

GDP and its Enemies:



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the Questionable Search for a Happiness Index

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Policy Brief

To be sure of hitting the target, shoot first, and call whatever you hit the target. **Ashleigh Brilliant**

Executive Summary

The financial crisis and global warming have led to a crisis of confidence in our traditional ways of measuring wealth because they do not take speculative risk and environmental costs into consideration. A number of alternative indexes have been proposed that would measure people's well-being and the environmental sustainability of the planet.

Even though the gross domestic product (GDP) measure has its problems, a look at the alternatives reveals that they are constructed with a specific political agenda in mind and are easily manipulated by governments. In fact, a strong argument for sticking with GDP is that it is narrow in scope and value free. It tells us what we can do, but not what we should do, and does not even try to define well-being. It fits a liberal, pluralistic society where people have different interests, preferences and attitudes to well-being. Our present environmental and financial problems can and should be solved within the intellectual framework of economic growth.

Telling us so

A recent commission on measures of well-being suggested that 'had there been more awareness of the limitations of standard metrics, like GDP, there would have been less euphoria over economic performance in the years prior to the crisis.' It also points out that the global warming crisis is made worse due to the fact that 'no



account is made of the cost of these emissions in standard national income accounts' (Stiglitz, Sen and Fitoussi 2009, 9).

A green think tank that proposes an alternative to the GDP measure claims not to be surprised by these twin crises: 'For those versed in ecological economics—a discipline which recognises the dependence of our economic systems on the Earth's resources—it is tempting to adopt a smug "I told you so" attitude' (NEF 2009, 8).

Global warming and the financial crisis have undermined confidence in our traditional way of looking at wealth, specifically the GDP—the value of the goods and services that we produce every year. There is something counter-intuitive about a measure according to which CO²-belching factories and hazardous financial innovation make us all richer, and that does not count depletion of our ecosystems as a cost. Such a measure is not just wrong, the argument goes; it is also destructive, since it makes us focus too much on simply maximising production.

As a result, in many government circles, think tanks and Brussels conferences, discussions are currently going on about doing away with GDP and replacing it with some sort of measure that counts social and environmental sustainability as a good and measures the well-being of the planet and humanity rather than what comes out of our factories.

These discussions have renewed political interest in well-being research. This is not a new field, but it has been revolutionised in the last few decades by neurological research, positive psychology and the enormous number of polls that have been conducted to find out how happy we are with our lives and how this relates to socioeconomic factors.

Writers such as the British labour economist Richard Layard (2005, 3) claim the data shows that money only buys happiness when we climb out of the worst forms of poverty. Beyond this point, we adapt to our new standard, become more stressed and work harder to 'keep up with the Joneses'. Layard wants higher taxes, longer holidays and lower growth to make us focus on more important things in life; and he proposes more job security, a national program of values education and government control of television and the advertising industry to tame destructive temptations and bring an end to the publicity of improper role models.



There have already been some attempts to construct happiness indexes to guide policy. In the Himalayan Kingdom of Bhutan, Gross National Happiness is an official policy which measures happiness in 9 dimensions with 72 variables, with the purpose of encouraging a form of modernisation that does not undermine traditional Buddhist culture.

In 2006 the New Economics Foundation developed a Happy Planet Index, which measures human well-being and environmental sustainability. The British Conservatives' Quality of Life Group have proposed, as a model for the index, that the Tory government should develop a 'measure of well-being that takes such environmental accounting into consideration' (Gummer and Goldsmith 2007, 22–3, 57).



In 2008 the French President Nicolas Sarkozy appointed a commission, led by Nobel Laureate Joseph Stiglitz, to identify the limits of GDP and find better measures of economic performance and social progress. The commission did not come up with one measure that could do the trick on its own, but instead proposed several different measures and had a long list of ideas on how to improve on GDP; for example, by also measuring income distribution and valuing housework and leisure.

If there is a common denominator, it is that they all emphasise that we care too much about growth and need another intellectual framework that can guide policies and populations to more worthwhile values and sustainability.

A Tale of Two Revolutions

The idea that happiness is the goal of public policy is obviously not new. The idea has been part of public discourse since at least the time of the ancient Greeks, but during the Enlightenment it became the consensus opinion. As society became more secular, the purpose of life became more an earthly matter. Locke maintained that happiness on earth is a foretaste of heavenly delight and so leads us to God; Helvétius declared the eighteenth century the 'century of happiness'; and thinkers like Bentham and Mill began to develop the utilitarian idea that we should always choose the path that leads to the greatest happiness for the greatest number.

But there were two radically different approaches to implementing happiness policies. Both the French and the American revolutions were led by individuals who considered happiness the goal. In the American Declaration of Independence, Thomas Jefferson famously declared that man has an inalienable right to pursue happiness. The French Declaration of the Rights of Man and of the Citizen begins with the statement that 'The goal of society is general happiness', and in 1794 the new calendar concluded every year with a 'Festival of Happiness'.

But despite the similarities, the attitudes to the role of government in promoting happiness differed. For Jefferson, inspired by Locke, the right to pursue happiness was just that—the idea that the government is not there to provide happiness, which is something individuals themselves can do. The government's role is to remove obstacles and create a certain level of security in which this is possible. The government only gives people the right to pursue happiness: as Benjamin Franklin supposedly said, 'You have to catch it yourself'.

The Jacobins, who took control of the French revolution from the liberal constitutionalists in May 1793, had a more collectivist approach, inspired by Rousseau. The historian Darrin McMahon describes how one of the most eager revolutionaries, the young lawyer Joseph-Marie Lequinio, visited the port city of Rochefort in the autumn of 1793 and gave a speech about why happiness on earth is the goal of humanity. But it was not the happiness of the individual that concerned him, since individuals only adapt to changes in their own lives, just as Rousseau had said. The goal for Lequinio was a





happy society, where individuals and their interests are sacrificed for the greater good. Therefore, the government must force citizens to seek happiness in the right way. Lequinio wrote home to Paris that he had found more men in Rochefort to operate the guillotine than he needed. And then he continued his journey, proclaiming happiness and simultaneously bragging about how he had personally executed enemies of the state. No sacrifice was too great for happiness (McMahon 2006, 253–61). 'Happiness is a new idea in Europe', the Jacobin leader Saint-Just explained. So was 'terror'.

So from these two revolutions, we have inherited two sets of attitudes to happiness: one individualist and one collectivist. One sees the individual as the agent, while the other puts its trust in government. It is the latter approach that made it possible for some of the worst authoritarian regimes and dictators to claim that they were really fighting for the happiness of humanity, even though they treated every specimen of it like dirt. It is in this tradition that Joseph Stalin liked to present himself as 'the constructor of happiness' (McMahon 2006, 403).

As commentators like H. L. Mencken and C. S. Lewis have warned us, oppressors who think they work for the good of the oppressed can be worse than oppressors who are just cynics and robbers, because the true believers torment us without end, with the approval of their own conscience. In dystopian literature, like Orwell's *Nineteen Eighty-Four and Huxley's Brave New World*, the brutality of governments is matched only by their rhetoric about human happiness.

Calling it the Target

GDP is not easy to measure, and every GDP figure is full of problems and guesses. But at least we know what we are looking for. This is not the case when we are trying to find measures of a good society and well-being. It depends on what one considers a good society, how one defines well-being and which parameters are used. And even if we had a common idea, we are by definition trying to capture something that is subjective. We are not counting cars and gigabytes here—we are trying to look into the emotional state of the population.



Even though indexes of well-being are not necessarily an excuse for oppression, they are often tools in an ideological toolbox. Although researchers are trying to come up with objective measures of what is going on, the indexes created with the intention of replacing GDP are often designed to give a green light to specific attempts to steer us towards a lifestyle that the authors prefer. A look at the three proposed replacements for GDP that we mentioned above illustrates this risk.

Gross National Happiness

It is said that the King of Bhutan came up with the idea of Gross National Happiness (GNH) in 1972, but the index is a very recent invention. The think tank that constructs



the index, the Centre for Bhutan Studies, was established only in 1999. GNH worked as an excellent rationalisation for policies that did not contribute to development. It was in an interview with the Financial Times in 1986 that the King made the idea world famous. When faced with questions about the lack of development in Bhutan, he responded, 'Gross National Happiness is more important than Gross National Product'.

It was very convenient. Taking the high moral ground, one could now brush aside all questions about the lack of growth. Bhutan did not care about such materialist concepts, only about the cultural and spiritual well-being of the people. But in fact the consequences of under-development were brutal. By then, Bhutan's life expectancy was just 49 years and the child mortality rate almost 20%. No more than two out of ten women got primary education, and the adult literacy rate was just 25% (UNDP 1990).

Since then, globalisation and modernisation have taken place in Bhutan, and social and economic progress has been made. But the government warned that traditional culture and community cohesion was being undermined by this process, so GNH came to be interpreted as a way to control this development and make sure that it was not too fast and spontaneous (Wangyal 2001). Bhutan outlawed television and the Internet until 1999.

In 1989 the government of Bhutan launched the policy of 'One Nation, One People' with the aim of creating a national identity. In the south, the Nepali-speaking minority suffered, despite representing a large section of the population. Their language was banned in schools and books were burned. Hindu Sanskrit schools were closed. And Bhutan was the only country in the world to make the national dress mandatory in public, which it still is.

Demonstrations against these policies resulted in arbitrary arrests and torture. Tek Nath Rizal, a leading human rights activist against these policies, was imprisoned for ten years 'for the peaceful expression of his political beliefs', according to Amnesty International. More than 60,000 people—around a tenth of Bhutan's population—had to flee to Nepal or India. There is widespread discrimination against the members of the Nepali-speaking minority who stayed behind (Amnesty International 1999; see also http://www.bhutaneserefugees.com).

The Happy Planet Index

In July 2006, newspapers around the world reported that the small island of Vanuatu was the happiest place in the world. That was one of the findings of the first Happy Planet Index (HPI), created by the New Economics Foundation. The top spots were reserved for Latin American and Asian countries, whereas rich, Western countries came a long way down the list. The first European country on the list was Austria, in 61st place—55 places behind Cuba and 36 places behind Tajikistan.

But it turned out that the HPI did not even have a study of happiness from Vanuatu; it simply extrapolated the score from other countries (Bialik 2006). One can always impute missing data when one is looking for something else. If I want to know whether there is a global correlation between climate and happiness, I can, without destroying



the analysis, obtain the happiness score for a few countries where data is missing by extrapolating from countries for which this information is available. But if the missing variable is the thing I am looking for, it is not possible to cut corners in this way—it is a methodological error, plain and simple.

But the HPI was never meant to be simply a measure of happiness; it is also a measure of ecological sustainability. It is an index of self-reported happiness and life expectancy ('happy life years') divided by the country's ecological footprint per capita, which is basically the same as its consumption of resources whose production requires CO². A country that is very poor and cannot consume much is therefore a Happy Planet champion.

This is a controversial way of measuring environmental sustainability because it begs the question of whether wealth is good or bad for the environment. According to this measure, the worst ecological rogues are Denmark, Norway, Canada and the United States. The most environmentally sustainable countries on the planet are Malawi, Haiti, Afghanistan and the Republic of Congo (Hails 2008). It is true that they do not produce or consume much. That is why their people are starving and dying from trivial causes.

In other words, this is not a measure of how good the environment is for human beings. The biggest environmental problems in our world still come from traditional sources. Indoor cooking results in bad indoor air that kills 1.6 million people annually (Warwick and Doig 2004). Unsafe drinking water kills even more. When a country does not solve these environmental problems with electricity and modern technology, it is considered more sustainable on the basis of its ecological footprint.

There is an alternative environmental index which tries instead to measure a host of environmental factors to see what damage human beings cause to nature: the Environmental Sustainability Index, which is compiled by the Center for Environmental Law and Policy at Yale University in the US. The results are almost the opposite of the ecological footprint index, with rich countries in the lead and poor African countries at the bottom. Haiti, which has the third-smallest ecological footprint, does not look as impressive here: it is the 155th most environmentally sustainable of 163 countries. The latest edition of the index concludes that 'wealth has a strong association with environmental health results' (EPI 2010).

The Stiglitz Commission



The Stiglitz Commission, appointed by the French President in 2008, clearly provides the most sophisticated recent challenge to the traditional GDP measure. This is partly because the Stiglitz Commission does not attempt to create a super-index that integrates everything, and partly because it highlights many of the classic shortcomings of GDP and presents a number of ideas on how to correct them.

But even here we see how political motives lie behind the proposals. In many ways the report is suspiciously flattering for France. Again and again it shows how particular ways of adjusting GDP or including other measurements would make France look better in



comparison with the US. At times, it looks more like a set of instructions on how to beat the US by changing measurements. In Figure 1.7 of the report it becomes almost comical when we are shown four comparisons on how French income per capita climbs as a proportion of US income per capita if the statistics office agrees with the commission's proposals. At the outset, the figure is just 66%, but France pulls closer if the output of government-provided services is included, and closer still if unpaid housework is included; and if they also included leisure, France would end up with a relative income level of 87%.

Sometimes, the suggestions are strange. The commission actually suggests that the value of leisure is the same as the wage foregone. That makes sense on an individual basis. No one would want to take a week off work unless they thought that the resulting leisure was worth more than the value of the wage they would have earned. But as a way of measuring wealth it is more problematic. Is it reasonable to say that this individual is just as well off after this choice? Would it not make more sense to say that he chose to become poorer because he valued leisure more? Am I not poorer as a result of not working as a doctor, even though I prefer my present job? (If not, I am just as well off after buying a new car, because I would not spend money on a new car unless I thought the car was worth more than the money I spent.) Furthermore, part-time employment is sometimes the result of a lack of job opportunities, and in that case it is a loss for both the economy and the individual, not just another form of wealth.

In most instances, though, the discussion is interesting and the proposals make sense. The problem is that they are applied selectively. The authors point out that studies show that unemployment reduces subjective well-being and that 'the costs of unemployment exceed the income-loss suffered by those who lose their jobs' (Stiglitz, Sen and Fitoussi 2009, 44). But interestingly (since this is a dimension where France does not come out particularly well), they do not suggest an adjustment of the GDP measure to account for this, and in this matter they do not show how France fares compared to the US (see also Bate 2009).

Obviously it would be nice to value our stock of natural wealth or produce alternative measures when asset prices rise as a result of an unsustainable boom, as the commission proposes. But this is something that not even the best minds know how to do. How can we trust governments to measure stock in an objective and evenhanded way when we know that even government finances are manipulated fairly regularly? And how can we trust them to identify a bubble when the financial crisis showed that neither central banks nor politicians understood that there was a bubble and that they simply continued to inflate it? The commission writes: 'It is no longer a question of measuring the present, but of predicting the future'. This is a good idea for policy makers and researchers, but a terrible one for statisticians.

If this is what this new way of measuring wealth looks like when Nobel laureates write, one can only guess what would happen to it in the hands of governments, eager to exaggerate the wealth of their countries and their own achievements. According to the commission, one reason why we need to take a second look at our measurements is that confidence in official statistics has been undermined. But it is difficult to see how that confidence would increase if we gave our politicians more discretion to adjust measures and choose the ones that flatter their own countries.





In Defence of GDP

There are several problems with GDP, with what it measures and what it fails to measure. There are quality problems with the data, and a lot of guesswork is involved. Using it as the only yardstick to evaluate our societies would be bizarre. But finding problems is one thing. If we also want to replace GDP, we need to know that the alternative is better.

There is something to be said for the Stiglitz Commission's point that it makes sense to have a pluralistic system which encompasses a range of different measures. The Organisation for Economic Co-operation and Development (OECD) and other institutions are working on that. Other indexes and measurements can give us information about other dimensions of well-being. We already use several, and that GDP is our primary way of measuring the progress of the economy does not mean that they receive less attention. It would be difficult to make the case that measuring GDP makes us less interested in the unemployment rate or the proportion of the population in higher education.

Replacing GDP with another preferred index of well-being and life satisfaction would therefore not add to our knowledge; rather, it would reduce the amount of information available to us. And in view here is not just any information, but information about how much we produce and how much we have to exchange for the things we want in life. This information provides a rough estimate of our possibilities as a society, what we can do and how many problems we can solve. This is why GDP correlates strongly with most of the things that most people want: economic security, improved education, better health, longer lives and less poverty. This is no coincidence. When we are able to do more things, we usually do what seems more important to us, both as individuals and as societies.

According to the World Bank, 730 million fewer people lived in extreme poverty (less than \$1.25/day) in 2009 than in 1981, even though world population increased by two billion during this time. One study of low-income countries showed that one percentage point of additional growth correlated with a reduction in extreme poverty of 2.4 percentage points (Chen and Ravallion 2008; World Bank 2009; World Bank 2005, 85).

In fact, GDP growth even correlates with happiness, contrary to the claims of Richard Layard and almost everybody else who prefers well-being measures (the Stiglitz Commission is an exception). The latest research shows not only that rich countries are happier, but also that countries get happier as they get richer. According to Gallup's World Poll—the largest global study of its kind—1% of growth results in a 0.2–0.4% increase in subjective well-being. The World Values Survey, which has been conducted at intervals since 1981, shows an average increase in well-being of almost 7%, and concludes that '[t]he trend toward rising happiness is overwhelming' (Stephenson and Wolfers 2008; Inglehart et al. 2008; see also Norberg 2006; Norberg 2009).

An even stronger argument for sticking with GDP is that it is pluralistic and well adapted to a society where people have different goals, and the role of government is





to help us achieve our diverse goals rather than picking and choosing them for us. GDP measures what we can do, but it does not tell us what to do. If we increase wealth, we can use that wealth for the purposes that we prefer: we can consume more but we can also reduce our work hours; we can travel more but we can also incorporate green technology into our lives. A growing economy gives us the means to create the kind of life we want; it does not tell us how to live it. It fits a liberal, pluralistic society where people have different interests, preferences and attitudes to well-being and the meaning of life.

If we replaced GDP with some sort of well-being measure, we would have to come to an agreement on what well-being is; and there is a risk that governments would be tempted to take a one-size-fits-all approach and try to make us all wear the result. We have seen how the Bhutanese happiness index has been used as a rationalisation to force minorities to live in the preferred way. Admittedly, this is an extreme example, but it is interesting that it is so often used as a positive example by those who seek to do away with GDP.

As the French classical liberal Benjamin Constant warned in 1819,

The holders of authority ... are so ready to spare us all sort of troubles, except those of obeying and paying! They will say to us: 'what, in the end, is the aim of your efforts, the motive of your labours, the object of all your hopes? Is it not happiness? Well, leave this happiness to us and we shall give it to you.' No, Sirs, we must not leave it to them. No matter how touching such a tender commitment may be, let us ask the authorities to keep within their limits. Let them confine themselves to being just. We shall assume the responsibility of being happy for ourselves. (Constant 1819, 326)

One of the best features of GDP is that it *does not* try to include all the different aspects of human welfare. It is a measure of material wealth, and we should not associate it with everything that is good in life. When governments make trade-offs, they do so in a fairly transparent way. Measuring GDP does not mean that we always want to maximise it. It means that we always know what we are doing when we sacrifice it for something that is considered a greater good. If we sacrifice income for leisure, it is good if we understand that this is what we are doing, so that we can make well-informed choices. The longing for a summary index of everything that is desirable belongs to the dream of a world where no difficult choices have to be made, where there is no need to set priorities or make trade-offs. The politician's sole task would be to maximise the (index of the) good. Of course those choices would still have to be made, but in that case they would be removed from public debates and left to the statistical offices and government authorities that produce the index, when they estimate different values for different public goods. It is the technocrat's dream, and therefore something that should make us suspicious.



As Winston Churchill might have put it, Gross Domestic Product is the worst of all means of measuring wealth, except for all those other means that have been tried from time to time.



The argument that too great an emphasis on GDP growth made us neglectful of the factors that led to the financial crisis and climate change is not a strong one. GDP has not stood in the way of an increased awareness of environmental issues or of the unprecedented action taken against such problems since the 1970s. Indeed, as evidence that global warming has human causes grew stronger in the early twenty-first century, the discussion almost swallowed the entire policy agenda.

When policymakers reduced interest rates and encouraged the housing market after the dot com bubble, they did so not just to increase GDP, but to reduce unemployment, avoid bankruptcies and encourage home ownership. Moreover, I do not think anyone seriously believes bankers made leveraged bets on the housing market because they wanted to encourage economic growth. Is it not more likely that they had their eyes fixed on stock market prices, house prices and bonuses?

Dealing with these challenges does not require another sort of intellectual framework or another way of measuring wealth. As the Great Recession shows, in the long run, GDP indicates whether rising asset prices are the result of a real improvement in savings and productivity or simply the result of a speculative boom. Considering how governments, central bankers and leading economic analysts regularly fail to make the distinction, perhaps it is better to stick with GDP, rather than giving someone the authority to second-guess everybody. And we need more economic growth in the future, to be able to bear the burden of the unprecedented levels of public debt to which the crisis has given rise.

Using GDP also helps us put our present problems in perspective and gives us a better sense of how far we have come. The financial crisis made a terrible mess. It meant that 2009 was only the second-best year in human history when it comes to our total yearly creation of economic value. Far from having destroyed human progress, the crisis only set it back by about a year.

The environmental problems that cause the most damage are still the result of a lack of wealth and technology, and, on average, richer countries are much more environmentally sustainable than poor ones. We have no reason to think that global warming cannot be dealt with in the same way. The amount of energy required to produce a given amount of wealth in high-income countries has declined by 1% per year in the past 150 years, and that pace has accelerated. In fact, countries such as Sweden, the United Kingdom and France have been reducing their CO2 emissions per capita since 1980. The improvements in nuclear and solar energy, fuel cells and other technologies are potentially revolutionary. They are still too expensive to be put to use globally, but what is the solution when something is too expensive? It is technological progress that reduces the price and economic growth that increases our purchasing power.



No matter what we do, nature will surprise us with problems and difficulties. If annual global economic growth remains at around 2% per capita, in 100 years' time the average person will be approximately eight times richer than today's average person. With the resources, the level of scientific knowledge and the technological solutions that may then be at our disposal, many of the problems that intimidate us



today will be much easier to handle. This is particularly important since there is a risk that the worst damage from global warming will occur in poor countries, in part as a direct result of their poverty.

Judging from the Stiglitz Commission's work, even the best attempts to adjust the GDP measure would open the way to the politicisation of statistics in an unprecedented way.

It will not be long until other countries find out that they can change their statistics to take account of indicators where they do better. Once we had competitive devaluations; now we could see competitive accounting revaluation, where governments define progress in the way that suits their interests. The only result would be less reliable statistics and meaningless international comparisons.

The Stiglitz Commission warned that 'those attempting to guide the economy and our societies are like pilots trying to steering a course without a reliable compass' (Stiglitz, Sen and Fitoussi 2009, 9). But even a compass that makes mistakes once in a while is better than having pilots steering a course with a compass that always points in a direction that reassures them.

References

Amnesty International. (1999). Bhutan: Amnesty International welcomes release of prisoners of conscience. Amnesty International, News Service, 21 December. Available at http://www.amnesty.org/en/library/asset/ASA14/004/1999/en/d2033b98-dfd8-11dd-82c9-a1d1b98af6ef/asa140041999en.html

Bate, R. (2009). What is prosperity and how do we measure it? AEI Outlook, American Enterprise Institute, No 3, October.

Bialik, C. (2006). Putting a number on happiness. Wall Street Journal, 20 July.

Chen, S., and Ravallion, M. (2008). The developing world is poorer than we thought, but no less successful in the fight against poverty. Policy Research Working Paper 4703. World Bank, August. Available at SSRN: http://ssrn.com/abstract=1259575

Constant, B. (1819). The liberty of the ancients compared to that of the moderns: speech given at the Athénée Royal in Paris. In *Constant: political writings* (pp. 307–28). Cambridge: Cambridge University Press, 1988.

EPI (Environmental Performance Index). (2010). Yale Center for Environmental Law and Policy & Center for International Earth Science Information Network, 2010. Available at http://epi.yale.edu/Home

Gummer, J., and Goldsmith, Z. (2007). *Blueprint for a green economy*. The Quality of Life Policy Group, September. London: Conservative Party.

Hails, C. (Ed.). (2008). Living Planet report 2008. Bland, Switzerland: WWF International.

Hall, B. (2009). France to count happiness in GDP. Financial Times, 14 September.

Inglehart, R., et al. (2008). Development, freedom and rising happiness: a global perspective (1981–2007). Perspectives on Psychological Science 3(4)





Layard, R. (2005). Happiness: lessons from a new science. London: Allen Lane.

McMahon, D. M. (2006). Happiness: A history. New York: Grove Press.

NEF (The New Economics Foundation). (2009). *Happy Planet Index 2.0.* London: NEF. Available at http://www.neweconomics.org/sites/neweconomics.org/files/The_Happy_Planet_Index_2.0_1.pdf

Norberg, J. (2006). Happiness paternalism: blunders from a new science. Brussels: CNE.

Norberg, J. (2009). Den eviga matchen om lyckan. Natur & Kultur.

Stevenson, B., and Wolfers, J. (2008). Economic growth and subjective well-being: reassessing the Easterlin paradox. Working paper prepared for Brookings Papers on Economic Activity, 16 April.

Stiglitz, J., Sen, A., and Fitoussi, J.-P. (2009). Report by the Commission on the measurement of economic performance and social progress.

Available at http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf

UNDP (United Nations Development Programme). (1990). Human development report 1990: concept and measurement of human development. New York: Oxford University Press. Available at http://hdr.undp.org/en/reports/global/hdr1990/chapters/

Wangyal, T. (2001). Ensuring social sustainability: can Bhutan's education system ensure intergenerational transmission of values? *Journal of Bhutan Studies* 3(1): 106–31.

Warwick, H., and Doig, A. (2004). Smoke – the killer in the kitchen: indoor air pollution in developing countries. London: ITDG Publishing. Available at http://practicalaction.org/?id=smoke_report_home#Download

World Bank. (2005). World development report 2006: equity and development. Washington, DC: World Bank. Available at http://go.worldbank.org/XP2234QDV0

World Bank. (2009). *Global monitoring report 2009: a development emergency*. Washington, DC: World Bank. Available at http://go.worldbank.org/1J2GN1XTO0

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