Tuesday, April 20, 2010 THE ECONOMIST

Economist Debates: GDP

Proposition: The House Believes That GDP Growth Is A Poor Measure Of Improving Living Standards. The Opposition's Opening Remarks

Apr 20th 2010 | Steve Landefeld

Gross domestic product (GDP) is a key measure of a country's economic activity—the purpose for which it was designed. It was not designed to be, nor should be regarded as, a comprehensive measure of society's well-being. Nonetheless, it has also proven useful as a gauge of an economy's capacity to improve living standards. It was a catastrophic decline in living standards that prompted the development of national, or **GDP**, accounts. Trying to design policies in the 1930s to combat the Great Depression, President Roosevelt had only such sketchy data as stock prices, freight car loadings and incomplete indices of industrial production on which to rely. In response, the US Department of Commerce developed a set of national economic accounts that for the first time provided a comprehensive framework to guide policy decisions to assist the millions of people who were out of work.

GDP, and the broader set of national income, product and wealth accounts, has stood the test time and no other measure has proven a worthy alternative. Simon Kuznets, one of the early architects of the accounts, in 1941 recognised the limitations of focusing on market activities and excluding household production and a broad range of other non-market activities and assets that have productive value or yield satisfaction. Yet 75 years and lots of research later, there is no broader social measurement tool that officials would agree is valid and useful.

It would, therefore, seem irresponsible to abandon the most comprehensive and reliable system currently available to tell us how a society is faring economically. **GDP** may not be a complete measure of improving living standards, but that does not make it a poor one, especially when considering what could possibly replace it today.

Thrre is, of course, room to improve **GDP** through better measuring of the distribution of the gains from economic growth and the sustainability of that growth, and selected measures of non-market activities that affect the economy—and these concepts have merit. Rather than replacing **GDP**, the goal might be extending and supplementing **GDP** and the national accounts, rather than their replacement.

Over time the national accounts have been constantly updated and extended to address changes in the economy and to keep them relevant, and many of the measurement issues raised in the current debate can be addressed within the context of these accounts. Yet extensions of the national accounts cannot be allowed to subject a critical tool for economic policy to uncertainty. Past efforts to expand conventional GDP have foundered on the inevitable problems of subjectivity and uncertainty inherent in measuring happiness. household work and other non-market activities. Critics rightly fear that the inclusion of such uncertain and subjective values in GDP will seriously diminish the essential role of the national accounts to financial markets, central banks, tax authorities and governments worldwide in measuring and managing the market economy.

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Much work has focused on how to successfully broaden the utility of GDP, while preserving its core integrity. Several National Academy of Sciences studies on accounting for the environment (Nordhaus and Kokkelenberg, eds, 1999) and non-market production (Abraham and Mackie, eds, 2005), as well as the System of National Accounts (1993) guidelines for compiling **GDP**, have concluded that an expansion of the GDP accounts should take place in supplemental, or satellite, accounts that extend their scope without reducing the usefulness of the core **GDP** accounts. They also conclude that such an expansion should focus on economic aspects of non-market and near-market activities—such as energy and the economy's use of natural resources, the impact of investments in research and development (R&D), health care, or education and not attempt to measure the welfare effect of such interactions.

Recognising the concerns of subjectivity and uncertainty, the focus should remain on creating "new" estimates within the framework of the existing accounts. For example, the Stiglitz-Sen-Fitoussi Commission (2009), which explored expanded welfare measures, has suggested a number of ways that "classical **GDP** issues" can be addressed within existing **GDP** accounts or through an extension and improvement of measures included in existing accounts.

The US Bureau of Economic Analysis focuses on just such improvements, and President Obama this year proposed extensions within the scope of the existing accounts that would provide new measures of:

- how growth in income is distributed across households, other sectors and regions;
- the sustainability of trends in saving, investment, asset prices and other key variables important to understanding business cycles, economic growth and living standards.

There are, however, limits to what can reasonably be included in **GDP**. For many years the problem has not been with **GDP**, but rather the singular focus on **GDP** alone as a measure of society's welfare. Many non-market measures of welfare may be better included in such measures as the newly authorised US National Academies Key National Indicators System.

These and other efforts in the coming years will lead to a more inclusive set of measurement tools that will enhance our understanding of countries' standards of living. This progress is inevitable, but it does not render current **GDP** data inadequate. **GDP** will continue to play a crucial role in measuring social progress in and among countries.



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Proposition: The House Believes That GDP Growth Is A Poor Measure Of Improving Living Standards. The Moderator's Opening Remarks

Apr 20th 2010 | Patrick Lane

Finding ways to improve humanity's living standards is the point of economics. Having a good measure of living standards, you may think, is therefore pretty fundamental to the discipline. For decades economists have turned to gross domestic product (GDP) when they want an estimate of how well off people are. By how much are Americans better off than Indians, or than their parents' generation? Chances are the answer will start with GDP.

GDP is really a measure of an economy's output, valued at market prices (to the extent that you have them). As societies produce more, and therefore earn more, their material well-being rises. So it is no surprise that so many economists and official statisticians broadly accept **GDP** as a measure of living standards.

It isn't the only measure. Even before the recent recession, a lot of debate over American living standards was based not on **GDP**, which was growing healthily¬, but on median incomes, which were not: the point was that national output was growing, but that its fruits were not being evenly shared. It doesn't cover everything: not all the things that we value are bought and sold in the marketplace. But when economists want to measure the living standards of whole societies, **GDP** is where they usually start.

That said, economists and statisticians have been debating for years whether **GDP** measures what truly matters. It may capture material wealth, broadly, but is that enough? If it is not enough, with what should it be replaced—or, more likely, supplemented? With assessments of the environment? Measures of people's health? Estimates of their happiness? And how might all these different aspects be combined? If some new measure is closely correlated with **GDP**, then **GDP**, though imperfect, may be good enough. If it is not, then focusing on **GDP** could be an error of more than just measurement: governments that pursue **GDP** growth may be making their citizens worse off than they might be.

The Economist's latest online debate is intended to wrestle with these questions. Andrew Oswald, of the University of Warwick, is proposing the motion that "GDP growth is a poor measure of improving living standards". Opposing him is Steven Landefeld, director of the United States Bureau of Economic Analysis (BEA), which produces America's national income and product accounts, of which GDP is a prominent feature.

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Mr Oswald's starting point is a report published last year by a commission chaired by Joseph Stiglitz, a Nobel economics laureate. The Stiglitz commission (of which Mr Oswald was a member, and which was written about in The Economist last September argued that official statistics should shift away from measuring production to measuring "well-being". Mr Oswald points to two pieces of evidence in particular: the Easterlin Paradox, the finding that increasing wealth does not make countries happier; and global warming, which is a sign that people should produce less and enjoy the planet more.

Mr Landefeld remarks that GDP was not intended to be a comprehensive measure of society's well-being. Even so, he says, it has stood up well as a measure of living standards. Nothing has bettered it yet. That isn't to say that GDP can't be improved, though—and Mr Landefeld points to ways in which the BEA has been trying to bring that about. He too notes the conclusions of Mr Stiglitz's commission.

This promises to be a lively and enjoyable debate on an important subject: how much use is **GDP** in measuring how well off people are? Mr Oswald and Mr Landefeld have set out what they think. I'm glad that we have two such prominent people to lead the debate. And I'm looking forward to the next round of arguments and to what you, on the floor of our online chamber, have to say.

Tuesday, April 20, 2010 THE ECONOMIST

Economist Debates: GDP

Proposition: The House Believes That GDP Growth Is A Poor Measure Of Improving Living Standards. The Proposer's Opening Remarks

Apr 20th 2010 | Andrew Oswald

"A ... key message, and unifying theme of the report, is that the time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people's well-being."

(Executive Summary: Stiglitz Commission Report)

GDP is a gravely dated pursuit. It is time to listen to the Stiglitz Report.

The first reason is the evidence known as the Easterlin Paradox (the empirical finding that countries do not become happier as they grow wealthier). The second reason is that global warming means it is necessary for Homo sapiens to make fewer things rather than more, to travel less except on their feet, to lean on the direct energy of the sun and water rather than on the smashed fuel of buried trees, to value tranquil beauty more and 160mph motor cars less.

These arguments are key parts of the recent Stiglitz Report.

Life is now more complex and services dominate ("The time has come to adapt our system of measurement ... to better reflect the structural changes which have characterised the evolution of modern economies.")

We, as a society, need to measure well-being per se. ("A ... unifying theme of the report is that the time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people's well-being.")

Official government statistics should blend objective and subjective well-being data. ("Statistical offices should incorporate questions to capture people's life evaluations, hedonic experiences and priorities in their own survey.")

Sustainability must be a criterion. ("Sustainability assessment requires a well-identified dashboard of indicators ... the components of this dashboard should be ... interpretable as variations of some underlying "stocks".)

I am optimistic. Eventually the green movement will discover the data of the Easterlin Paradox, named after Richard Easterlin, a famous Californian economist, and also become aware of the statistical evidence on declining emotional prosperity that I describe below. Although fine young scholars like Betsey Stevenson and Justin Wolfers doubt the veracity of it, they are heavily outnumbered: the weight of published evidence is in line with Mr Easterlin's paradox. Moreover, Ms Stevenson and Mr Wolfers themselves agree that America, perhaps the iconic GDP-chasing nation, is not becoming happier through time.

If we look at broader measures of psychological well-being, the newest longitudinal research suggests there are reasons to be more pessimistic than Easterlin. Although further research evidence needs to be collected, this is what we currently know.

Worryingly, emotional prosperity and mental health appear from the latest data to be getting worse through time. This disturbing conclusion emerges from these seven studies:

Sacker and Wiggins (2002) Hodiamont et al. (2005) Verhaak et al. (2005) Green and Tsitsianis (2005) Wauterickx and Bracke (2005) Oswald and Powdthavee (2007) Sweeting et al. (2009)

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humans are animals of comparison (some of the newest evidence, from brain scans, is reported in Fliessbach et al., 2007). What I want subconsciously is to have three zoomy BMWs and for my colleagues in the office corridor at work to have mere rusting, spluttering Fords. Unfortunately, the tide of economic growth lifts all boats, so where having three glamorous cars was unusual, eventually it becomes the norm, and any relative gains are thereby neutralised. Second, people choose things—such as high-pressure kinds of work and long commutes away from their families and their dogs and their fishing buddies that, despite what they think, will often not make them happier. Economists have ignored the research on "affective forecasting mistakes" by psychologists like Daniel Gilbert; they need to wake up to it.

Why? We are not yet certain. But, first,

Unsurprisingly, the citizens of the rich nations find it difficult to grasp that higher gross domestic product from this point onwards will not make society happier. Like people in earlier times who could not conceive of themselves as creatures glued by gravity onto a spherical planet, they trust their intuitions (because as individuals they like to become richer and assume whole countries must be the same). One cannot blame them. But the evidence shows they are wrong.

As an undergraduate, I was taught that economics is a social science concerned with the efficient allocation of scarce resources. In 2010, a better definition is needed. Economics is a social science concerned with the way to allocate plentiful resources to maximise a society's emotional prosperity and mental health.

A gravely dated pursuit.

Research evidence

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Monday, April 26, 2010 THE ECONOMIST

Economists Debates: GDP (Part 2, Continued)

Proposition: The House Believes That Gdp Growth Is A Poor Measure Of Improving Living Standard
Audience Participation
Comments From The Floor.
Featured Guest: Michael J. Boskin

Posted April 26, 2010

Editor's note: The main portion of part two in the "Economists Debates" series on the GDP featuring BEA Director Steve Landefeld, appeared in Friday's main edition of the Daily News Clips. Though part three of the debate will not appear until Wednesday, April 28, The Economist has run and additional "Comments for the floor," this time form former BEA Advisory Committee Member, Michael Boskin. It appears below.

Paul Samuelson called the development of the national income accounts that measure real GDP and inflation "one of the greatest achievements of the 20th century". These numbers measure the current state of the economy and its progress over time and compared with that of other countries. To be sure, GDP has some well-known limitations, such as the exclusion of nonmarket activity (most importantly, leisure and work done in the home). Nor does it pretend to capture a wide range of other societal indicators such as gains (or losses) in life expectancy or air and water quality, and so on.

Material progress is certainly not the only indication of well-being. But economists and statisticians should be wary of confusing limitations in the GDP accounts and their interpretation with invitations to contaminate them with fuzzy feel-good (or bad) numbers purporting to measure "happiness" or "satisfaction".

While such analyses may well be interesting in their own right or helpful in interpreting or supplementing GDP, they should be kept separate from the primary GDP accounts. The GDP accounts can be improved, but they remain by far the best starting point, and the major part of the story, in measuring improvements in living standards.

Politicians are already clamouring for alternatives to GDP that make them look better. A commission appointed by the French president, Nicolas Sarkozy, suggests that every country should design its own set of indicators, heavily weighting "stability" indicators such as "security" and inequality. Choose the "correct" weights and France outperforms America. That's an especially neat trick when American per head income is 30% higher. Nobel Laureate Ed Prescott labelled that the difference between prosperity and depression and attributed all of it to France's higher taxes. When do stability and security morph into sclerosis and stagnation? Perhaps when French tax and labour policies so stifle new private-sector jobs that chronic depression-level unemployment results for young adults and a majority of college students say they are forced to seek government jobs. Most people also value dynamism, mobility and choice. Do we really want core economic statistics to be manipulated to fit political biases?

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With Venezuela's economy imploding by conventional GDP measures, President Hugo Chavez even declared GDP to be a capitalist plot (originally hatched, apparently, by American Nobel Laureate Simon Kuznets, et al., in the 1930s, nurtured by British Nobel Laureate Sir Richard Stone, et al., and including thousands of economists and statisticians, some under the auspices of the UN, over subsequent decades). Mr Chavez wants a new "socialist-friendly" measure of the economy. Maybe he really believes such garden spots as Cuba, North Korea and the former East Germany are great role models for the 21st century, rather than depressing relics of a depraved economic system. Maybe his "socialist" statisticians can conjure up a way for the bolivar to regain its collapsed value. And then they can pump oil out of the Orinoco basin. After all, Soviet statisticians once kept three sets of books: the published data, a set they believed, and what they showed Stalin.

Winston Churchill famously proclaimed: "Democracy is the worst form of government except all those other forms that have been tried from time to time." Much the same could be said about GDP growth as a measure of improvements in living standards.

Despite numerous conceptual and measurement improvements made by government statistical agencies over the years, and the flurry of renewed research interest in the past 15 years or so, GDP will always be chasing a moving target in a complex, dynamic economy and society. Most of the complaints about GDP assert that GDP growth overstates gains in living standards. But the most important augmented indicators would probably raise at least the current level of GDP in most countries, not lower it (with a few important exceptions such as the environment in China).

There are technical, measurement and administrative reasons to be chary of this rush to measure happiness or replace GDP with other measures. First, including subjective items measured inaccurately in GDP would decrease the statistical reliability of the core numbers. Second, it is important that the populace have confidence that the numbers upon which they rely as consumers, investors, workers, managers and citizen/voters will not be politicised. Witness the recent problems over perceived politicisation of inflation statistics in Argentina. Causes should be left out of our economic accounts. Satellite accounts or additional indicators are more than sufficient to supplement GDP for any reasonable purpose.



Friday, April 23, 2010 THE ECONOMIST

Economists Debates: GDP (Part 2)

Proposition: The House Believes That GDP Growth Is A Poor Measure Of Improving Living Standard

April 23, 2010

The moderator's rebuttal remarks: Patrick Lane:

Welcome to the second, "rebuttal" stage of the debate. From what both Andrew Oswald and **Steve Landefeld** say, and from the comments from the floor, it's clear that whether you support or reject the motion depends to a large extent on how you define "living standards". Are they limited to material comfort, or do they cover broader, less tangible concepts, not least happiness? This difference of view emerged in the first few online remarks, and it's been a constant theme. Pythian Legume, for instance, is "relatively certain that a claim that it [ie, GDP] does not measure national happiness is off point". Belfast citizen argues: "It is quite true for Mr Landefeld to say that GDP was not designed to be a wellbeing measure—though that concedes Prof Oswald's case at the outset—but it is treated by most OECD governments as if it were a proxy for well-being."

Here's another dividing line, not yet obvious on the floor but plain between the protagonists: is GDP is simply out of date, or can it be improved or supplemented by other measures of living standards, however defined? Mr Oswald says that, given the apparent decline in psychological measures of well-being in rich nations, GDP has not (as Mr Landefeld believes) "stood the test of time". It is too narrow an indicator of things that matter to remain a valuable indicator today. Mr Landefeld remarks that if measures of happiness have not moved much over time, their merits as measures of living standards are in question.

Better, he says, to augment GDP with other measures on an economic "dashboard". He suggests that GDP will remain the most closely watched.

On the floor, other themes have emerged. One is perhaps best illustrated by KCCM, who believes that the debate "exemplifies the economic and attitudinal gulf between developed and developing economies". GDP may seem out of date in the rich world, he says, where most people have satisfactory food and shelter, but in poorer countries, "quantity reigns supreme because many simply do not yet have enough". High GDP growth numbers are a symbol of rising living standards—or, as KCCM puts it, of "ability to provide more of what their growing populations really need and, eventually, want".

Another topic is the tension between living standards of whole societies and those of individuals or households. A related subject is the distribution of income. Plainly, GDP can capture only aggregates or (if you divide by population) averages. It won't tell you about the living standards of individuals, the gap between rich and poor, or the concentration of riches at the top. It's not supposed to, some may say—GDP per person is a measure of central tendency, not dispersion—but for many participants that's not the point.

Mehmet Asici suggests that GDP may be a fair measure of living standards in fairly equal societies with strong welfare states, but not in places where the distribution of income is highly skewed.

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Several participants have said that the answer is not to measure **GDP** alone, but to have lots of indicators of material and psychological well-being. That in turn raises another question: can these meaningfully be combined into a single measure, or does it make more sense to look at several (back to the "dashboard"), sometimes paying more attention to one indicator and sometimes to another? Quite a few people mentioned the UN Human Development Index. One speaker, haripolit, said flatly that it was pointless to look any farther. Others thought the answer was more complicated.

Before we hear Mr Oswald's and Mr Landefeld's closing statements, we'll have contributions from guest speakers. The first of these will be Enrico Giovannini, formerly chief statistician of the OECD and now head of the Italian national statistical agency. The rebuttals and the guests' statements will, I'm sure, provoke more debate.

Featured guest Enrico Giovannini As the Nobel Prize winner:

Amartya Sen said, "to discuss about indicators is a way to discuss about the ultimate goals of a society". This is why this debate is so important and can lead to a change in the way our societies work. We value what we measure and we measure what we value. For 50 years we have been focusing on **GDP** and several countries have been able to increase it and improve the living conditions of millions of people. More recently this process has interested billions of people. But, at the same time, we know that the consumption patterns followed by developed countries cannot be replicated by the rest of the world, because of ecological limits that we had forgotten. At the same time, we observe in several developed countries that the correlation between GDP and life satisfaction decreases or disappears beyond a certain level of income, but we also see how the current economic crisis can hit millions of people around the world, showing that a decrease in GDP does not necessarily make people happier. So, what should we conclude?

Since 2003, as Chief Statistician of the Organisation for Economic Co-operation and Development (OECD), I have been involved in the debate on how to measure well-being and sustainability and after organising the first OECD World Forum on "Statistics, Knowledge and Policy" I established the Global Project on "Measuring the progress of societies" (see www.oecd.org/progress). Finally, as a member of the Stiglitz Commission, I tried to contribute to this debate, stressing the need to measure societal progress going beyond GDP. But what does "societal progress" mean? And can we reach a consensual view of what constitutes progress?

On the first point, at the OECD we have defined "societal progress" as an increase in what we call "equitable and sustainable well-being". In our view, the key dimensions of what, according to the most recent academic research, constitutes well-being (health, knowledge, material wellbeing, environment, personal relationships, etc.) need to be integrated with two cross-cutting dimensions: the first is the intra-generational one (equity), the second is the inter-generational one (sustainability). Now, if we believe that all these dimensions matter for a good life, at individual and societal levels, it is clear that GDP cannot measure all of this. Fortunately, GDP is positively correlated with several good things, but not necessarily with all of them; in some cases, the correlation can be absent or negative. Furthermore, we have to recognise that it is not possible to aggregate all the necessary indicators to measure these dimensions into a single measure, expressed in monetary terms. Therefore, we can only conclude that measures of economic well-being (like GDP) should be complemented by other measures, which should be communicated to people as frequently and widely as GDP.

Unfortunately, for many years official statisticians have been investing their limited resources to refine GDP and other similar measures, instead of paying the same attention to the other dimensions of well-being. So, what we need is a re-orientation of the research efforts towards these other measures, to rebalance the picture official statistics provides to the society.

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And media should do the same, to change the culture and the focus of the political discourse.

Fortunately, there is good news that make me optimistic. First, in several countries, a lot of good statistics on the other dimensions of well-being already exist; so these countries could do much better right now to inform citizens about the overall progress (or the regress) of their communities and societies. Second, we discovered that there are hundreds of initiatives around the world, in developed and developing countries, where communities try to use the debate about indicators to develop a shared view of what to do to improve their societies, assembling indicators and communicating them to citizens. This is emerging as a possible new governance model for democracy in the "information age" and confirms the importance of this debate for our future. Third, there is a growing consensus among political leaders that a new model for the prosperity of our societies is needed: therefore, we need better indicators to drive new policies and to make policy makers accountable.

All of these elements show how this debate goes well beyond statistical issues, but touches upon the demand for a different future than that the current crisis is stimulating. It is the perfect time to provide a concrete answer to this need and I believe that with a joint effort of statisticians and other scientists, media, civil society and policy makers we could improve the understanding of our world and, in doing that, contribute to improving it.

The proposer's rebuttal remarks: Andrew Oswald:

GDP is too narrow a measure of the things that truly matter to humans to be viewed as a valuable indicator in developed nations like ours in 2010.

Steve Landefeld presents his view cogently, but he proposes an old-fashioned vision that is driven by conventional ways of thinking rather than modern evidence, and he makes no mention of green issues or sustainability.

Here is an example:

It was a catastrophic decline in living standards that prompted the development of national, or GDP, accounts. Trying to design policies in the 1930s....

I agree with this assessment about the origins of GDP measurement. But of course such days are long, long gone. This is not an issue relevant to the case for or against GDP in 2010.

Here is a further example:

GDP, and the broader set of national income, product and wealth accounts, has stood the test [of] time and no other measure has proven a worthy alternative.

This is an assertion for which Mr Landefeld gives no evidence. On some measures of mental health, for example, as I tried to explain in the first stage of the debate, there is research evidence that levels of psychological well-being in rich nations are worsening through time. If so, it would seem to me, and I presume to other observers, that the "test" has been failed.

Mr Landefeld also argues that:

There is no broader social measurement tool that officials would agree is valid and useful.

This is not true: see the Stiglitz report.

Mr Landefeld suggests that it would seem irresponsible to abandon what he sees as the most comprehensive and reliable system currently available. Readers will have to judge for themselves. In my opinion, this takes us back to the kind of status-quo positions adopted in debates since at least the Middle Ages when it was proposed to give up the view that the Earth was the centre of the universe. Presumably we should choose our intellectual positions on the basis of modern data and not because ideas are familiar to us or previously long-accepted.

Mr Landefeld says that the Stiglitz-Sen-Fitoussi Commission (2009), which explored expanded welfare measures, has suggested a number of ways that "classical GDP issues" can be addressed within existing GDP accounts or through an extension and improvement of measures included in existing accounts. Yet, as a read of the report on the web will make clear, his is not in an obvious way an even-handed assessment of the Commission (on which I served). For example, he does not mention the central recommendations in the Stiglitz Report about the need to measure human well-being rather than GDP.

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Mr Landefeld believes that alternatives to GDP have..."foundered on the inevitable problems of subjectivity and uncertainty inherent in measuring happiness, household work and other non-market activities". Unfortunately, this is an assertion without data to support it. More important, it is time to think about what economists would call the right maximand.

Consider this possibility. One of Mr Landefeld's close relatives or friends comes to him and says: "Steve, confidentially, I am really hating my job and my marriage isn't working and I am feeling deeply depressed." Surely he would not say to his relative: "Not interested. Don't give me your subjectivity. Go home and count dollars."

The opposition's rebuttal remarks: Steve Landefeld:

If the motion were about measuring welfare, the answer might be that **GDP** is a poor measure. However, as a measure of standards of living—that is, a measure of the level of comfort provided by privately purchased and publicly provided goods and services—GDP is a pretty good measure of living standards. While it may need to be supplemented by distribution of income and other information, it is a concrete measure of the economic output and incomes available to meet the material needs of society and advance standards of living.

I will concede that GDP is an imperfect measure of living standards, but as an objective measure of the contributions of the economy to living standards, it is a better measure than gross national happiness or any of the other measures that have been proposed. The question of whether it is a poor measure is directly related to the quality of alternatives.

I am reminded in this debate on GDP and standards of living of the debates on democracy as a form of government and Winston Churchill's famous words: "No one pretends that democracy is perfect or all-wise. Indeed, it has been said that democracy is the worst form of government except all those other forms that have been tried from time to time."

GDP may not (yet) measure the distribution of incomes, the effect of the economy on the environment, or the happiness of society, but it is an objective and measureable index of what the economy can contribute to standards of living.

Taxes, public spending and transfer programmes play an important role in determining how GDP is distributed. But it is the level and growth of GDP that determine how much a nation can afford to spend on such things as housing, medical care, food, and other goods and services, as well as the alleviation of poverty, better schools, transport and pollution abatement.

Consider the alternatives. What would be the result of America and other developed economies following Bhutan and replacing GDP with gross national happiness? The main result would be a set of measures that do not change over time and thus are of little value in assessing the effect of specific events or policies.

Existing measures of happiness for the developed economies in Europe, America and Japan are virtually flat over the entire postsecond-world-war era, with no significant increase over time despite real GDP per head in these countries more than tripling over this period (Landefeld and Villones, 2009). Except for the richest and poorest countries, there is little difference in recorded happiness. There is almost no variation to reflect wars, recessions, or natural disasters—each of which clearly has a material affect on these countries and their living standards. Yet they barely register on the existing happiness indices. The reality, as Mr Oswald pointed out, is that individuals adapt to changes in their circumstances and register little change in their happiness when their incomes or circumstances change—up or down. Or as one of the online "comments from the floor" points out, "our troglodyte forebears were doubtless just as happy as we are". Yet I feel certain that few Economist readers would choose to return to the standard of living, as measured by the level of goods and services, including medical care, available in the Cro-Magnon era. Interesting stuff, but not a tool that is likely to be helpful in guiding economic or other policies.

Other alternatives to GDP, such as the genuine progress indicator, suffer from the second fatal deficiency of subjective measures: the absence of an objective set of weights for aggregating and comparing the various indicators included in such measures.

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Without a widely accepted and objective means of weighting, it is impossible to provide an overall measure of a nation's progress in raising living standards. Without objective weights it is also not possible to compare the value of cleaning up the environment with the value of investments in early childhood education. Subjective weights from some new welfare-based index cannot take the place of the public debate and legislative processes necessary to the evaluation of such complex, multifaceted issues.

As an economist, and head of a statistical agency, I suggest that we in the field have no special expertise in developing subjective social weights, and that such weights would not be accepted by the public or legislative bodies as a reasonable substitute for political decisionmaking.

What would be helpful to public policy would be an extension of the existing GDP accounts to measure the economic effects of pollution control, health and other public programmes. An extension of the national accounts would use proxies for market prices—the avoided costs of medical treatment associated with child health and environmental problems, the avoided work loss days from illness, and so on—to compare and aggregate. Such measures would be limited to the market effects of non-market programmes, and would need to be supplemented by explicit social and legislative judgments. But they would provide a consistent means of comparing the economic effects of such programmes. This is the appropriate contribution for economics to make.

A useful analogy for economic indicators is that of a car's dashboard. The speedometer, tachometer and fuel gauges are all important. Other dials tell you the temperature, how far you've travelled and how much oil you have. At any given time, these separate dials give you much of the information you need to drive your car, but you would never want to add up the readings on all the indicators and put them on one gauge. That would make no sense.

GDP is the economy's speedometer, measuring the growth rate of the economy. It's only one of several indicators. And other components of the GDP accounts represent many of the other dials.

To address some of the gaps in the existing dashboard, **BEA** is looking at adding new gauges to improve the existing dashboard, rather than developing a single new index that attempts to measure concepts as diverse as the distribution of income and sustainability. These plans are laid out in the paper "GDP and Beyond: Measuring Economic Progress and Sustainability" included in the background reading section of this debate site.

GDP may be an imperfect measure of living standards, but it is not a poor one, at least not in comparison to the alternatives.

Oh, and by the way—which dial on your car's dashboard do you look at the most?



Wednesday, April 28, 2010 THE ECONOMIST

Economists Debates: GDP (Part 3)

Proposition: The House Believes That Gdp Growth Is A Poor Measure Of Improving Living Standard Closing Statements

Posted April 28, 2010

The moderator's closing remarks: Apr 28th 2010 | Patrick Lane

We've nearly reached the end of this online debate. The closing statements from both sides are in. During the rebuttal phase, we've had remarks from two guests: Enrico Giovannini, of Istat, and Michael Boskin, of the Hoover Institution. We'll hear from another guest, Keith Hennessey, who was director of the National Economic Council under George Bush, before we finish.

From the outset, a lot of the debate especially on the floor—has centred on the meaning of two words in the motion: "living standards". In the rebuttal stage Aaron Goh put it this way: "The way the debate motion has been framed is not conducive for discussion. Whilst most of us (as shown by poll numbers) believe that the GDP is a poor measure of living standards, this does not detract from the fact that it does indeed do the job it was made to domeasure the growth in economic output in a country." XzvmSnMTef wrote: "Before trying to change the GDP indicator, it may be useful to discuss the very concept of 'living standards' and well-being. If we don't know what it is, we can hardly measure it."

This focus on definition, I think, can be either a strength or a weakness in a debate. In this debate it's been a strength, on balance, because it invites us to think about what, exactly, we mean by living standards and hence what it is we are trying to measure. The obvious starting point is material.

And because output, income and consumption are three points on the same circle of economic activity, GDP—an estimate of the output of the economy—is an obvious measure. If we stop there, the chief question is how well GDP captures material living standards.

As we've said before, we know GDP (or GDP) per head) captures averages. Criticising it for not measuring the distribution of income is, depending on your point of view, either a killer point (of course distribution matters!) or beside the point (yes, distribution matters, but don't ditch GDP; add the Gini co-efficient or the ratio of the 90th percentile of the income distribution to the 10th). Perhaps, if we limit ourselves to material living standards, the main omissions that should worry us are things not reflected in GDP that make us materially poorer or richer: a cleaner or dirtier environment, better or worse provision of public goods, and so forth. Important policy questions follow: does the pursuit of GDP growth lead not to higher living standards but to lower ones, because it comes at the expense of things we do not measure?

But should we stop there? Australian Actuary thinks we should, urging me to "get the debate back on track" and arguing that living standards and well-being are not the same thing. Many of you plainly think we shouldn't.

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We certainly get into deeper waters once we ask what the point of higher material living standards is. If the point is not to make us happy, or to improve our well-being, then what is it?

We're then asking a different question: does GDP make us better off, not just materially but in some broader sense? Many of you argue that this is all very well, but believe that happiness cannot be measured, or can be measured only subjectively. Andrew Oswald disagrees, vigorously—and moreover, says that happiness and GDP do not walk hand in hand. He points to evidence that in rich countries GDP growth does not do those things: wealth makes us no happier. Few of you want to do away with GDP altogether. Just about all of you seem to think it should be supplemented. So does Steve Landefeld—although GDP would continue to get most of his attention.

The proposer's closing remarks: Apr 28th 2010 | Andrew Oswald

Steve Landefeld has not mentioned the modern research evidence that, in the first round, I listed for Economist readers. Moreover, most of the points made in Mr Landefeld's rebuttal are factually incorrect.

It may be useful to begin more broadly. My unspoken assumption, which it seems I will have to make explicit, has been that this debate is not about about whether GDP is a measure of GDP. Truisms do not need to be debated. Yet I feel that a lot of Mr Landefeld's arguments, and those of a few web commentators, have come close to that. We are instead debating something important—something that our grandchildren and great grandchildren will have to face.

The first reason to doubt that GDP is a useful measure is the evidence known as the Easterlin paradox (the empirical finding that countries do not become happier as they grow wealthier). Large numbers of researchers have doubted this, then looked at the data, then beaten the data, and then, often through gritted teeth, ended up accepting that Richard Easterlin's paradox really does show up in the numbers. A good example of such a study is that in the Journal of Development Economics by two distinguished researchers, Rafael Di Tella of Harvard and Robert MacCulloch of Imperial College London. The second reason is that global warming means it is necessary for homo sapiens to make fewer things rather than more, and to burn fewer of the fossil fuels that have fuelled, literally, the GDP race. I

do find it frustrating that Mr Landefeld has not offered us an opinion on this. The third reason, and a twist in the intellectual story that is Mr Easterlin's work, is that, as I explained in the opening round—with listed references for anyone who does not know the modern literature—there is evidence that mental health and emotional prosperity are declining. The fourth reason is that the recent Stiglitz Commission has produced a weighty report saying: "A ... unifying theme of the report is that the time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people's well-being."

Let me try to swallow some of the medicine I recommended to my colleague—and address key points explicitly.

Point 1. "What would be the result of America and other developed economies following Bhutan and replacing GDP with gross national happiness? The main result would be a set of measures that do not change over time and thus are of little value in assessing the effect of specific events or policies."

I have not mentioned Bhutan. But it is simply false to say that the result would be a set of measures that do not change over time. Although Mr Landefeld appears not to have the read the research literature, we know that, for example, there are strong business cycle movements in nations' happiness and mental-health data. Read Justin Wolfers (2003) and Rafael Di Tella et al. (2001) and the ensuing literature. When unemployment rises, happiness falls. When inflation drops, happiness increases. And much else.

Point 2. "Except for the richest and poorest countries, there is little difference in recorded happiness."

This statement seems a strange one to me (except for the tallest people and the smallest people, humans are about the same height?) but insofar as it makes logical sense it is incorrect.

There are large differences in recorded happiness and life satisfaction across countries. Read the literature. Look at the scatter plots in the work of Betsey Stevenson and Mr Wolfers and a psychology literature going back decades. It would be amazing if this were not true; rich countries have democracy, public education systems, good public health systems, and so on. But the issue is whether AFTER a nation has those there is any real point in pushing up GDP.

Point 3. "... individuals adapt to changes in their circumstances and register little change in their happiness when their incomes or circumstances change—up or down. Or as one of the online 'comments from the floor' points out, 'our troglodyte forebears were doubtless just as happy as we are'."

The first of these is wrong; the second is somewhere between unknown and surely ridiculous. The new research literature on longitudinal data does not show that happiness is barely affected by changes. And the idea that cavemen and cavewomen were as happy as we are is silly and not consistent with any research evidence, known to me, on poor societies.

Point 4. "Subjective weights from some new welfare-based index cannot take the place of the public debate and legislative processes necessary to the evaluation of such complex, multifaceted issues."

By subjective I assume Mr Landefeld means human. Well, human weights are just what we do need. Moreover, Mr Landefeld does not appear to notice that GDP itself does not take the place of public debate and the legislative process; nor should it. So this is a red herring.

Point 5. "By the way—which dial on your car's dashboard do you look at the most?"

The milometer. I want to know whether I am going forward.

Western society is not.

Research evidence:

Relative income, happiness, and utility: An explanation for the Easterlin paradox and other puzzles

Authors: Clark, A.E., Frijters, P. and Shields, M.A.

Source: Journal of Economic Literature, Volume 46, Issue 1, pages 95-144, March 2008

Gross national happiness as an answer to the Easterlin Paradox?

Authors: Di Tella, R. and MacCulloch, R. Source: Journal of Development Economics, Volume 86, Issue 1, pages 22-42, April 2008

Is Business Cycle Volatility Costly? Evidence from Surveys of Well-being

Author: Wolfers, J.

Source: International Finance, Volume 6, Issue 1, pages 1-26, Spring 2003

Preferences over inflation and unemployment: Evidence from surveys of happiness

Authors: Di Tella, R., MacCulloch, R.J. and Oswald, A.J.

Source: American Economic Review, Volume 91, Issue 1, pages 335-341, March 2001

The macroeconomics of happiness Authors: Di Tella, R., MacCulloch, R.J. and Oswald, A.J.

Source: Review of Economics and Statistics, Volume 85, Issue 4, pages 809-827, November 2003

Objective Confirmation of Subjective Measures of Human Well-Being: Evidence from the USA

Authors: Oswald A.J. and Wu, S. Source: Science, Volume 327, Issue 5965, pages 576-579, January 29th 2010

The opposition's closing remarksApr 28th 2010 | Steve Landefeld

During Bill Clinton's 1992 campaign for president against George Bush, there was a large banner on the wall of campaign headquarters to focus attention on the electorate's most important issue. The banner read, "It's the Economy, Stupid." While that election took place during the 1990-91 recession, the economy—as measured by real GDP per capita and GDP inflation—has consistently been the most important of the determinants of US presidential elections over the last century (Ray Fair, 2009).

Today, as we look at a world struggling to recover from the worst economic collapse since the Great Depression, we see policymakers pouring over the GDP and each scrap of new economic data. From this perspective, I have to wonder what my worthy opponent was thinking when he said, "GDP is too narrow a measure of the things that truly matter to humans to be viewed as a valuable indicator in developed nations like ours in 2010."

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Why do we as a society focus on the economy? Because growth in the economy is the most important determinant of living standards. You may not like the distribution of income or pollution outcomes associated with growth in the economy, but that growth produces a bigger pie, which makes it easier to redistribute income, and raise taxes to invest in parks, pollution abatement, education, and health care. Indeed, as guest commenter, Enrico Giovanini, observed, higher GDP per capita is normally associated with better living conditions. These include better health, longer life expectancy, less pollution, more leisure, and a greater variety of cultural and public goods and services.

It is clear that GDP, which can be measured, is not only a good measure of standards of living—as defined by the provision of goods and services—but serves as a pretty good proxy for a broader definition of standards of living that includes a lot of things which cannot be easily measured.

But we must go beyond the existing measures of GDP. While GDP may be a good proxy for standards of living, narrowly or broadly defined, we can and should do better. By extending GDP accounts in some of the ways suggested by the Stiglitz-Sen-Fitoussi report, countries can build on the strong foundation of the existing GDP accounts to develop a more comprehensive set of supplemental measures that are consistent with the existing accounts but are more directly relevant to the broader definition of living standards. The BEA has proposed an extension that will provide new measures of (1) the distribution of growth in income across households, other sectors, and regions; and (2) the sustainability of trends in saving, investment, asset prices, and other key variables important to understanding business cycles and the sources of economic growth. (You can learn more about these proposals here.)

Such measures strike the appropriate balance for public policy, with GDP and extended national accounts providing objective information on the economy, leaving the political judgments in the hands of elected leaders. While extending the scope of GDP, these improvements would still function within the objective realm of gauging the market effects of nonmarket activities.

Most important, they would provide a consistent means of comparing the economic effects of various policy decisions.

This is as it should be. Judgments on concepts which are hard to define and quantify like well-being and happiness must be left to those responsible for guiding social movement and legislative policy. Economists' contributions must continue to focus on what economists can uniquely provide: the objective impacts of such programmes. As the Nobel Laureate Milton Friedman observed, "Positive economics is in principle independent of any particular ethical position or normative judgments...In short it is or can be an objective science."

In addition to sticking to economic effects, extended accounts should probably stick to that which can be reasonably measured. Arthur Pigou, a leading English economist in the 1900s who helped form the way people think about economic welfare, suggested that national accounts should include those elements that reflect economic welfare which can "be brought directly or indirectly into relation with the measuring rod of money." Pigou emphasised that the word "can" might mean anything from "can easily" to "can with mild straining" to "can with violent straining". It is likely that the measurement of happiness and the welfare value of a wide range of nonmarket activities and social programmes should be regarded as "can with violent straining."

In conclusion, improvements to national accounts, through supplemental accounts, are necessary and welcome, but not at the expense of the core GDP statistics. The economy is essential to the measurement of nations' progress in improving standards of living. The absence of economic growth, which begets jobs, which in turn provide means for consumption can make life pretty grim, regardless of intangible qualities of life. GDP is an objective measure of these market forces, and remains a central tool for providing the public a sense of current living standards, and an objective method to gauge change.

Should we continue to improve it, as we have for the last 75 years? Expand upon it? By all means, let's get to work. Both those things which we can measure and those which we cannot have real and important value—that is not in doubt.

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But to replace objectivity with subjectivity—well, to me that is the dated pursuit. Various groups have suggested replacing GDP with alternative measures since its inception in the 1930s, yet—beyond occasional gee-whiz publicity—none of those alternatives have gained acceptance or are used in public policy. Far better to work on supplemental accounts within the powerful and well-accepted structure of the GDP accounts. These accounts are used around the world to guide fiscal and monetary policy, to allocate funds and tax shares, and guide regulatory and a broad range of other policies.

Those who are serious about moving forward with broader measures of the effects of economic growth will be well served by focusing their efforts on the existing GDP accounts. By incorporating measures, such as the distribution of income, that supplement, but do not reduce the usefulness of the core GDP accounts, they will accomplish far more than by developing yet another set subjective measures of society's welfare.

Audience participation Comments from the floor. Featured guest:Keith Hennessey

Gross domestic product is of course an imperfect measure of improving living standards, primarily because it is incomplete. By excluding changes in non-market goods like clean air and water, GDP measures the market value of goods and services produced within a nation, but excludes many important outputs that are not owned, traded, or easily and objectively valued. The "P" stands for product, so GDP is an output measure, whereas living standards are in part a function of the goods and services we consume and of the income generated by those we produce.

GDP does not measure happiness, or wellbeing, or what economists call utility. As a gross measure, it aggregates data for a geographic area, ignoring important distributional questions and individual preferences. As a flow measure, it does not account for the value of a nation's stock of assets and liabilities.

Andrew Oswald argues: "GDP is too narrow a measure of the things that truly matter to humans to be viewed as a valuable indicator in developed nations like ours in 2010."

I shudder to imagine who might assign themselves the role of determining what truly matters to all mankind. Yet the proposition is not whether GDP is a valuable indicator of "things that truly matter to humans". The proposition is not limited to rich nations or to the present. The proposition is that GDP growth is a poor measure of improving living standards. I oppose that proposition.

Mr Oswald argues that we should measure well-being and include both subjective surveys and sustainability as components of that measurement. I have no quarrel with measuring well-being, but there is no reason to foul up a useful statistic in doing so. GDP is but one indicator that policymakers can and should use to analyse the economic health of a nation, and it is foolish either to use it for a purpose for which it was not intended, or to attempt to change it to suit one's policy goals. A doctor who monitors only a patient's pulse is not doing his job, but one who argues we should ask the patient how he feels and call that his "pulse" is outright dangerous.

A patient's pulse is useful in part because it is an easily measurable and objective metric that is comparable over time and across patients. GDP is quantifiable—it is simply an accounting measure. GDP is objective—we can rely on the data even when personnel in the statistics office change or the party in power flips. GDP is, within limits, roughly comparable across nations and over time, allowing us to make imperfect but still useful policy comparisons and judgments. And since wealthier societies generally devote some of their increased resources to improving non-market attributes like clean air and water, GDP is only partially incomplete as a measure of the non-tradable aspects of improved living standards.

I would rather live in the Turks and Caicos Islands than in Iran, even though the latter has a higher per person GDP. But if you ask me in which of two unlabelled countries I want to live, and if I know only their per person GDP, I will choose the higher one because it probably has a higher standard of living. Similarly, if you tell me only that a country's GDP has grown 10% and ask me if the standard of living has improved, I will almost always be right if I guess that it has.

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Higher GDP means more tradable resources for individuals and governments with which to improve standards of living. Economic growth is good, and more economic growth is better. Ask a family in a poor African nation whether they agree with Mr Oswald's conclusion that man needs "to make fewer things rather than more", and whether they need to value tranquil beauty more and a car less.

Money cannot buy happiness, and GDP cannot measure it. But as a measure of improving living standards, it is both adequate and superior to subjectively defined, internationally incomparable and time-inconsistent measures of happiness based on someone's subjective decision about how you should measure your happiness.



Friday, April 30, 2010 THE ECONOMIST

Economists Debates: GDP (Part 4)

Proposition: The House Believes That Gdp Growth Is A Poor Measure Of Improving Living Standard Winner Announcement

Patrick Lane, Moderator Posted April 30, 2010

Our debate has ended, and it is my duty to declare the winner: Andrew Oswald's proposition, that **GDP** growth is not a good measure of living standards, is carried, by 72% to 28%. A margin of roughly that size has been in evidence since the first day, and despite **Steve Landefeld's** valiant efforts, it has not looked as though the gap would shrink.

Anyone who supposes that a debate about GDP must be dry, dull and statistical ought to take a look at the arguments laid out by Mr Oswald, Mr Landefeld, our guest commentators and many floor speakers over the past week or so. From the outset, when Mr Oswald told us that "GDP is a gravely dated pursuit", the debate has been passionate as well as scholarly. And rightly: we have been arguing about how to measure living standards. Whether you define that term in material terms alone or whether you interpret it more broadly, it is an argument about the essence of economics and economic progress.

Some participants have taken issue with the wording of the motion, pointing out, for example, that GDP was never intended as a measure of living standards. This to-and-fro over questions of definition might in another context have been frustrating, but for me it was a strength: arguing about what is worth measuring seems to me to be a necessary preliminary step before you work out how best to measure it.

The final tally suggests that Mr Landefeld always had a harder task than Mr Oswald. Despite what I have just said, perhaps the motion placed too great a burden on GDP. Once you start to think about how you might measure living standards—the distribution of income, not the average; the state of the environment; happiness; and so forth—you can find more and more ways in which a measure of economic output will fall short. Mr Landefeld argued that GDP should be supplemented by other measures, such as satellite accounts, and cautioned economists against "judgments on concepts that are hard to define and quantify". Many more people, though, sided with Mr Oswald's claim that GDP had outlived its usefulness

On behalf of The Economist I would like to thank Andrew Oswald and Steve Landefeld for their time and eloquence. Thanks are also due to our guest speakers, Enrico Giovannini, Michael Boskin and Keith Hennessey, for their fine contributions. I would also like to thank all those who have taken part in this debate, especially by making contributions from the floor. Our debate is over; the arguments, I suspect, will go on.