

# CUTTING THROUGH THE CLUTTER: SEARCHING FOR AN OVER-ARCHING MEASURE OF WELL-BEING

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#### Introduction

We take as our departure point the now well-rehearsed ideas that:

- Societies place too much emphasis on Gross Domestic Product (GDP) as though it were a metric of well-being, and
- Decision-makers would do better by paying attention to more direct measures of well-being, using GDP in its place as a macroeconomic planning tool.

It is, of course, one thing to recognize that a change in behavior is required, and another to bring about the change. Indeed, the idea of demoting GDP is not new. In 1968 Senator Robert Kennedy warned eloquently about the problems of using Gross National Product (GNP) as a yardstick for America's progress, concluding that the GNP "measures every-

thing, in short, except that which makes life worthwhile". And yet, more than 40 years later, the 2009 report of the Sen-Stiglitz-Fitoussi Commission shows that concerns remain. Although the limitations of GDP as a measure of well-being are well known, no

serious challenger has yet emerged to supplement or supplant it. The public and politicians, through the media, are bombarded with economic data daily, from the latest stock exchange figures to currency exchange rates and most, if not all, societies seem a long way away from having a public debate that is framed in terms of increasing well-being. Narrow economic outcomes remain paramount in most domestic and international assessments of national success. But why is that? And what role can measures of subjective well-being play in the push to go beyond GDP?

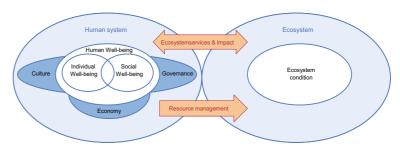
### What is well-being?

Before you can search for better measures of wellbeing, you need to know what it looks like. While most people would agree that well-being is multidimensional there are many views on what those dimensions are and how they should be labeled. The OECD has suggested that "progress" comprises increases in both human and ecosystem well-being (Hall, Giovannini, Morrone and Ranuzzi 2010). The former includes health, knowledge and understanding, work, material well-being, freedom and self-determination and interpersonal relationships, as well as those institutions and conditions of life that support human well-being (namely the economy, governance and democracy, and culture). Measuring ecosystem well-being requires measuring the state of biodiversity and its environments (land, freshwater, seas and the atmosphere) (Figure).



Figure

#### THE DIMENSIONS OF WELL-BEING



Source: Hall et al. 2010.

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Well-being, therefore, covers a wide range of dimensions. It follows that any measure or set of measures that seeks to replace GDP should ideally relate to all of the above, otherwise it risks portraying too narrow a view of the things that matter, one of the criticisms leveled at GDP in the first place.

#### The political economy of information reform

It is not so difficult to be convinced of the intellectual case for measuring what matters and focusing on well-being rather than output. And it is technically possible to measure many of the dimensions of wellbeing outlined above: when taken together, such a set of measures ought to provide a better picture of national overall well-being than that offered by GDP. But it is a much more difficult proposition to change the paradigm in which people debate national well-being. GDP remains the dominant way in which a nation's progress is measured and understood (OECD 2009). There are doubtless several reasons for GDP's continued dominance, but one reason for its popularity is that it is just one number. It is much easier to interpret changes in GDP (with an increase seen as good and a decrease as bad), or to rank countries according to their level, than to summarize changes in a multitude of separate indicators that might be moving in different directions.

Some proponents of change seek to replace GDP by a set of measures, but GDP has outlived the - now largely defunct - "social indicators movement" of the 1980s and also appears to have survived the faltering sustainable development indicators movement of the 1990s. In both cases the plurality of approaches and the number of different, and often conflicting, indicators, appear to have been important factors in their failure to take central places in discussions of national policies and priorities. So, while assessing well-being with a set of measures might seem attractive, since it offers many groups the chance to see that their special interests are supposedly being taken into account, it lacks the power to convince. It seems too complicated an approach to capture the hearts and minds of the vast majority of people. Perhaps a single number would provide a more effective focus for public attention. What might serve that purpose?

The most widely known alternative to the set of indicators approach is the composite indicator, which aggregates the various dimensions of well-being into a single number. Better-known approaches include

the UNDP's Human Development Index and the Genuine Progress Indicator (Cobb, Halstead and Rowe 1995). But composite indicators remain open to criticism because they must use arbitrary weighting to combine the component indicators which will usually be measured in different units - life expectancy (in years), income (in purchasing power), inequality, air pollution (in particles per volume of air), etc. Combining these units poses a fundamental methodological (and ethical) problem - namely, that any composite indicator is based on some judgment regarding the relative weights to be applied to the components. "Is a one-year increase in average life expectancy to be weighted more heavily than, less heavily than or equally with a 5 percent decrease in greenhouse gas emissions?" (Hall 2005). There is a danger that political discussion will focus more on the choice of weights than on the overall indicator, thereby generating more heat than light in the attempt to take the focus away from GDP. They also run the risk of oversimplifying a complex system and sending misleading signals.

#### But is there a single measure of well-being?

In summary, therefore, it seems that GDP will remain the dominant measure of progress until a single alternative indicator emerges. To be effective, this single indicator should embrace a much broader notion of well-being than does any measure of economic activity. To be accepted it should not be a composite indicator. But is there a way to summarize well-being in one number, without requiring an arbitrary weighting of component indicators? We would argue, following Aristotle's suggestion, that the strongest candidate is some overarching measure of how we feel about our lives. It is a single number that can be collected directly through surveys without arbitrary weighting. But it is summary: it depends - to greater or lesser degrees - on all of the other elements in the OECD's framework for well-being (Hall et al. 2010).

## Subjective well-being as a measure of individual and societal well-being

When in doubt about how people feel about their government, ask them to vote and thereby choose among the alternatives on offer. When in doubt about how satisfied people are with their lives, why not ask them to assess their life satisfaction, on a scale of 0 to 10? Perhaps because it sounds so simple

and even naive, the possibility of using survey-based measures of subjective well-being (SWB) has only recently started to gain traction in policy-making departments and official statistical offices. The increasing support for official collection of measures of SWB has probably had four sources:

- Recognition that conventional measures of income are insufficient indicators of human and social progress (as argued above, and in Stiglitz, Sen and Fitoussi 2009).
- Recognition that although data can be collected on a wide variety of other social indicators, there is no natural way to combine them into an overall indicator of well-being.
- 3. Accumulating evidence for the validity and reliability of SWB data, based primarily on the congruence of the responses to different questions, and the apparent ease with which the data can be explained by life circumstances widely agreed to be important supports for the quality of life (Diener, Lucas, Schimmack and Helliwell 2009, 67–94).
- 4. Evidence from prospective studies showing that current levels of SWB are both responsive to current circumstances and predictive of important future consequences. Importantly, this evidence comes from both the top and the bottom of the range of SWB. At the top end, those who use more positive expressions are likely to have longer and healthier subsequent lives, even under comparable life circumstances1 than others. At the other end of the scale, a large prospective study in Denmark (Koivumaa-Honkanen, Hokanen, Viinamäki, Heikkilä, Caprio and Koskenvuo 2001) found that men with the highest degree of dissatisfaction with life had average suicide rates over the first ten years of the follow-up period 25 times higher than those of men who were satisfied with their lives.

## Benefits of using life satisfaction as an overarching measure of well-being

First and foremost, measures of life satisfaction provide in one number an individually-based assessment that speaks directly to the respondent's quality of life. They can be aggregated and averaged in any number of ways to measure the average quality of life in different communities, nations and socio-economic groups, and to keep track of changes through

time, both for individuals and for groups. Measures of GDP, by contrast, typically are not available at community or any other sub-national scales. Moreover, measures of life satisfaction resonate with the public far more than abstract concepts like GDP. Jigmi Y. Thinley, now Prime Minister of Bhutan, put this well when describing why his nation uses subjective well-being rather than economic activity as the paradigm for development: "The most common goal that every Bhutanese seeks in life is happiness" (Thinley 2007). The public's interest in these measures in turn can provoke a rich facts-based debate across society about the things that matter. Changes in average well-being, or large differences between population subgroups, would trigger debate. This debate would inevitably look for answers by analyzing the raft of economic, social and environmental information that influences overall well-being. And a richer debate makes for a healthier democracy.

Second, measures of life satisfaction enrich the information from social indicators and economic circumstances by enabling the direct estimation of weights reflecting the relative values that individuals, whether on average or in specific demographic groups, communities or nations, implicitly place on different aspects of life.

Measures of life satisfaction thus meet the three gold-standard conditions: They are equally applicable at different levels of aggregation, whether communities, regions or nations; they can be monitored as frequently as needed, and they provide the means for explaining how economic, social and institutional conditions combine to make lives better or worse.

These advantages amplify each other, as data indicating some overall change in well-being can be used in disaggregated form, and even in experimental contexts, to understand why some lives are happier than others and to improve the analysis of the costs and benefits of different policies intended to make lives better.

## The role of multiple measures of subjective well-being

Although life evaluations have been shown to contain much that is useful and even predictive, they are, like most indicators, sensitive to how and when they are measured and can shift with circumstances as temporary as today's weather. Life evaluations, like

 $<sup>^{\</sup>rm l}$  For example, life within the same order of nuns (Danner, Snowdon and Friesen 2001) or among eminent academic psychologists (Pressman and Cohen 2007).

GDP, can be measured in different ways, and there are good grounds for collecting and comparing different measures on an occasional and even a regular basis. There are three main ways of measuring GDP – via expenditures, incomes and value-added. Most systems of national accounts employ at least the income and expenditure approaches, and then use a variety of methods to decide how to allocate or interpret the inevitable discrepancies.

Similarly, there is some evidence that combining different life assessments from the same individual can provide a more robust indicator, one that can be slightly more accurately explained by underlying life circumstances (Helliwell and Barrington-Leigh 2010, Table 10.1). Similarly, it has been shown that life evaluations, measures of positive affect (positive emotions) and negative affect are separable measures of subjective well-being, all interesting and useful in their own ways (Diener et al. 2009, 11-20). Our case for choosing life evaluations as the primary candidate for an overarching role is that they are much more reflective (than are measures of positive and negative affect) of the overall circumstances of life that are – and ought to be – the principal focus of public policy (Diener, Helliwell and Kahneman 2010, chapters 1 and 10).

## Even an overarching measure of well-being is not a complete measure of progress

One current limitation on the effective use of subjective well-being data to sufficiently measure progress is that there is still only limited understanding of the time scale reflected in life evaluations. There is little yet known about the extent to which one's life expectancy plays into satisfaction, nor how much such reports reflect the quality of life that one may expect for oneself or for future generations. Thus, one way or another, the far future may not be adequately represented in life satisfaction reports.

Modern attempts at formulating a more farsighted measure of progress than GDP typically incorporate the health of natural resources and ecological systems as indicators of long-term prospects for future well-being. However, when compared with macroeconomic models of GDP, the theory relating the flow of current experienced well-being to the set of stocks which will sustain future well-being may be even less firm.

The ties between current human well-being and the long-term material stocks and services of natural systems are too complex to know with confidence. Long-standing and unresolved debates in the macroeconomics of growth and in ecological economics are evidence that top-level indicators should not attempt to combine or conflate current human well-being or current flows of benefits with indicators of natural systems and their long-term sustainability. Instead, measures of both are required, with the data on longer-term sustainability being used to guide decisions for supporting future well-being.

More generally, while we are arguing for using life satisfaction as a way to summarize and integrate many other measures of well-being, we do not favour singleminded focus on any one headline number, whether it be GDP or life satisfaction. As we have already noted, both GDP and measures of subjective well-being, including life satisfaction, require diverse sources of information. Thus we support the consensus reported by Diener et al., "... that several measures of subjective well-being need to be comparably collected to better understand the nature and consequences of international differences in subjective well-being" (2010, x-xi). Multiple and fine-grained measures of subjective well-being, as well as of the economic and social variables that are its underlying supports, are needed (Helliwell and Barrington-Leigh 2010). For example, social connections with spouses, family, colleagues, communities and nations - measured by frequency of contact, depth of trust and feelings of belonging - are all powerful predictors of people's big-picture reflections about how good life feels. These attributes of a society are likely to feature amongst the second-tier supporting data, along with accounts of natural stocks of resources, stocks of physical capital, human capital, social capital and investments in social, economic and political institutions. Only with this broader body of information can the quality of the overall measures be assured and their supports better understood. Only thus will it be possible to conduct the kind of broader analysis of costs and benefits required to inform more balanced discussions and decisions in both the private and public spheres.

## Measuring life satisfaction to support better policies and a healthier democracy

To conclude, we agree with Joseph Stiglitz and his colleagues that "what we measure affects what we do; and if our measurements are flawed, decisions may be distorted" and that "it has long been clear that GDP is an inadequate metric to gauge well-being over time particularly in its economic, environmental, and social dimensions" (Stiglitz, Sen and Fitoussi 2009).

A growing consensus recognizes the need to replace, or at least complement, GDP with a broader set of measures. Considerable energy is being spent to do just this around the world with many organizations producing sets of progress measures. However, experience over the past 30 years shows that these exercises, while they can be beneficial, are unlikely to provoke widespread change. We believe that GDP will remain the dominant way in which societies assess their progress unless an alternative single number can be found to take GDP's place in the spotlight. Sets of indicators are too complex to usurp GDP, while composite indicators of well-being are too controversial and generate more heat than light. Life satisfaction provides a way through this thicket. Such a measure would be statistically defensible, would not require arbitrary weighting and would arguably summarize – by sitting at the apex of – all of the different dimensions of life that comprise our current well-being.

Measuring life satisfaction offers a different lens through which to think about policy making: a lens that in countries like the UK is already leading to a rethink of many policy areas (Bacon, Brophy, Mguni, Mulgan and Shandro 2010). Moreover, the popularity of life satisfaction measures can trigger a rich facts-based national conversation about all the things that matter in life. The measures resonate with the public and so help the media fulfill their "responsibility in enabling citizens to get a sense of what is happening in the society in which they are living. Information is a public good; the more we are informed about what is happening in our society, the better will our democracies be able to function" (Stiglitz, Sen and Fitoussi 2009).

Although we believe that measures of subjective well-being have the potential to join or even supplant GDP's place in the spotlight, we are not, for one moment, suggesting all policy making and public debate should focus narrowly and solely on increasing life satisfaction. Rather, we see a measure of life satisfaction as revitalizing and reframing debate, and ultimately provoking richer and broader national conversations about all of the components of progress.

In short, the broad availability and use of life satisfaction as an overarching measure of well-being, if properly supported by appropriate measures of the sustainability of the social, institutional and environmental fabric, could encourage and support better local and national policies to build and sustain better lives for current and future generations.

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