Some Thoughts on How Subjective Well-Being Metrics Can Contribute to

"The Great Policy Challenge"

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It is a point in history where all of our standard benchmarks of progress, productivity, job quality, and democracy, among others, are under question or in flux. Our income-based measures of progress such as GNP took a long time to develop and served us well for decades. Yet they are not without flaws, most of which are well-known, such as including severe pollutant generating economic activity on the positive side of the balance sheet, and failing to include metrics for unpaid labor activity, such as stay at home parents' child care provision or the work of volunteers, at all.

Nor did the early authors of these metrics, such as Simon Kuznets, promise that they could measure everything perfectly. On the release of the original GDP data: "Kuznets warned of this: 'the welfare of a nation can, therefore, scarcely be inferred from a measurement of national income', like the one they had created. That hasn't stopped us from making this misleading number perhaps the most influential statistic in the world."

An additional issue, which is less a problem of the metrics and more of the rapid pace of technological change, is that key variables in GDP, which take time to agree upon and to make comparable across countries, cannot by definition keep up with technical progress. As such, cars and factories are likely over-weighted, and cell phones and information technology are under-weighted. While there are no magic bullets to these issues, subjective well-being metrics can help. How?

Subjective well-being metrics depart from standard revealed preference based approaches, and rely on surveys of reported well-being instead. As such they allow us to value the welfare effects of phenomena which are not easily captured in standard income or consumption choice based metrics. These include macro and institutional arrangements that individuals cannot change, and/or behaviors that are driven not by optimal preferences but by addiction and self-control problems on the one hand, and lack of agency on the other.

While much public attention goes to cross-country comparisons of average levels of happiness, a note of caution is necessary. The country averages tell us much less than the individual level data and how it moves across cohorts within countries. In the latter instance, it is possible to control for unobservable character differences across individuals, countries, and time, among other things, and to more precisely estimate the well-being effects of things that vary. Country averages move much less and they also pick up unobservable differences across countries. Still, there is meaningful information in the averages, and the cross country rankings reflect real differences in key factors affecting well-being. These include average levels of GDP per capita, freedom to make choices in life, health status, social capital, and trust and the absence of corruption. These factors vary across countries and those which score better, on average, also score higher on average levels of life satisfaction. As such wealthy countries in general score higher on the world scale, and very poor countries and particularly those with high levels of violence are routinely at the bottom of the rankings.

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¹ Rothkopf (2011).

Yet there are clearly nuances, and there are significant differences between countries' GDP per capita and average well-being levels. The divergences can be explained by a mix of objective quality of life indicators on the one hand and innate character traits on the other. As such Latin American countries all score higher than their incomes would predict, Eastern Europeans all much lower. And while the averages and the rankings do not move very much, they move in the expected direction with significant events: down with financial and other crises, and up with significant improvements in things like democracy and safety.

The countries that experienced the greatest average drops in life satisfaction between the 2005-2007 period and the 2012-2014 period, for example, were, not surprisingly, Greece, Egypt, and Italy, all falling over 1 point in the average score on a 0-10 (e.g. 11 point) scale. Those that experienced the greatest increases, meanwhile, include Nicaragua, Zimbabwe, and Peru, increases that may be due to changes in governance and/or in economic circumstances. The happiest and wealthiest countries in the rankings and the poorest and least happy ones at the bottom of the rankings, meanwhile, are the least likely to experience significant changes (which is in part an artifact of construction – it is hard to move a higher average up or a very low average down even further).

One example of significant change in average happiness levels, meanwhile, is the "paradox of unhappy growth", which finds that life satisfaction levels often fall dramatically during periods of very rapid growth, due to insecurity, inequality, and changing rewards to different skill sets. While life satisfaction levels usually recover over time, the human costs in the interim can be very high, such as major increases in suicide and mental illness rates in China from 1995 to 2010. Reflecting its gradual recovery as growth patterns stabilized, China's average ranking changed by half a point on the 0-10 scale from the 2005-2007 to the 2012-2014 period.

The findings from individual analysis focused on particular factors that both vary and affect well-being are more robust - and more useful as inputs into policy discussions, including this one. One example is the well-being effects of information technology. Our research around the world finds that the overall effects on life satisfaction of internet, cell phones, and television are basically positive, particularly where they increase capabilities (such as cell phones and e-banking in Africa), but the technologies may also be associated with higher levels of stress and anger for the same respondents.

Another example is the value of "flex time" and/or voluntary part-time work status. While both of these things are likely to be associated with lower wages, they are also associated with significantly higher levels of well-being. The role of having autonomy at work does not have an attached income value, but the assessed value in terms of well-being is very high relative to that of higher marginal incomes. Volunteering, meanwhile, also has significant benefits in terms of well-being although it does not appear in the income metrics. All of these factors are important as we re-assess our definitions of progress and productivity.

Another area where SWB metrics can attach value (in relative terms) to a non-monetary dimension of productivity and progress is the well-being effects of differential environmental conditions, ranging from air plane noise to air pollution. The same metrics can be applied to assess relative values, in terms of well-being, to commuting time, diversity in cities, local and national level inequality, and more.

² Helliwell, Layard, and Sachs (2015).

The metrics also show that individuals with higher levels of well-being, which are often linked to the above factors as well as to innate character traits, are more productive, healthy, and more likely to invest in their futures.³ Conversely, they show the very high well-being costs and lack of faith in the future, such as deep desperation and even increasing suicide rates among the left-behinds.⁴ Those individuals who are unable to take advantage of changing trends, because of lack of skills and education or even worse because of insecure and precarious existences which preclude planning beyond the moment, are falling further and further behind and also facing competition from new competitors for a shrinking number of low skill jobs. Fear of downward mobility among some of them, meanwhile, is reflected in frightening levels of support for extremist politicians in many countries in Europe and in the U.S.

Subjective well-being metrics cannot solve all of these complex problems. Yet they can provide deeper insights into them, which is the first step towards crafting solutions. Had we been measuring well-being in official statistics in the U.S., as some countries like Britain are already doing, we might not have waited until we were caught off guard by depressing mortality statistics among downwardly mobile cohorts or the explosion of political support for Donald Trump, neither of which portend well for productivity in the future.

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³ Graham, Eggers, and Sukhtankar, 2004; DeNeve et al., 2013.

⁴ Case and Deaton, 2015; Graham, forthcoming.