introduced with the switch from GNP in the 1980s and early 1990s. GNP counted the income of a country’s citizens wherever in the world it was earned. As global trade and investment grew, this measure became harder and harder to square with domestic indicators such as employment and industrial production. It made sense to switch to GDP, which measures only domestic production. The change, though, altered the growth trajectories of many countries. Developing nations with lots of foreign direct investment saw GDP grow much faster than GNP would have—but didn’t necessarily reap the benefits, because the investments’ profits went mostly to multinational corporations.

Sustainability. As Kennedy’s comments make clear, GDP can’t distinguish between economic activities that increase a nation’s wealth and ones that eat into its natural endowments (cutting redwoods), result in sickness and future cleanup costs (pollution), or merely ameliorate disasters whose costs are never accounted for (ambulances). Measuring the sustainability (environmental or otherwise) of economic growth requires making estimates, of course. Joseph Stiglitz, a leading proponent of what’s usually called green GDP, doesn’t think sustainability estimates are any more speculative than some of the estimates now included in GDP. “Taking into account resource depletion and some aspects of sustainability is fairly easy,” he told me recently.

It’s true that the challenges of tracking energy use or pollution aren’t huge. But the politics are extremely tricky. In its early days the Clinton administration pushed the Bureau of Economic Analysis—the agency that measures U.S. GDP—to develop a green GDP. A West Virginia congressman put a halt to the effort, fearing it would hurt his state’s coal mining industry. A green GDP initiative in China got much further, but it, too, was eventually derailed by opponents.

Other metrics. Many things of value in life cannot be fully captured by GDP, but they can be measured by metrics of health, education, political freedom, and the like. In the 1980s Amartya Sen began to distinguish between “commodities,” which show up in GDP, and “capabilities,” which do not. A few years later, in a project spearheaded by Mahbub ul Haq, a friend from his university days, Sen was able to put the idea into practice. The result was the most successful effort thus far to supplant GDP.

Ul Haq was a top adviser to Robert McNamara at the World Bank in the 1970s, served as Pakistan’s finance minister in the 1980s, and joined the UN Development Programme in 1989. He had long been frustrated by how hard it was for Pakistan and other poor nations to make rapid progress as measured solely by GDP, so he concocted a project to better track development, roping in Sen and several other prominent economists to help. The group decided to supplement GDP with data on life expectancy and educational attainment, which were readily available worldwide. And—this was ul Haq’s essential contribution—they combined the numbers into a simple index that allowed them to rank countries.

“I told Mahbub, ‘Look, you are a sophisticated enough guy to know that to capture complex reality in one number is just vulgar, like GDP,’” Sen recalled in a 2010 interview with the UNDP. “And he called me back later and said, ‘Amartya, you’re quite right. The Human Development Index will be vulgar. I want you to help me to do an index which is just as vulgar as GDP, except it will stand for better things.’”

The first HDI, published in 1990, put the U.S.—at the time far in the lead in terms of per capita GDP—in 10th place, behind Japan, Canada, Australia, and several small European countries. It also identified a few nations—Sri Lanka, Vietnam, and China were the standouts—that with respect to living standards were punching well above their economic weight. The HDI is now a dominant metric in development circles. And although the main index hasn’t changed much, the annual Human Development Report spotlights various other metrics, such as sustainability and income distribution. In the most recent report, the U.S. comes in fourth on the HDI but is just 23rd on the “inequality-adjusted” index.

For its composite Human Development Index, the UN measures three basic aspects of quality of life: health and longevity, knowledge, and income.

1. Norway
2. Australia
3. Netherlands
4. United States
5. New Zealand
6. Canada
7. Ireland
8. Liechtenstein
9. Germany
10. Sweden

The HDI has spawned legions of imitators, from single-issue rankings such as the Heritage Foundation’s Index of Economic Freedom and Transparency International’s Corruption Perceptions Index to broad measures of well-being such as the Legatum Prosperity Index mentioned earlier. Anybody with enough statistical skills and time on her hands can now construct national rankings to match her priorities. In fact, the OECD’s website lets those without statistical skills join in, giving visitors the option of deciding which indicators are the most important and then spitting out a personalized country list (Australia is number one on mine).

Top Countries by Human Development, Adjusted for Inequality

This UN ranking considers levels of inequality in the three aspects measured by the Human Development Index.

1. Norway
2. Australia
3. Sweden
4. Netherlands
5. Iceland
6. Ireland
7. Germany
8. Denmark
9. Switzerland
10. Slovenia

Measuring Happiness
An alternative to crunching data sets to produce a “vulgar” index is to find better ways of presenting them. In the late 1990s, after decades of practicing medicine in the developing world, Hans Rosling began teaching a course in global health at Sweden’s Karolinska Institute. As he struggled to convey the complex story of the progress he had witnessed, he enlisted his son and daughter-in-law—both artists—to help. The result was software, since acquired by Google, that animates the movement of different indicators over time. Complete with Rosling’s unhinged-sports-announcer narration, it makes an improbably compelling alternative to GDP rankings. How compelling? A talk Rosling gave at the 2006 TED conference has been viewed more than 3.8 million times.

The idea that economic and other data can be better presented with a dashboard of indicators than as a single number or ranked list is very much in the air among experts and policy makers. In Sarkozy’s 2009 report on alternatives to GDP, the word “dashboard” appears 78 times. But the notion of dashboards hasn’t captured the public’s imagination. What has is a word that shows up just 29 times in the Sarkozy report (mostly in the bibliography): “happiness.”
Perhaps this isn’t so surprising. After all, happiness is what Jeremy Bentham was out to maximize way back when. In the 1950s and 1960s psychologists and sociologists reopened the question of whether it could be quantified. Opinion polls, then entering their heyday as measurers (and in some cases determiners) of the public mood, were an obvious vehicle for the attempt.

The economist Richard Easterlin imported the happiness discussion to his discipline with a 1974 paper pointing out that the results of national happiness polls did not correlate all that well with per capita income. Rich people were generally happier than poor people in the same country, but richer countries weren’t necessarily happier than poorer ones; and beyond a certain level, rises in income over time failed to increase happiness.

It took quite a while for the so-called Easterlin paradox to garner much attention from other economists. But the recent emergence of behavioral economics, which takes psychological research seriously, has caused an explosion of surveys about happiness and well-being. The trend has been fueled by the example of Bhutan, where the former king Jigme Singye Wangchuck began talking about gross national happiness in the 1970s, shortly after he came to power. A 1987 interview with the Financial Times alerted the world to his views—sending a long parade of happiness pilgrims to Bhutan and spurring the king to eventually convert GNH into something tangible enough to measure with development indicators and polling data.

The interest in happiness surveys has also led to critical scrutiny of the Easterlin paradox. After reevaluating decades’ worth of polling data, the economists Betsey Stevenson and Justin Wolfers made headlines in 2008 by refuting the paradox—at least the part that said people in wealthy nations weren’t happier than those in poor nations. They were unable to conclusively debunk the argument that rises in income over time fail to deliver increased happiness, but the evidence they marshaled certainly muddied the waters. Meanwhile, other researchers have begun to distinguish between happiness surveys that ask people to evaluate how satisfied they are with their lives and ones that focus on emotional states at specific times. The first quality is closely linked to income; the second is not.

The psychologist and behavioral economics pioneer Daniel Kahneman has been working with the economist Alan Krueger (now the head of President Obama’s Council of Economic Advisers) on creating “national time accounts” in the U.S. These would combine time-use surveys conducted by the Bureau of Labor Statistics since 2003 with measures of economic value and maybe even happiness. The concept applies its own number-crunching precision to the study of well-being, but it uses different numbers—minutes. What’s more, there’s no obvious reason for interest groups to oppose it.

There are limits, though, to how far the Bureau of Economic Analysis is willing to go. A 2010 paper by several BEA officials concluded that any GDP expansion should “focus on economic aspects of non-market and near-market activities…and not attempt to measure the welfare effect of such interactions.” Even then, they warned, “it is critical that such an expansion of the scope of the accounts not occur at the expense of funds needed to maintain, update, and improve the existing GDP accounts.”

Money can’t buy happiness. But it could perhaps buy the ability to measure it.