

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Nikolova, Milena

Working Paper Happiness and Development

IZA Discussion Papers, No. 10088

Provided in Cooperation with: IZA – Institute of Labor Economics

Suggested Citation: Nikolova, Milena (2016) : Happiness and Development, IZA Discussion Papers, No. 10088, Institute for the Study of Labor (IZA), Bonn

This Version is available at: https://hdl.handle.net/10419/145222

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



WWW.ECONSTOR.EU

IZA DP No. 10088

Happiness and Development

Milena Nikolova

July 2016

Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor

Happiness and Development

Milena Nikolova

IZA and the Brookings Institution

Discussion Paper No. 10088 July 2016

IZA

P.O. Box 7240 53072 Bonn Germany

Phone: +49-228-3894-0 Fax: +49-228-3894-180 E-mail: iza@iza.org

Any opinions expressed here are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent nonprofit organization supported by Deutsche Post Foundation. The center is associated with the University of Bonn and offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral program. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

IZA Discussion Paper No. 10088 July 2016

ABSTRACT

Happiness and Development*

Subjective well-being (SWB) indicators, such as positive and negative emotions, life evaluations, and assessments of having purpose and meaning and life are increasingly used alongside income, employment, and consumption measures to provide a more comprehensive view of human progress. SWB measures have several advantages but also challenges which development scholars and practitioners need to carefully consider before introducing such metrics in the policy arena. This article provides an overview of the SWB approach and offers insights into whether and how SWB measures can inform development theory and practice.

JEL Classification: I31, O10

Keywords: development policy, subjective well-being, happiness, measurement

Corresponding author:

Milena Nikolova IZA Schaumburg-Lippe-Str. 5-9 53113 Bonn Germany E-mail: nikolova@iza.org

^{*} This manuscript was prepared for the *Routledge Handbook of Development Ethics* (edited by Lori Keleher and Jay Drydyk). I am grateful to Carol Graham, Boris Nikolaev, Olga Popova, and Tom Ivlevs for helpful comments, corrections, and suggestions. I also thank Margard Ody for help locating relevant studies, Daria Golokhvastova for research assistance, and Richard Forsythe for copy-editing support. All errors are mine.

Gross Domestic Product is an inaccurate measure of human development

What is human progress and how can we accurately measure it? Economists and policy-makers often define and gauge development and well-being in terms of gross domestic product (GDP). Nonetheless, this measure – encompassing the value of goods and services produced in an economy – reflects economic activity and not specifically transactions leading to people's well-being.¹ For example, GDP excludes volunteer work, despite the latter improving the quality of the social fabric and contributing to civic capital. Nonetheless, because every transaction positively adds to GDP, economic "bads" such as environmental pollution, crime and divorce are counted as economic gain. How is this possible? Crime increases expenditures on security measures such as guards, alarms and locks, while divorce includes attorney and court fees. As another example, while natural disasters clearly make those affected by them worse off, they are positively counted in GDP terms due to expenditures to clean debris and rebuild homes. In his 1968 speech, Robert Kennedy (John F. Kennedy Library 2016) offered a famous critique of using gross national product (GNP) as a measure of societal welfare:

"Our Gross National Product [...] counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them. [...] Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play. [...] It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile."

Importantly, a human progress measure that focuses on income and wealth confuses the *ends* and *means* of development. Two countries with the same level of economic development as measured by GDP can use resources very differently, which has implications for quality of life. One country can use its resources to oppress its citizens and promote the well-being of powerful elites, while the other can utilize its economic wealth to provide public goods and services such as education, healthcare, childcare, clean air and water, which provide better quality of life for all. Income and wealth should thus be viewed as the *means* to achieving human progress and *proxies* for quality of life rather than as tell-all indicators of human progress.

A subjective quality of life measure?

For several decades, academics have discussed the shortcomings of GDP and the fact that income-based measures offer an incomplete view of human flourishing. Nonetheless, the Stiglitz-Sen-Fitoussi Commission's report (Stiglitz et al. 2009) has only recently brought this discussion to the center of the public debate. Created by the then-French President Sarkozy in 2008, the Commission evaluated the shortcomings of using national income as the sole indicator of societal progress and provided recommendations for broadening and deepening the measurement of human well-being, including using objective and subjective indicators side-by-side. Objective well-being measures such as income, consumption, employment and wealth provide valuable information about means and actual circumstances. Nonetheless, understanding how people subjectively perceive and evaluate these circumstances is just as important as the circumstances themselves (OECD 2011). One advantage of SWB measures is that they are self-

reported (i.e. measured via surveys as explained below). As such, respondents can judge and assess their circumstances on their own. A subjective quality of life measure is thus democratic and non-paternalistic (Binder 2014).

Moreover, many experiences in human life are multi-faceted. For instance, while economic growth may signal improving economic well-being, the Latin American evidence shows that people in faster-growing economies are on average less happy than those with slower growth rates (controlling for income levels) (Lora and Chaparro 2008). The Latin American result is also replicated in the world sample. Graham and Lora (2009) call this the "paradox of unhappy growth", explaining that it arises because rapid economic growth often brings instability to people's lives, which income measures fail to reflect. Focusing on growth alone may obscure its frustrating aspects such as rising job insecurity or inequality (Graham 2009).

Several countries – ranging from Morocco to Australia, Britain, Canada, France, Italy and New Zealand – are now collecting SWB measures as part of their national statistics (Durand and Smith 2013).² Bhutan has even replaced GNP with gross national happiness as a measure of progress. Despite the momentum and the great promise that SWB measures could offer in terms of broadening the basis upon which we judge human progress, development scholars need to carefully consider the challenges before supporting and blindly trusting such measures.

What is subjective well-being and (how) can it be measured?

"Happiness" is a word that certainly attracts strong attention from policy-makers, development scholars, journalists and ordinary people. Therefore, it is unsurprising that happiness is what most people associate with "subjective well-being." Nonetheless, happiness is only one emotion, while SWB encompasses a broad range of metrics related to positive and negative moods, life evaluations and life purpose.

SWB measures are usually based upon self-reported evaluations collected via large-scale nationally representative surveys conducted with thousands of individuals across countries and over time (Graham 2011b). Such surveys also gather information on income, employment, health and socio-demographic characteristics such as age, education and gender, among others. In some cases, panel surveys follow the same individuals within a country over time and ask the same questions each year. This allows researchers to adjust SWB scores for factors related to how different people answer SWB questions or factors related to respondents' changing circumstances (e.g. job loss, birth of a child, marriage). For example, optimistic people may naturally score higher on SWB questions, while pessimists may repeatedly report low life evaluations. Using panel data and statistical techniques allows researchers to eliminate the influences of such (time-constant) personality traits on self-reported well-being scores.

SWB has both hedonic (i.e. *affective*) and cognitive (i.e., *evaluative*) dimensions. Along with smiling and feelings of joy, happiness is an example of positive hedonic well-being. Negative hedonic well-being includes experiences of stress, anger, sadness or worry. Hedonic well-being measures are reflections of experiences *at a particular point in time* and can be measured using either *experiential* or *survey* methods. For example, with the Experience Sampling Method (ESM), respondents are contacted several times a day via a beeper or another signaling device

and asked questions about their activities, surroundings and emotions. Developed as a response to the intrusive and labor-intensive ESM data collection method, the Day Reconstruction Method (DRM) asks people to reflect in a diary what happened at different episodes during the previous day (Kahneman, et al., 2004). Despite being less labor-intensive, the DRM responses may be subject to recall bias as respondents may not necessarily remember what they did or how they felt during the day. In large-scale surveys, hedonic well-being is measured with a short series of questions asking respondents how they felt during the previous day. For example, global surveys such as the Gallup World Poll ask interviewees whether they experienced a lot of happiness or smiled a lot or whether they felt depressed, worried, angry or stressed the day before, with possible responses being yes and no.

In contrast, evaluative well-being is an overall reflection on one's life. This dimension is typically measured using general life satisfaction questions or the Cantril ladder of life question, whereby respondents rate their current life on an 11-point scale, where 0 represents their worst possible life and 10 corresponds to the best possible life that they can imagine for themselves. Judging one's satisfaction with life as a whole requires a thorough evaluation of one's circumstances, both past and present. These measures usually reflect people's capabilities, means and long-term opportunities (Graham and Nikolova 2015). By contrast, hedonic experiences indicate emotions and moods triggered by pleasant and unpleasant daily experiences such as sitting in a traffic jam, having a cold, meeting with friends or watching a funny movie.

Despite being correlated, the two SWB dimensions are also distinct. Specifically, responses to these two questions can vary across individuals and countries at different levels of development. For instance, a high-achieving Ivy-League School graduate working on Wall Street could have higher-than-average life satisfaction but also higher-than-average stress levels and low levels of daily happiness due to long working hours and many daily sacrifices on the personal front. At the same time, a destitute person with bleak life prospects may report average smiling and joy experiences but low satisfaction with life as a whole due to a lack of opportunities and capabilities. How can it be the case that a destitute person smiles just as much as the world's average? Part of the explanation rests upon hedonic adaptation (explained below), whereby people in deprived circumstances learn how to make their lives more tolerable and pleasurable by focusing on what they have, e.g. children, friends or social networks. For example, using Latin American data, Graham and Lora (2009) show that respondents with more material means tend to place greater emphasis on work and health aspects when assessing their well-being levels. By contrast, the poor tend to focus on friends and social networks, which likely help them to get through the day and make it more pleasurable in the hedonic sense.

Hedonic and evaluative well-being have different determinants. For example, income and opportunities tend to be much more important for evaluative rather than hedonic well-being (Graham and Nikolova 2015).³ Smiling and learning something interesting the day before are among the key determinants of hedonic happiness (Graham and Nikolova 2015). Furthermore, progress and development can increase some SWB dimensions but worsen others. For instance, access to information and communications technology (ICT) can reduce information and communication costs or enable respondents to conduct financial transactions or connect with relatives abroad, which can improve life satisfaction and happiness. Nonetheless, ICT access can also lead to stress and anger, especially among respondents who previously lacked such access

(Graham and Nikolova 2013). By providing information, technology such as cell phones or TV and internet also raise the expectations and frustration among the poor.

What about eudaimonic well-being? It refers to the Aristotelian concept of flourishing in terms of the opportunity to lead a purposeful life. Research is still in progress to better understand how to measure and interpret this SWB dimension. As Graham (2011b) notes, Aristotle likely thought of this concept not in terms of what people *say* about their lives but rather how they *live* their lives. White and Dolan used the DRM described above to study eudaimonia, finding that activities that are pleasurable are not necessarily meaningful. For example, spending time with children can be rewarding but not pleasurable, while watching TV can be pleasurable but not meaningful (White and Dolan 2009). Graham and Nikolova (2015) find that *belief in hard work* is the most important determinant of eudaimonic well-being, which they measure using a Gallup World Poll question on whether respondents have meaning and purpose in life.

Are happiness measures simply noise?

Empirical social scientists – and economists in particular – are cautious about what people say and focus on what people do, i.e. their revealed preferences. Their rationale is that "talk is cheap" and that there are no consequences to what respondents report in survey questionnaires. According to the critics, SWB answers cannot be trusted. SWB opponents also highlight that the understanding of happiness can differ from person to person or across countries and cultures. Moreover, one's own understanding of happiness can also change over time. Therefore, happiness scores cannot be validly and reliably compared across individuals, time and countries.

Nonetheless, SWB questions are never open-ended but rather are given a bounded scale. For example, a typical life satisfaction question asks: "Overall, how satisfied are you with your life as a whole these days?", with possible answers ranging from 0 "completely dissatisfied" to 10 "completely satisfied." Thus, respondents' answers are anchored to their own judgment of how their lives are going. Many of the other criticisms related to comparability have already been addressed. Forty years of work among psychologists and economists, including by Nobel Prize laureates Daniel Kahneman and Angus Deaton, has shown that SWB measures capture the underlying concepts, are valid and reliable as well as being comparable across people, countries and over time (Krueger and Schkade 2008, Exton et al. 2015, Helliwell and Barrington-Leigh 2010, OECD 2011).

SWB measures are not simply noise but rather reflect meaningful information about perceived quality of life. Given their subjective nature, these measures cannot be directly validated, although they have been indirectly validated by being tested for plausible correlations with other variables (DiTella and MacCulloch 2006). For example, if they were simply noise, these measures would be (statistically) unrelated to life events and circumstances such as unemployment, marriage or death of a family member; nonetheless, many cross-sectional and panel data find that they are. Other indirect validations show that SWB measures correlate with the frequency of "genuine" Duchene smiles, biological markers such as brain activity and cortisol, as well as ratings made by friends and partners (OECD 2011). Of course, no measurement of any variable – objective or subjective – can be completely error-free and as such SWB indicators are imperfect. Certain response modes (e.g. phone vs. in-person interviews),

temporary moods and the presence of others during the interview can distort the answers to SWB questions (Conti and Pudney 2011, Dolan and Kavetsos 2012, Krueger and Schkade 2008).

SWB measures reflect both income and non-income dimensions and allow a broader perspective of the consequences of complex development phenomena such as migration, growth, economic and democratic transitions or increased access to information technology. Scholars estimate SWB regressions from which they can discern the relative importance for SWB of factors such as income, employment conditions, education and health, which are important policy inputs. The SWB approach is especially relevant for assessing the welfare consequences of institutional arrangements that individuals cannot change, such as inequality, macroeconomic volatility, political systems or migration policies. These arrangements are external from the individual perspective, whereby a person cannot express revealed preferences for them (aside from protesting or migrating in certain cases) (Graham 2011b). However, life satisfaction answers and institutional- or macro-level data allow scholars to statistically assess the welfare implications of the latter.

Adaptation

One of the strongest critiques against using SWB as a guide to development theory and practice is the problem of *hedonic adaptation*. As mentioned above, people living in deprived circumstances may adjust to what they consider possible. Furthermore, one can also be dissatisfied with a relatively good life by adapting to a high standard of living (Sen, Fitoussi, and Stiglitz, 2009). Carol Graham's "happy peasants and frustrated achiever" paradox is one such example (2009, 255). While poor individuals are on average less happy than rich individuals within a country, very poor people often report being very happy, while wealthier individuals report lower SWB and higher-than-average frustration with their economic situation. The paradox could be partly explained by the fact that poor people adapt their expectations downwards, while richer or more upwardly-mobile respondents have ever-increasing expectations (Graham 2009).

Moreover, people in different countries have varying norms of what is acceptable and tolerable. For example, Latin America is the world's happiest region in terms of hedonic well-being, despite also being a high-violence, -crime and -corruption region, whereby crime and corruption are detrimental to SWB. Therefore, how can it be the case that Latin Americans are so happy? Research shows that if crime and violence are high they become the norm and people adapt to them (Graham 2011a). In such circumstances, people who become the victims of crime and corruption are less likely to feel victimized and experience less moral conflict if they have to engage themselves in such activities.

While individual adaptation is a positive mechanism that allows people to cope with and recover from unfavorable situations, collectively, it can lead to bad equilibria (Graham 2011b). For example, people could adapt to corruption, poor health standards and undemocratic institutions and learn to be happy. In such circumstances, dysfunctional institutions become the norm, which makes reform less likely to occur.

Adaptation is a double-edged sword for those willing to incorporate SWB metrics in development theory and practice. On the one hand, understanding differences in the capacity to adapt broadens our understanding of well-being. On the other hand, adaptation presents one of the major challenges of using SWB measures as a guide to policy (Graham 2011b).

Sen's critique of happiness

Amartya Sen provides one of the sharpest critiques of the happiness economics approach, which relates to adaptation. According to what Crocker calls the "small mercies" argument, people may be seriously deprived but quite happy if they do not expect much from life and accept the "small mercies" that appear in their lives (Crocker 2008, 127, Crocker 1992, 601). In other words, Sen's main argument against using happiness as a measure of human progress is the fact that by lowering expectations and suppressing suffering in the name of survival, a deprived person such as the "hopeless beggar", the dominated wife or those working in precarious conditions may still be well off in terms of "mental metric of utility." Thus, a happiness approach would fail to reflect the real degree of deprivation (Sen 1987, 45-46, Sen 2003, 45).

One response to this critique refers to the difference between hedonic and evaluative well-being explained above: while a person may adapt his/her daily experiences to an unfavorable situation, he/she would hardly evaluate a depraved life as the best possible life. Indeed, while adaptation presents a challenge to happiness economics, one way around the small mercies argument is to use hedonic and evaluative measures side-by-side – and the different and at times contradictory information that these metrics yield both within and across individuals and countries – to gain a fuller understanding of the human condition.

The Easterlin Paradox

One of the central debates in the SWB literature – with important implications for development ethics – concerns the relationship between income (growth) and happiness. Within a country, the rich are happier than the poor. Likewise, at any point in time, rich countries are happier than poor ones. Therefore, *at a particular point in time*, the relationship between income and happiness is positive. However, looking at the relationship over time, as countries become richer, it appears that they do not get happier. This is the Easterlin Paradox: while cross-sectionally (i.e. at a particular point in time), income and happiness are positively correlated, as countries become richer *over time*, the relationship does not hold.

There are two main explanations for this paradox, namely, social comparisons and adaptation (Clark 2016). According to the social comparisons explanation, individuals compare their income to that earned by a peer group (e.g. neighbors, colleagues, classmates). While own-income increases are positively associated with happiness, as the reference group income rises, own happiness falls. The two effects cancel each other out, leading to the result that income is unassociated with happiness over time. The second explanation refers to a within-person comparison, i.e. the person compares his/her current and past income. If there is complete adaptation to income, higher income will initially lead to higher happiness, although after some time the individual fully adapts to this higher income and happiness returns to its pre-income increase levels (Clark 2016).

Why is this debate prominent? While scholars agree on the evidence and the positive relationship between income and happiness at a given point in time, the disagreement concerns the over-time relationship. Depending on the data and methodology, some studies find that rising income leads to rising happiness, which contradicts the Easterlin Paradox. Indeed, while several recent papers have tried to challenge the Easterlin Paradox (Stevenson and Wolfers 2008, Sacks et al. 2012, Diener et al. 2013, Veenhoven and Vergunst 2014), Easterlin (2016) has re-affirmed the paradox, noting that the divergent findings are due to methodology, including the length of the time series, the choice of the countries included in the analyses, question wording and survey peculiarities.

A modified version of the paradox, which is also subject to debate, is that income only improves happiness until basic needs are met (Veenhoven 1991, Clark et al. 2008). Once basic needs are met, income is unrelated to happiness because other factors become relatively more important for happiness. Nonetheless, several studies have empirically challenged this explanation, showing that – if anything – the relationship between income and happiness may be stronger in richer rather than poorer countries (Deaton 2008, Stevenson and Wolfers 2013). This could be the case because wealthier people are better able to take advantage of income as a means of achieving happiness (Graham 2009).

What do these debates imply for development theory and practice? On the one hand, if there is indeed no over-time relationship between happiness and income and if income does not matter for happiness after basic needs are met, then income has limited informational value as a quality of life measure. On the other hand, income cannot be ignored as it is a proxy for many of the markers of a good society, such as freedom of choice, functioning labor markets and public goods (Graham 2011b).

Policy implications and future directions

Should happiness be the end goal of development? Some scholars such as Richard Layard propose that life satisfaction should be the only relevant measure of human well-being. He claims that society needs a single overarching well-being measure, whereby life satisfaction is the obvious candidate as it depends on satisfaction with policy-relevant domains such as health, education, family and work, among others (Layard 2009). While the majority of scholars agree that SWB may advise development policy, SWB measures have several limitations and can best serve as a complement to rather than as a replacement of progress indicators in the policy arena.

First, from a normative perspective, SWB cannot be the only well-being measure because people may be happy by engaging in immoral or unlawful behavior. According to this critique, not only rising income, better education or health can lead to higher SWB (Duncan 2010); for instance, a person taking drugs could report to be happy, while obviously suffering from an addiction. This criticism is usually addressed by noting that policy-makers and development experts need a range of objective and subjective metrics including several SWB dimensions to credibly assess welfare.

Second, hedonic adaptation remains an unresolved challenge. If people adapt to negative circumstances, SWB scores would not reflect the negative welfare consequences of sub-par

institutions or policies, leading policy-makers and development experts to think that no action is necessary (Graham 2011b, Binder 2014). Looking across different SWB dimensions and interpreting the data correctly is an important step towards overcoming this problem.

Third, while unhappiness may point to destitution and a lack of economic progress, a related yet open-ended question is whether some unhappiness and frustration often accompanies the development process, at least in the short run (Graham and Nikolova 2015, Graham 2011b). It may also be the case that individuals trade off hedonic happiness in the present to achieve better life evaluation in the future. To understand this process and the associated trade-offs, the same individuals need to be followed over time.

Finally, while SWB indicators are democratic, using them as the only measure of human progress makes them subject to misuse and misrepresentation by politicians. One can also imagine citizens being constantly polled about their well-being and thus being reduced to passive "metric stations" automatically submitting SWB answers, which is inimical to democracy (Frey and Stutzer 2010).

As argued throughout this article, human well-being is multi-dimensional and different life events or development processes have complex consequences that cannot be captured by a single tell-all metric. Data on a range of objective measures such as income, consumption and employment and subjective indicators such as happiness, job satisfaction, life satisfaction and negative emotions can provide a more comprehensive view of the human condition and serve as a better policy guide. Accordingly, having well-trained academics who can correctly and credibly assess the data using theory, robust empirical methods and a range of metrics as a guide will be an essential part of informing development theory and practice in the future.

References

- Binder M. (2014) Subjective Well-being Capabilities: Bridging the Gap between the Capability Approach and Subjective Well-being Research. *Journal of Happiness Studies*, 15(5) 1197-1217
- Clark, A. E., 2016. Adaptation and the Easterlin Paradox. *Advances in Happiness Research*. Springer, 75-94.
- Clark, A. E., Frijters, P. and Shields, M. A. 2008. Relative Income, Happiness, and Utility: An Explanation for the Easterlin Paradox and Other Puzzles. *Journal of Economic Literature*, 46(1), pp. 95-144.
- Conti, G. and Pudney, S. 2011. Survey Design and the Analysis of Satisfaction. *Review of Economics and Statistics*, 93(3), 1087-1093.
- Costanza, R., *et al.* 2009. Beyond GDP: The need for new measures of progress. *The Pardee Papers No. 4.*
- Crocker, D. A. 1992. Functioning and capability: The foundations of Sen's and Nussbaum's development ethic. *Political Theory*, 20(4), 584-612.
- Crocker, D. A., 2008. *Ethics of Global Development: Agency, Capability, and Deliberative Democracy.* Cambridge: Cambridge University Press.
- Deaton, A. 2008. Income, Health, and Well-Being around the World: Evidence from the Gallup World Poll. *The Journal of Economic Perspectives*, 22(2), 53-72.
- Diener, E., Tay, L. and Oishi, S. 2013. Rising income and the subjective well-being of nations. *Journal of Personality and Social Psychology*, 104(2), 267-276.
- DiTella, R. and MacCulloch, R. 2006. Some uses of happiness data in economics. *The Journal of Economic Perspectives*, 20(1), 25-46.
- Dolan, P. and Kavetsos, G. 2012. Happy Talk: Mode of Administration Effects on Subjective Well-Being. *Centre for Economic Performance Discussion Paper No 1159*, 1-17.
- Duncan, G. 2010. Should happiness-maximization be the goal of government? *Journal of Happiness Studies*, 11(2), 163-178.
- Durand, M. and Smith, C., 2013. The OECD approach to measuring subjective well-being. *In:* Helliwell, J., Layard, R. and Sachs, J. eds. *World Happiness Report*. 112-137.
- Easterlin, R. A. 2016. Paradox Lost? IZA DP No. 9676.
- Exton, C., Smith, C. and Vandendriessche, D. 2015. Comparing Happiness across the World. *OECD Statistics Directorate Working Paper No.* 62.
- Frey, B. S. and Stutzer, A. 2010. Happiness and public choice. *Public Choice*, 144(3-4), 557-573.
- Graham, C., 2009. *Happiness Around the World: The Paradox of Happy Peasants and Miserable Millionaires*. Oxford: Oxford University Press.
- Graham, C. 2011a. Adaptation amidst Prosperity and Adversity: Insights from Happiness Studies from around the World. *The World Bank Research Observer*, 26(1), 105-137.
- Graham, C., 2011b. *Pursuit of Happiness: An Economy of Well-Being*. Washington DC: Brookings Institution Press.

Graham, C. and Lora, E., eds., 2009. Paradox and Perception: Measuring Quality of Life in

Latin America. Washington, D.C.: Brookings Institution Press.

Graham, C. and Nikolova, M. 2013. Does Access to Information Technology Make People Happier? Insights from Well-Being Surveys from around the World. *The Journal of Socio-Economics*, 44(0), 126-139.

- Graham, C. and Nikolova, M. 2015. Bentham or Aristotle in the Development Process? An Empirical Investigation of Capabilities and Subjective Well-Being. *World development*, 68, 163-179.
- Helliwell, J. F. and Barrington-Leigh, C. P. 2010. Viewpoint: Measuring and Understanding Subjective Well-Being. *Canadian Journal of Economics*, 43(3), 729-753.
- Helliwell, J. F., Huang, H. and Wang, S., 2016. The Distribution of World Happiness. *In:* Helliwell, J. F., Layard, R. and Sachs, J. eds. *World Happienss Report 2016*. New York, 8-48.
- John F. Kennedy Library, 2016. Robert F. Kennedy Speeches: Remarks at the University of Kansas, March 18, 1968. John F. Kennedy Presidential Library and Museum. http://www.jfklibrary.org/Research/Research-Aids/Ready-Reference/RFK-Speeches/Remarks-of-Robert-F-Kennedy-at-the-University-of-Kansas-March-18-1968.aspx.
- Kahneman, D., *et al.* 2004. A Survey Method for Characterizing Daily Life Experience: The Day Reconstruction Method. *Science*, 306(5702), 1776-1780.
- Krueger, A. B. and Schkade, D. A. 2008. The Reliability of Subjective Well-being Measures. *Journal of Public Economics*, 92(8/9), 1833-1845.
- Layard, R. 2009. Why subjective well-being should be the measure of progress. *In: OECD World Forum: Charting Progress, Building Visions, Improving Life, 27-30 Oct 2009, Busan, Korea.*
- Lora, E. A. and Chaparro, J. C. 2008. The Conflictive Relationship between Satisfaction and Income. *Inter-American Development Bank*, Working Paper 642.
- OECD, 2011. *How's Life?: Measuring well-being*. OECD Publishing, http://dx.doi.org/10.1787/9789264121164-en.
- Sacks, D. W., Stevenson, B. and Wolfers, J. 2012. The new stylized facts about income and subjective well-being. *Emotion*, 12(6), 1181-1187.
- Sen, A., 1987. On Ethics and Economics. Blackwell Publishing.
- Sen, A. 2003. Development as capability expansion. Readings in Human Development, 3-16.
- Stevenson, B. and Wolfers, J. 2008. Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox. *Brookings Papers on Economic Activity*, 1-102.
- Stevenson, B. and Wolfers, J. 2013. Subjective well-being and income: Is there any evidence of satiation? *The American Economic Review*, 103(3), 598-604.
- Stiglitz, J., Sen, A. and Fitoussi, J.-P. 2009. The measurement of economic performance and social progress revisited. *Reflections and overview. Commission on the Measurement of Economic Performance and Social Progress, Paris.*
- Veenhoven, R. 1991. Is happiness relative? Social Indicators Research, 24(1), 1-34.
- Veenhoven, R. and Vergunst, F. 2014. The Easterlin Illusion: Economic Growth Does Go with Greater Happiness. *International Journal of Happiness and Development*, 1(4), 311-343.
- White, M. P. and Dolan, P. 2009. Accounting for the Richness of Daily Activities. *Psychological Science*, 20(8), 1000-1008.

Endnotes

¹ The use of GDP as a global welfare measure originated in the post-WWII Bretton Woods Conference, leaders of 44 nations saw economic growth as the path to economic well-being and lasting peace (Costanza et al. 2009). Moreover, the two new international institutions created at Bretton Woods, namely the World Bank and the International Monetary Fund, adopted GDP as the primary benchmark for economic progress for the 60 years that followed (Costanza et al. 2009).

² Importantly, in 2013, the EU living conditions survey (EU-SILC) included a subjective wellbeing module, which will be repeated every six years.

³ Six factors—GDP per capita, social support, healthy life expectancy, freedom to make life choices, generosity, and corruption control—determine about three quarters of the variation in national life evaluations. This means that these six variables explain the differences in life evaluations between the world's least and most satisfied countries. While every country's average life evaluation differs, the elements that explain the levels are remarkably similar (Helliwell et al. 2016). The same six factors explain about half of the variation in an index measuring smiling, joy, and happiness the day before, and about a fifth of the variation in an index measuring negative emotions the day before.