April 2017

Sustainability and Well-Being: A Happy Synergy

Christopher Barrington-Leigh



The new science of "happiness" is revolutionizing our ability to measure social progress. Factors such as meaningful relationships and a sense of purpose and belonging have been shown to be essential to human well-being; indeed, they contribute even more than income. The happiest societies foster dignity for all, in part through robust investment in public goods and a holistic approach to education. This converging body of research indicates that well-being and ecological sustainability, goals sometimes viewed as contradictory, are in fact complementary. Emphasizing social drivers of well-being counters the conventional focus on economic growth and fosters the prosocial attitudes and behaviors necessary to live in better balance with nature. Fortuitously, recent technological innovations that make knowledge and productive capacity widely available at little cost and promote creative and collaborative activity could facilitate a transition to a world of reduced environmental stress and enhanced human well-being. An affirmative vision of a future both resilient and fulfilling, rather one of dour work and sacrifice, should guide our way.

Introduction

To date, society has gauged the advance of human welfare by relying on poor proxies such as income, employment, and GDP. However, the emerging science of "happiness" is providing new tools that could revolutionize the measurement of social progress. Emergent insights from this young field are already influencing economics, psychology, health care, and urban planning, as well as the methods of the national statistical agencies that guide policymaking. If adopted, the new metrics could have far-reaching implications for transformational social change.

At a basic level, understanding why individuals in some communities and countries are more satisfied with their lives lays a foundation for improved policy. More broadly, the study of happiness informs a value shift away from individualism and consumerism by showing that life is better when we prioritize and achieve more Aristotelian ideals, including a sense of individual and collective purpose, and connection with others.

These new insights support efforts toward a Great Transition in two key ways. First, economic growth, which has served as a proxy for gains in well-being and a palliative for social ills, has only an indirect and limited impact on well-being in the long run, so there is no reason to pursue such growth directly. Second, the sources of lasting improvements in well-being—such as trust, common cause, and compassion—are largely non-material, and thus easy on the earth. The delinking of gains in well-being from economic growth creates an opportunity for an alliance between advocates of economic justice and environmental protection, whose goals have sometimes seemed in tension. We need not accept the message that painful cuts to our quality of life are necessary in order to achieve sustainability. Indeed, an optimistic, win-win message concerning society and environment is not only compelling, but also essential for the large policy shifts necessary for building a sustainable and flourishing civilization.

What We Know about Happiness

There are good reasons to approach the science of happiness with skepticism. Is it possible to measure happiness in a reliable way, or to accurately compare one person's or one country's happiness to another's?¹ Indeed, one could question the wisdom of trying to design policies to improve human happiness in the first place. However, it is worth noting that economists, who generally focus on behaviors rather than opinions, and national statistical agencies, which primarily deal with concrete and objective measures, have come to see the measurement of subjective

The sources of lasting improvements in wellbeing are largely nonmaterial, and thus easy on the earth. well-being as a valuable tool for social assessment. Indeed, the science of happiness has gained prominent advocates from policy NGOs, academia, and governments across the globe.² High-level government initiatives in France, the UK, the UAE, and other countries, as well as scientific and international policy agencies, are working to standardize measures and use them to drive new policy.³ Subjective well-being has now been measured for nearly a decade in more than 150 countries as part of the Gallup World Poll, and is included in numerous mainstream government surveys across six continents.

How is "happiness" defined and measured? The process begins with a survey that asks something called the life satisfaction (LS) question: "Taking all things into account, how satisfied are you with your life these days on a scale of zero to ten?" Although this differs from inquiring about subjects' momentary emotional state (how "happy" they feel), the data gathered is informally referred to as "happiness." Using large data sets compiled from individuals' answers to this question, along with other pieces of economic and social information, statistical analysis can provide insight into which kinds of people, communities, and nations are more or less satisfied with their lives.

This analysis helps to quantify many things we already knew, such as that health and wealth and safety are important for well-being. However, it also reveals links economists and policymakers have often overlooked, such as how important feeling connected to others and having a sense of purpose are to well-being. Volunteering, group activities, close relationships, trustworthy institutions, meaningful work, and a shared sense of identity all matter deeply. Trust is of particular importance: societies differ by levels of trust in family, neighbors, co-workers, bosses, police, government, and business; greater trust in each case supports greater life satisfaction.

Above all, the data on happiness shout out an essential truth: *humans are social beings*. Becoming unemployed is worse than losing income alone because of the impact of the loss of a job on one's identity, purpose, and relationships. We are hard-wired to enjoy collaborating and doing good, but also to compare our material situation to what we see around us and what we remember from the past. Consumption and wealth, therefore, make us feel good in part to the extent that we rank above others—making widespread consumption growth a zero-sum game in which the relative gains of some are experienced as a loss for others.

However, more of the variation in LS can be explained by differences in communitylevel social identity (the degree to which individuals feel they belong to their local community) than by differences in income.⁴ In other words, it is more important, on

The data on happiness shout out an essential truth: humans are social beings. average, to be living somewhere with high social cohesion and inclusiveness than to be wealthy. Given the wide variation in incomes and the social emphasis on the pursuit of wealth as a means to a better life, this is remarkable.

Economists quantify the impact of life circumstances on well-being by comparing it to the impact of changes to (or differences in) income. For instance, the average difference in LS between people who feel their work colleagues "cannot be trusted at all" and those who feel they "can be trusted a lot" is the same as the average difference in LS between two people who are otherwise alike except that one has an income more than *four times* the other's.⁵ If you were choosing between two jobs and knew that one had a lower-trust environment but paid a lot more, would you take it? Based on this evidence, you should have a hard time choosing, but society shifts our attention toward financial compensation and away from what will ultimately matter most to the quality of our lives. Correspondingly, managers often focus on boosting salaries and bonuses rather than investing in small improvements to morale and trust.

These insights underscore the enormous influence of social factors on well-being. Indeed, the changes in income required to match some of these effects are on the order of, or more than, the total GDP of many countries. Remarkably, these findings on well-being hold for developing and less affluent countries as well as for rich ones.⁶ The lessons from happier societies today, along with those from recent policy experiments, suggest that a society better attuned to subjective well-being would likely exhibit more leisure and social time at the expense of formal work; more holistic education; and more collective enterprises and rewards. Policies that improve our levels of trust, social identity, and pro-social interaction may be worthwhile even at the cost of some missed economic growth.

Happiness, Wealth, and Relative Incomes

While most people acknowledge that "money can't buy happiness," the relationship between money and happiness is complex. Wealth may not be everything, but how important is it?

Economists routinely address this question by calculating the implications for "welfare" (economists' term for well-being) of whatever policy they are considering, assuming that individuals are better off (happier) when they have the opportunity to consume more. The ability to consume more, however, also implies an option to have more leisure time, and it seems reasonable that if someone has more earning power, she may, in fact, work less. Such a person can afford to "invest" more in relaxation, relationships, or self-development rather than choosing to keep working

A society better attuned to subjective well-being would likely exhibit more leisure and social time at the expense of formal work. in order to buy more cars, a bigger house, or more *things*. Economists thus assume that higher productivity, rather than income *per se*, is the right objective to pursue to improve well-being.

However, if you can measure happiness directly, you no longer have to rely on such assumptions. The measurement of subjective well-being came into economics in part through the work of Richard Easterlin, who in the early 1970s discovered what appeared to be a paradox. He found that while happiness was strongly correlated with income within each country and varied widely across countries, a country did not necessarily become any happier on average when it became richer.⁷ Two reasons, both backed up by empirical data, help explain this seemingly counterintuitive phenomenon. First, the satisfaction humans experience from their material situation depends in part on what they have become accustomed to. Second, and more important, satisfaction depends in part on what people see around them, i.e., norms and standards. Terms such as "hedonic treadmill" apply to the first reason; "keeping up with the Joneses" and "conspicuous consumption," the second.⁸

Both of these explanations for the "Easterlin paradox" describe aspects of a "rat race." For any given individual, increasing income, wealth, or material consumption may look as though it will make life better, but if everyone does so, no one ends up any better off in the long run. If an individual increases his work productivity and is able to consume more, he will likely be happier, but countless people around him will end up ever-so-slightly less happy. When everyone's productivity and consumption goes up, no one is happier. It may even be harder to please one's future self with the same things that were satisfying in the past. Everyone is running faster just to stay in the same place.

The analogy of climbing a ladder illuminates the fundamental dynamic at work: there can only be one person on top, one in second place, and so on. No matter how high a group moves up a ladder together, the same number of people will lie in the bottom 20%. Ranking competitions are zero-sum games. Because we evolved in small hierarchical communities, we are very sensitive to, and motivated by, such visible social ranking.

However, not everything is zero-sum. Life satisfaction does not exhibit this "reference dependence" (or, at least, not as strongly) when it is derived from social engagement, a sense of belonging, trust, or health. If you improve your interpersonal relationships with co-workers, build more trust in your neighborhood, or take up regular practice of a team sport, you will be better off in the short and long term, *and* no one else will be worse off as a result. Social capital of these sorts is a positive-sum good.

Satisfaction depends in part on what people see around them, i.e., norms and standards.

Inequality and Well-Being

Inequality often looms over discussions of social transformation and, increasingly, over discussions of sustainability as well. Yet the concept of "inequality" is fuzzy, given the many ways in which it can be calculated and the fact that few call for an alternative state of perfect equality. Reducing the discussion of social transformation to a comparison of income levels, moreover, does not adequately address the human experience we ultimately care about.

The pursuit of well-being, rather than income, provides a holistic and humancentric way of responding to inequality. Ultimately, the most fundamental way to support positive social identity, and thus enhanced well-being, is to ensure people's dignity. Comparing northern European societies to the US shows that a society can provide or deny a sense of dignity to the poor, to workers, to prisoners, and to the unfortunate even in the presence of disparities in wealth. Data show that rich and poor alike are happier in societies that value all people first as humans and insist on the dignity of everyone.⁹ A happier future can accommodate modest differences in market income given that some occupations have higher economic productivity, and some people may choose to spend more of their life in the market sector. However, such a society would place much greater emphasis on ensuring dignity for everyone and fostering universal compassion as a basic social skill. Everyone would be more content because even the privileged and wealthy suffer when they are constantly judging others, mentally classifying people as different or oppositional, or fearing for their own safety in others' presence.

Focusing on respect and dignity offers a more proximate key to both social sustainability and well-being. These values can be embodied in robust social insurance systems that help build a sense of common cause and a recognition of our shared vulnerability.¹⁰ Of course, social safety nets involve redistribution of income, so it is no coincidence that the happiest societies (largely among the Nordic countries) are also among those with the lowest levels of (post-tax) income inequality. Redistribution, however, is only one part of the solution: actively counteracting self-perpetuating stigmas is also necessary for a more universal sense of dignity, inclusion, and compassion.

Investing in the Future

As decades of work in developmental psychology, labor economics, and other fields have shown, conditions experienced in early life profoundly and permanently affect later outcomes, including health and labor productivity, as well as all the social

The pursuit of wellbeing provides a holistic and human-centric way of responding to inequality. outcomes that we now know are central to a happy life. To foster positive social identity and reduce inequality, we must collectively invest more in children. The well-being payoff of strong supports and safety nets for children is likely to be enormous.

Compassion, resilience, "mindfulness," leadership, and relationship-building skills all require training and improve with formal practice, like physical activities and like reading, writing, and arithmetic. Pro-social skills have been the subject of much research, so teaching and promoting them is neither an ideological exercise nor an act of mysticism.

Focusing on preparing youngsters for a fulfilling life (with such skills as resilience, compassion, and leadership) rather than simply preparing them for the job market has profound implications for well-being and education. When the OECD ran an experiment that emphasized non-academic social-emotional skills in school teaching, the average self-reported life evaluation of students rose significantly and stayed up a year later. Test scores increased as much as they did after the best available academic interventions. Programs to foster such non-academic skills are now being tested and rolled out throughout South Asia, Latin America, and Canada; attendance, graduation rates, and physical health have all improved in response. In some countries, like Denmark, which reports the highest adult life satisfaction in the world, such life skills are already standard teaching practice. Improved test scores and career prospects make for a win-win situation, but the ultimate justification for pursuing them should be the lifelong subjective well-being of the students.

In general, if you want to know what the future will look like, take a look at the investments being made today. To understand and shift the future social fabric, one must start quite deliberately with investments in the young. Changing norms and expectations of institutions is a long-term project. Shifting from a low-trust society towards the Scandinavian model cannot be accomplished overnight, but requires sustained and comprehensive effort over a generation or more.

Happiness and Sustainability

If we care about the well-being of future generations, then we must guarantee them a livable planet. But the well-being of future generations does not always enter our everyday decision-making about our own well-being. Our efforts toward building a happier society today will not alone ensure sustainability for tomorrow. Humans have limited foresight and perspicacity when answering the life satisfaction question, even though it encompasses, in principle, everything respondents know about their lives—current, past, and future.

To foster positive social identity and reduce inequality, we must collectively invest more in children. On the other hand, the pursuit of human well-being and ecological sustainability may complement each other because a stronger focus on well-being leads naturally to more pro-social thinking and behavior, which, in turn, facilitate the ability to address collective challenges. This dynamic makes avoiding and mitigating environmental problems easier to achieve. The countries with the highest levels of social trust tend to be those with the strongest environmental protections. This is true even with regard to protecting resources beyond their own borders, because those who trust their own neighbors also tend to have more empathy for outsiders.

To ensure sustainability, numerous constraints must be imposed on human activities in order to limit material impacts on natural systems. Such constraints may make us less affluent than we might otherwise become, limit our consumption choices, and possibly (but not likely) even make us have to work harder. However, as life satisfaction data show, a reduction in potential income will not necessarily reduce well-being (particularly for those in upper-income brackets), and fewer choices in some areas may not make much difference to happiness. Work does not just entail suffering undertaken in exchange for payment: it also embodies meaning and relationships. Moreover, many of the opportunities for improving well-being discussed so far do not necessitate an increase in environmental harm or even material production. Pursuing sustainability and well-being can be done in tandem.

We can thereby relax the societal focus on the size of the economy in not one but two respects: we should pursue neither its expansion nor, in the hopes of limiting environmental destruction, its contraction. The idea of "degrowing" the economy has become a rhetorical trap which, like the mainstream emphasis on growth, perpetuates a focus on GDP. Rather than seeing GDP growth as a villain or a panacea, we should address the goal of improving well-being and the constraints of sustainability as directly as possible.

The fortuitous truth is that we can improve our lives, individually and collectively, while simultaneously reducing our impact on the natural systems that support us. To achieve the dual aim, we should measure what really matters to us, and others on Earth, as directly as possible, and then let the results guide our actions.

Future Economies and Cultural Transformation

Technological change plays a key role in long-run social transformations, and the changes underway now are the most significant ever. New developments are increasingly allowing value to be created by "the crowd." We live in a world of electronic media as well as the electronic consumption of goods that can be

The countries with the highest levels of social trust tend to be those with the strongest environmental protections. duplicated costlessly. Open-source software, created by a global community and shared freely, now runs most of the world's smart phones (Android) and nearly all of the servers (GNU/Linux), which keep the Web and the Amazons, Googles, and Facebooks of the world running. Even open-source *hardware* now exists, for example, in the form of blueprints for 3D printing and other distributed manufacturing, which promise nearly costless duplication of some physical goods. Humanity's productive knowledge is increasingly held in these open-source tools and in communal repositories like Wikipedia, Stack Exchange, and open courseware. At the same time, peer-to-peer services and the sharing economy allow for greater utilization of existing capital.

Imagine a world in which such developments become increasingly prominent or even dominant, that is, in which capital accumulation is largely in the form of easyto-share information, digital tools, and blueprints, rather than private physical capital. In such a world, the process of creation, rather than production, becomes central to meeting everyone's needs and wants.

In this new world, markets would still have a role in the provision of consumer goods and the most human-centric services as well as rationing raw materials and real estate. However, the creation of public goods would become the most valuable activity, if it has not already. If many material needs are met at low cost through robotic service and replication, the objective of society may increasingly become finding people fulfilling occupations. In this "zero marginal cost society," in which most production and duplication inevitably becomes nearly free and automated, human activity will shift towards collective creative endeavors and human-centric services.¹¹

Such a society, should it emerge, would advance the joint goals of well-being and sustainability in two ways. First, without proprietary control over the production of goods, firms would not have the incentive to *manufacture* demand for things. In the current form of capitalism, advertising and demand creation can build a wedge between our behavior and our well-being—i.e., they can guide us to make individual choices that create a profit for others but are not actually in our own interest.¹² Such activities will disappear to the extent that the consumer is also in charge of production. Second, with less economic centralization, progress would focus more on collaborative and pro-social efforts toward creativity and innovation. Fortuitously, creative, pro-social, team-oriented, and collaborative behaviors strongly support positive evaluations of work and life. In a further lucky twist, the jobs least subject to automation would be those based on personal and pro-social interaction, because such skills cannot be replicated by machines.

The creation of public goods would become the most valuable activity, if it has not already. In addition to qualitative shifts in labor, the explosion in access to cheap services and goods (and, soon, cheap non-human labor) would provide an incalculable increase in our incomes and wealth. The free availability of on-demand information, media, and productivity tools with which we interact daily would have been unimaginable just a few years ago. The increases to productivity from online *how-tos* alone are mind-boggling. With the digital services, sharing, and artificial intelligence revolutions, we stand at the beginning of an explosion of wealth in collective assets. As these developments continue, people will have more time for activities outside the market, from collective action to simple social and community contact to individual and collaborative creative expression.

The explosion in wealth due to non-material advances further underscores the irrelevance of GDP to well-being-oriented sustainable development. The transformative gains in consumption that these advances provide generally do not register in GDP calculations, but yield considerable benefits for psychological wellbeing. Moreover, much of the associated gain in wealth depends little on increased material flows, thereby separating income from environmental impact.

When goods can be freely shared and reproduced, policies can and should arise to provide for those goods collectively. This would mean a bigger role in the future for cooperative, public institutions and endeavors. The literature on life satisfaction suggests that we are hard-wired to benefit from intrinsic rewards, social rewards, interpersonal interactions, and a sense of belonging, whether on the local level or the global level, as has been fostered by technological shifts and global challenges. With a reduced need for private capital, our institutions and the way we actually spend our time are likely to be better aligned with the fundamental supports for satisfying lives and with our natural human instincts for collaborative pro-social undertakings.

Conclusion

Millions of people's responses to life evaluation questions have shown that although affluence is important to subjective well-being, much of that benefit may come from collective resources—i.e., the ability of a society to provide public goods that benefit everyone simultaneously. Chief among such public goods are the opportunity to belong and to contribute, and a social environment that fosters feelings of safety, trust, and autonomy. If we took subjective well-being as a guide to policy, we would focus on the quality of jobs, not just income; on respect and dignity rather than equality *per se*; on improving the social and emotional environments of our children; and on educating for well-being and high social functioning rather than primarily for academic aptitude and performance.

We stand at the beginning of an explosion of wealth in collective assets. These new insights can enable advocates of social justice and advocates of environmental sustainability to combine forces. A happy society is one in which people have the freedom and capacity to excel at their work, to take on new challenges, and to contribute to the well-being of others. These characteristics have little correlation with the intensity of material flows through the economy. These new insights about happiness can enable advocates of social justice and advocates of environmental sustainability to combine forces in support of a unified agenda inspired and justified by our knowledge of what sustains *satisfying lives*. Focusing on well-being effectively supports efforts to reduce environmental strain because doing so sidesteps conflict between economic growth and sustainable development, and because both human nature and current technological transitions favor non-material benefits that support well-being.

A Great Transition to a new paradigm of social objectives and sustainable decisionmaking can arise from focusing not on sacrifice but on the opportunities ahead. While challenges abound, the future is overflowing with possibilities. By aligning public sentiment and decision-making bodies with the social objective of satisfying lives, we can boldly embrace the stark constraints we face and build the most desirable society ever seen.

Endnotes

1. For recent work on cross-cultural comparisons, see John Helliwell and Christopher Barington-Leigh, "Measuring and Understanding Subjective Well-Being," *Canadian Journal of Economics* 43, no. 3 (2010): 729–753; and Carrie Exton, Conal Smith, and Damien Vandendriessche, "Comparing Happiness Across the World: Does Culture Matter?" (working paper, OECD Statistics Working Paper, Organisation for Economic Co-operation and Development, November 5, 2015).

2. The list of Nobel Memorial Prize-winning economists who support this new approach to well-being includes Joseph Stiglitz, Angus Deaton, Daniel Kahneman, and George Akerlof.

3. For reports commissioned by national governments, see Joseph Stiglitz, Amartya Sen, and Jean-Paul Fitoussi, *Report by the Commission on the Measurement of Economic Performance and Social Progress* (Paris: National Institute of Statistics and Economic Studies, 2009), http://library.bsl.org.au/jspui/bitstream/1/1267/1/Measurement_of_economic_performance_and_social_progress.pdf; and UK Office for National Statistics, *Measuring What Matters: National Statistician's Reflections on the National Debate on Measuring National Well-Being* (Newport, South Wales: Office for National Statistics, 2011), https://www.ons.gov.uk/ons/guide-method/user-guidance/well-being/publications/measuring-what-matters-national-statistician-s-reflections-on-the-national-debate-on-measuring-national-well-being.pdf. The Sustainable Development Solutions Network, a project of the UN, has released annual reports on world happiness since 2012: see, for example, John Helliwell, Richard Layard, and Jeffrey Sachs, eds., *World Happiness Report* (New York: SDSN, 2012), http://worldhappiness.report/ed/2012/. See also the OECD's 2013

guidelines: OECD Guidelines on Measuring Subjective Well-Being (Paris: OECD Publishing, 2013). 4. John Helliwell and Christopher Barrington-Leigh, "How Much is Social Capital Worth?" in *The Social Cure: Identity,* Health, and Well-Being, eds. Jolanda Jetten, Catherine Haslam, and S. Alexander Haslam (Milton Park, UK: Psychology Press, 2011), 55–71. See Table 1.

5. Ibid. While not necessarily causal, this relationship holds even *after* controlling for other forms of trust, other social connections, subjective sense of belonging, and numerous other variables.

6. See, e.g., John Helliwell, Christopher Barrington-Leigh, Andy Harris, and Haifang Huang, "International Evidence on the Social Context of Well-Being," in *International Differences in Well-Being*, eds. Ed Diener, John Helliwell, and Daniel Kahneman (New York: Oxford University Press, 2010), 213–229; Christopher Barrington-Leigh, "Inequality and Subjective Well-Being" (working paper, UBC Economics, University of British Columbia, 2010); Geeta Gandhi Kingdon and John Knight, "Community, Comparisons and Subjective Well-Being in a Divided Society," *Journal of Economic Behaviour and Organization* 64, no. 1 (2007): 69–90.

7. Before delving into this mystery, it is important not to overstate the paradox. The data show that, at one moment in time, people in richer countries do tend to report higher life satisfaction.

8. However, uncertainty remains. See Andrew Clark, Paul Frijters, and Michael Shields, "Relative Income, Happiness, and Utility: An Explanation for the Easterlin Paradox and Other Puzzles," *Journal of Economic Literature* 46, no. 1 (2008): 95–144; Richard Easterlin, Laura Angelescu McVey, Malgorzata Switek, Onnicha Sawangfa, and Jacqueline Smith Zweig, "The Happiness—Income Paradox Revisited," *Proceedings of the National Academy of Sciences* 107, no. 52 (December 2010): 22463–22468; Betsy Stevenson and Justin Wolfers, "Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox" (working paper, National Bureau of Economic Research, 2008); Christopher Barrington-Leigh, "Consumption Externalities," in *Encylopedia of Quality of Life and Well-Being Research*, ed. Alex Michalos (New York: Springer, 2014), 1248–1252.

9. A county's level of inequality is not itself correlated with its average well-being after controlling for the country's income level. However, there is a strong negative correlation between average well-being and the degree to which one's socioeconomic position determines one's subjective well-being. This relationship can be partly accounted for by how people in each country ranked on the "post-materialism" scale; that is, countries where economic position was a more important determinant of happiness were those with materialistic values and were altogether less happy, controlling for income. See Barrington-Leigh, "Inequality and Subjective Well-Being."

10. For example, mental health problems are now an enormous loss for well-being, with 10% of the global population suffering from mental illness at any moment. The benefits in income terms of more openly and comprehensively treating it are enormous. For a discussion in the context of SWB, see Richard Layard, Dan Chisholm, Vikram Patel, and Shekhar Saxena, "Mental Illness and Unhappiness," in *World Happiness Report 2013*, eds. John Helliwell, Richard Layard, and Jeffrey Sachs (New York: Sustainable Solutions Development Network, 2013), 38–53. 11. See Jeremy Rifkin, *The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism* (New York: St. Martin's Press, 2014).

12. See George Akerlof and Robert Schiller, *Phishing for Phools: The Economics of Manipulation and Deception* (Princeton, NJ: Princeton University Press, 2015).

About the Author



Christopher Barrington-Leigh is an Assistant Professor at McGill University, joint between its Institute for Health and Social Policy and the McGill School of Environment, and an Associate Member in McGill's Department of Economics. His research focuses on empirical and quantitative assessments of human well-being, and their implications for economic, social, and environmental policy, using large international as well as national surveys, experiments, and economic theoretical modeling. His other research pursuit addresses issues in environmental economics, including urban road networks, urban forms, and their implication for climate policy. He holds a PhD in Economics at the University of British Columbia.

About the Publication

Published as an Essay by the Great Transition Initiative.

You may freely republish our content, without alteration, for non-commercial purposes as long as you include an explicit attribution to Great Transition Initiative and a link to the GTI homepage.



Cite as Christopher Barrington-Leigh, "Sustainability and Well-Being: A Happy Synergy," *Great Transition Initiative* (April 2017), http://www.greattransition.org/publication/sustainability-and-well-being.

About the Great Transition Initiative

The Great Transition Initiative is an international collaboration for charting pathways to a planetary civilization rooted in solidarity, sustainability, and human well-being.

As a forum for collectively understanding and shaping the global future, GTI welcomes diverse ideas. Thus, the opinions expressed in our publications do not necessarily reflect the views of GTI or the Tellus Institute.