

Frey, Bruno S.

Working Paper

What future happiness research?

CREMA Working Paper, No. 2021-29

Provided in Cooperation with:

CREMA - Center for Research in Economics, Management and the Arts, Zürich

Suggested Citation: Frey, Bruno S. (2021) : What future happiness research?, CREMA Working Paper, No. 2021-29, Center for Research in Economics, Management and the Arts (CREMA), Zürich

This Version is available at:

<https://hdl.handle.net/10419/246012>

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.

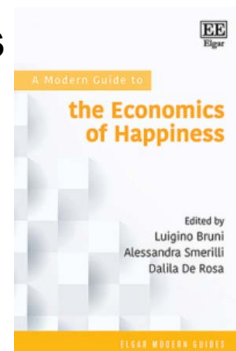
If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Center for Research in Economics, Management and the Arts

What Future Happiness Research?

Working Paper No. 2021-29



2. What future happiness research?

Bruno S. Frey

2.1 THE BEQUEST OF HAPPINESS RESEARCH

At the end of the last century and the beginning of the new century economists gained great insights into the determinants of subjective well-being.¹ They were informed by social psychologists, who dealt with the issue earlier than economists did (Kahneman et al. 1999). Happiness research was taken up by the media and was recognized by the general public. It became general knowledge that national income per capita is not directly linked to people's well-being. The Kingdom of Bhutan officially proclaimed that its policy is to further happiness and not gross national product (GNP). In the social sciences, happiness research is an excellent example of an interdisciplinary approach not dictated from above but an efficient way to learn from each other. This applies in particular to economics and psychology, but beyond also to philosophy, sociology and political science. They are all engaged in finding ways and means to raise human happiness.

For economists educated in strict neoclassics it came as a surprise that human well-being can be measured, and that it can serve as a useful approximation to the theoretical concept of utility (see e.g. Weimann et al. 2015; Kahneman and Krueger 2006). Sir John Hicks and Baron Lionel Robbins, who in the 1920s and 1930s were dominant scholars, were convinced that it is impossible to measure utility. As a result, a microeconomic theory was developed which does not rely on measured utility. Above all, this approach made it possible to empirically estimate demand function. This was quite an achievement but over time it became clear that this approach cannot cope with important behavioural regularities (for an early statement see Sen 1977). These shortcomings have at least partly been overcome by happiness research which starts from the – well-founded – assumption that subjective well-being can be captured by careful representative surveys.

Happiness research has produced many novel and also surprising insights into what individuals value. It is important to emphasize and to clearly work out the differences to the views held by laypeople as well as to classical neoclassical theory as taught at universities. If there are indeed

diminishing returns to research on happiness as suggested above, interest must be maintained by demonstrating that there are nevertheless new insights to be gained. If this is not done, it may well happen that economics returns to the previously orthodox position claiming that there is no need to measure and analyse happiness.

These are some examples of surprising and unexpected results of research on subjective well-being:

- One of the largest negative effects on happiness occurs when people lose their job and become unemployed. This is only partly due to the concomitant income loss (this effect is kept constant in the multiple regression approaches) but rather to the fact that people experience a strongly reduced feeling of self-worth, and that they are no longer part of society. In contrast, in neoclassical economics work is taken as a burden or cost, and receiving an income without work would be optimal. That unemployment has a strong negative effect on well-being has been found in a large number of studies. It has, for instance, been shown that the self-employed, who work harder and on average receive lower incomes than people employed in organizations, are happier (Benz and Frey 2008).
- Happiness research emphasizes the importance of social relationships to one's family and friends, an aspect disregarded as a welfare contributor in orthodox economics. This is an aspect long ago focused on by the Italian movement of civil economy (see recently Becchetti and Cermelli 2018; also Bruni 2006, 2012; Bruni and Porta 2005, 2007; Bruni and Stanca 2008; Bruni and Zamagni 2004, 2015; Bartolini et al. 2007; Gui and Sugden 2005).
- Giving and volunteering are found to raise happiness. This stands in contrast to orthodox economics where it is assumed that gaining additional income raises utility.
- Happiness theory supports the notion that procedural fairness matters for individuals. There are conditions under which a less favourable outcome is preferred if the process has been considered fair (e.g. Lind and Tyler 1988; Hollander-Blumoff and Tyler 2008).
- Adaptation, aspirations, overoptimism and mispredictions have the capacity to strongly influence human decisions, drawing them away from rational choice prediction (e.g. Stutzer 2004; Frey and Stutzer 2014; Odermatt et al. 2017; Deaton 2018). The same consequence is likely to result from social comparisons (see Bartolini et al. 2019).

Today, economic happiness research has been widely accepted in the academic profession though there are still quite a number of scholars who

find that utility is not well approximated by empirical measures of happiness. Especially young researchers have become strongly engaged in the subject. Hundreds of scientific articles have appeared since the beginning of the twenty-first century. There are several extensive survey articles (e.g. Easterlin 2003; Dolan et al. 2008; Frey and Stutzer 2002a; Stutzer and Frey 2010), monographs and books (e.g. Diener et al. 2018; Sgroi et al. 2017; Clark et al. 2018; OECD 2017; Frey 2008, 2018; Layard 2005; Frey and Stutzer 2002b), and hundreds of scholarly articles.

In view of this explosion of literature it is no surprise that *marginally decreasing* insights can be observed. It is difficult for scholars to come up with really new results. Rather, most contributions are devoted to quite specific issues, and the advance in our knowledge about happiness is restricted. This is a normal process in every new field.

2.2 REACTIONS TO DECREASING MARGINAL INSIGHTS

Within economics, five different reactions to the large number of previous publications, results and insights may be distinguished.

Continuation of Existing Research Approaches

The already existing research can be, and has been, amended in various directions (see e.g. Clark 2018; Frey et al. 2014), such as:

- Use more and better statistics, in particular panel data. They could extend, for instance, to what kind of subjective well-being is captured. In addition to the normally used ‘life satisfaction’ data, researchers may look on the one hand at short-run happiness, or on the other hand at long-run, deeply felt happiness (eudaimonia, see e.g. Ryff 2017). An effort can be made to develop ‘well-being indices’ designed to substitute for national income as a welfare measure (e.g. Benjamin et al. 2014). It can also be attempted to capture subjective well-being in diverse ways. A fascinating approach is to derive it from language corpora from millions of digitized books going back at least 200 years (Hills et al. 2015). It turns out that a rise in national income indeed raises subjective well-being. However, on the basis of these data the authors cannot find a long-run positive trend in subjective well-being.
- More refined econometrics may be employed, most importantly in order to capture causal links. They are of considerable importance in

happiness research. It is, for instance, well known that higher income raises happiness, but that happier persons are better equipped to get good jobs with higher income. Similarly, healthy people are happier, but happiness to some extent contributes to health.

- Results from the natural sciences can be used to better understand the conditions of happiness. This applies most importantly to the role of genes (e.g. De Neve et al. 2012), but also to less obvious aspects such as the use of molecular fingerprints (e.g. Probst-Hensch 2017).
- The analysis may be extended to more countries above and beyond developed economies. In addition, particularly surprising developments for particular countries can be compared to other countries. Thus, for example, Americans seem to suffer greater pain than persons from other countries (Blanchflower and Oswald 2017).
- The happiness of particular groups and parts of society can be studied more deeply. For example, the subjective well-being of government compared to private employees has been identified for 21 European and 17 Latin American countries (Luechinger et al. 2008). Many groups in the United States have experienced a downward trend in happiness while the happiness of black Americans has strongly increased since the 1970s (Blanchflower and Oswald 2017). Another important area is the specific impact on happiness in groups suffering from poverty (Clark 2017). Families with children are less happy than those without children. Children are expensive and reduce the money available for other purposes. But once this finding is controlled for the financial condition of a family, it turns out that children tend to raise the well-being of parents (Blanchflower and Clark 2019).
- Both psychic and physical health affects happiness greatly. It is important to identify the many different connections more deeply (see e.g. the survey by Crivelli and Lucchini 2017).
- The state of the natural environment impacts life satisfaction in a systematic way. Over recent years many studies have been undertaken in this direction, see for example Luechinger (2009), Luechinger and Raschky (2009), or Welsch (2002, 2006).
- It is difficult to imagine people being happy in times of war or intense civil conflict but a more refined analysis suggests that even war may have some positive effects on the happiness of some persons (Welsch 2008; Frey 2012a, 2012b). It has been found that terrorist incidents strongly reduce people's well-being (Frey et al. 2007; Clark et al. 2020). More work on these issues is strongly needed; it is a rather neglected aspect in happiness research.

- An aspect of great importance in modern times is the impact of the digital world on happiness. It has, for instance, been found that Facebook usage decreases happiness because it strengthens users' engagement in upward social comparisons (Arad et al. 2017). There are, of course, many other aspects of digitization possibly impacting subjective well-being that are worth studying.
- The effect of income on life satisfaction depends on what kind of income is received. It has been shown (Lindqvist et al. 2018) that a lottery win gained without effort produces only 30 per cent of the satisfaction from the same income gained by (hard) work. This may also be relevant for rents and for programs suggesting unconditional income.
- Research has shown the general importance of happiness and income inequality, trust and social capital in society (e.g. Coleman 1990; Putnam 2000; Bennett and Nikolaev 2017). This also holds for social welfare (e.g. Musson and Rousselière 2017). There are many different aspects of trust whose effects on happiness are well worth studying (e.g. Mikucka et al. 2017).

This discussion shows that there are hundreds of worthwhile topics to be analysed. It can safely be predicted that this will be the road taken by a great many future researchers on happiness. The major reason is that young scholars today are under immense pressure to publish within a rather short time span. As a result they are induced, if not forced, to engage in a subject that is already generally accepted, and to publish by adding some small extension to already existing publications. Established scholars are increasingly subject to similar publication pressures. While this development can be criticized (e.g. Frey 2003, 2009), the reaction to pursue the trodden path is most likely to be undertaken by many future contributors to happiness research.

A Larger Picture Is Worthwhile

In the tradition of Aristotle, happiness may be taken to be the overarching goal of human beings. Alternatively, it may stand next to other goals of humans such as personal development, loyalty, solidarity, justice or religious fulfilment. Some scholars (e.g. Glaeser et al. 2016) in the context of cities identify trade-offs between individual happiness and other goals. Individuals may willingly make choices reducing happiness in order to achieve other goals.

To look at happiness in a broader way, and to compare it to other goals, has been an important and fruitful contribution of Italian economists

following Genovesi (1765–87) and his insights regarding civil economy (Bruni 2006; Bruni and Porta 2005, 2007). They emphasize the importance of interpersonal concepts of public happiness (*pubblica felicità*), public trust (*fede pubblica*), reciprocity and relational goods, and that interaction may raise happiness. This direction of analysis of human well-being should be further pursued.

The Political Use of Happiness Results

There is a strong tendency to apply the results of happiness research in a direct way via happiness policies (see e.g. in the context of the United Nations, Layard and O'Donnell 2015; O'Donnell and Oswald 2015; Diener et al. 2009). However, much thought should be applied before engaging in such policy-making. According to one author, 'happiness is a poor guide for policy' because the concept is vague, multifaceted and subjective (White 2015).

In some firms there already exists a 'chief happiness officer' next to the chief executive officer, chief operating officer, chief patent officer, etc. They endeavour to create happiness by sending their employees on mindfulness courses, yoga lessons and many other things demonstrating that the top managers are interested in the 'whole person' of their employees. Such a mistaken cult of happiness constitutes an 'unacceptable invasion of individual liberty' (*The Economist* 2016: 60). To employ happiness instrumentally is moreover unlikely to work. Only 'rational fools' (Sen 1977) take such actions seriously.

The Kingdom of Bhutan measures its gross national happiness and claims to build all their policies to further happiness. A substantial number of governments (the United States, Britain, France, Germany, Australia, etc.) regularly publish reports informing their citizens on the relationship of their policies to happiness. The United Arab Emirates even has a minister of state for happiness and well-being. The United Nations General Assembly has unanimously adopted a resolution that governments should pursue the happiness of their citizens. The happiness goal is boasted irrespective of whether a country is democratic or authoritarian. It is difficult, or even impossible, to argue against the idea that governments should raise the happiness of their citizens (see Farrow et al. 2018 for the importance of words in the policy context).

To impose policies designed to raise happiness from above is mistaken. The insights of happiness research should not be used to substitute for the democratic participation of citizens but rather should serve to inform them about the determinants of happiness. What policies they favour should be left to the citizens (Odermatt and Stutzer 2018).

There are moreover two fundamental reasons why a policy of happiness maximization by governments is mistaken (Frey and Stutzer 2000):

- Once respondents are aware that governments pay attention to the measured level of happiness they no longer answer in an unbiased way. Consider, say, a left-wing citizen. He or she will be reluctant to state they are happy when living under a strongly right-wing government. As a result the happiness surveys no longer reflect the true-life satisfaction level of the population, and therefore can no longer be used as a reasonable policy guide.
- Once governments have committed themselves to raising the happiness of their citizens they have a strong incentive to systematically manipulate the happiness statistics. This is easy to do, in particular because the data are subjective, and because it is easy to exclude answers considered being outliers, or parts of the population (for instance persons imprisoned).

In future research on happiness these considerations must be taken into account. It should be analysed in what way the population can be informed about the results of happiness research. Obviously, the classical and the new media play a large role in this context.

Another important issue is the consequences of happiness on politics, in particular on voting. This is a large area so far not widely analysed. An exception is a study suggesting that individuals satisfied with their life are 1.6 per cent more likely to support the incumbent (Liberini et al. 2017). Such results may be of great relevance in a period in which disgruntled voters tend to support extreme parties, often of the right wing.

Institutional Prerequisites of Happiness

To find out under what institutional conditions happiness flourishes, and under what conditions it is hampered, has so far been undertaken too rarely. One of the reasons for this neglect is that many economists engaged in happiness research are strongly influenced by psychology and endeavour to follow that path. The analysis of institutions is beyond the realm of psychological analyses; it is the area of political economists, political scientists, sociologists and lawyers (see e.g. Huang 2018). This is indeed an area of research in which economists could make a major contribution.

Some contributions in happiness research have isolated institutional determinants of happiness, among them democracy versus authoritarian regimes (e.g. Dorn et al. 2007), direct democracy versus more representative systems (Frey and Stutzer 2000, 2002a, 2002b), decentralization (e.g.

Diaz-Serrano and Rodríguez-Pose 2012; Rodríguez-Pose and Tselios 2019) or governance systems (Helliwell and Huang 2008; OECD 2017: 157–98). But much is still unknown, for instance the importance on happiness of the rule of law, of basic human rights, or of types of bureaucracy.

2.3 CONCLUSIONS

There are many fruitful opportunities for future happiness research. Some are rather obvious, others are too little considered despite their great importance, and others have not been exploited so far. The further pursuing of the direction indicated by the (large) literature already existing on subjective well-being is likely to happen but there are even more challenging and worthwhile opportunities.

This author does not hide his preference for more enterprising directions. In particular, happiness should be put in a larger perspective. It should be compared to other goals of human beings and it should be carefully analysed as to whether these goals are complements or rather substitutes. To prevent happiness research from becoming a handmaiden of authoritarian political tendencies it is also important to inquire carefully as to what institutional conditions favour raising the happiness of the population.

NOTE

1. This chapter is partly based on an article by the author published in 2019 in the *International Review of Economics*. The author declares that he has no conflict of interest.

REFERENCES

- Arad, A., O. Barzilay and M. Perchick (2017), The impact of Facebook on social comparison and happiness: evidence from a natural experiment. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2916158>.
- Bartolini, S., E. Bilancini and M. Pugno (2007), Did the decline in social capital decrease American happiness? A relational explanation of the happiness paradox. Working Paper 513, Department of Economics, University of Siena.
- Bartolini, S., M. Piekalkiewicz and F. Sarracino (2019), A social cure for social comparisons. Working Paper 797, Department of Economics, University of Siena.
- Becchetti, L. and M. Cermelli (2018), Civil economy: definition and strategies for sustainable well-living. *International Review of Economics*, 65(3), 329–57.
- Benjamin, D. J., O. Heffetz, M. S. Kimball and N. Szembrot (2014), Beyond happiness and satisfaction: toward well-being indices based on stated preference. *American Economic Review*, 104(9), 2698–735.

- Bennett, D. L. and B. Nikolaev (2017), Economic freedom and happiness inequality: friends or foes? *Contemporary Economic Policy*, 35(2), 373–91.
- Benz, M. and B. S. Frey (2008), Being independent is a great thing: subjective evaluations of self-employment and hierarchy. *Economica*, 75(298), 362–83.
- Blanchflower, D. G. and A. E. Clark (2019), Children, unhappiness and family finances: evidence from one million Europeans. Working Paper 25597, National Bureau of Economic Research Working Paper Series.
- Blanchflower, D. G. and A. Oswald (2017), Unhappiness and pain in modern America: a review essay, and further evidence, on Carol Graham's happiness for all? Working Paper 24087, National Bureau of Economic Research Working Paper Series.
- Bruni, L. (2006), *Civil Happiness: Economics and Human Flourishing in Historical Perspective*. London: Routledge.
- Bruni, L. (ed.) (2012), Market and happiness. *International Review of Economics*, special issue, 59(4).
- Bruni, L. and P. L. Porta (eds) (2005), *Economics and Happiness: Framing the Analysis*. Oxford: Oxford University Press.
- Bruni, L. and P. L. Porta (eds) (2007), *Handbook on the Economics of Happiness*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing.
- Bruni, L. and L. Stanca (2008), Watching alone: relational goods, television and happiness. *Journal of Economic Behavior & Organization*, 65(3–4), 506–28.
- Bruni, L. and S. Zamagni (2004), *Economia civile: Efficienza, equità, felicità pubblica*. Bologna: Il mulino.
- Bruni, L. and S. Zamagni (2015), *L' economia civile: Un'altra idea di mercato*. Bologna: Il mulino.
- Clark, A. E. (2017), Happiness, income and poverty. *International Review of Economics*, 64(2), 145–58.
- Clark, A. E. (2018), Four decades of the economics of happiness: where next? *The Review of Income and Wealth*, 64(2), 245–69.
- Clark, A. E., O. Doyle and E. Stancanelli (2020), The impact of terrorism on individual well-being: evidence from the Boston marathon bombing. *Economic Journal*, 130(631), 2065–2104.
- Clark, A. E., S. Flèche, R. Layard, N. Powdthavee and G. Ward (2018), *The Origins of Happiness: The Science of Well-being over the Life Course*. Princeton: Princeton University Press.
- Coleman, J. S. (1990), *Foundations of Social Theory*. Cambridge, MA: Belknap Press of Harvard University Press.
- Crivelli, L. and M. Lucchini (2017), Health and happiness: an introduction. *International Review of Economics*, 64(2), 105–11.
- De Neve, J.-E., N. A. Christakis, J. H. Fowler and B. S. Frey (2012), Genes, economics, and happiness. *Journal of Neuroscience, Psychology, and Economics*, 5(4), 193–211.
- Deaton, A. (2018), What do self-reports of wellbeing say about life-cycle theory and policy? *Journal of Public Economics*, 162, 18–25.
- Díaz-Serrano, L. and A. Rodríguez-Pose (2012), Decentralization, subjective well-being, and the perception of institutions. *Kyklos*, 65(2), 179–93.
- Diener, E., R. Lucas, U. Schimmack and J. Helliwell (2009), *Well-being for Public Policy*. Oxford and New York: Oxford University Press.
- Diener, E., S. Oishi and L. Tay (eds) (2018), *Handbook of Well-being*. Salt Lake City, UT: DEF Publishers.
- Dolan, P., T. Peasegood and M. White (2008), Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29(1), 94–122.
- Dorn, D., J. A. V. Fischer, G. Kirchgässner and A. Sousa-Poza (2007), Is it culture or democracy? The impact of democracy and culture on happiness. *Social Indicators Research*, 82(3), 505–26.
- Easterlin, R. A. (2003), Explaining happiness. *PNAS, Proceedings of the National Academy of Sciences*, 100(19), 11176–83.

- Farrow, K., G. Grolleau and N. Mzoughi (2018), What in the word! The scope for the effect of word choice on economic behavior. *Kyklos*, 71(4), 557–80.
- Frey, B. S. (2003), Publishing as prostitution? Choosing between one's own ideas and academic success. *Public Choice*, 116(1–2), 205–23.
- Frey, B. S. (2008), *Happiness: A Revolution in Economics*. Cambridge, MA: MIT Press.
- Frey, B. S. (2009), Economists in the PITS? *International Review of Economics*, 56(4), 335–46.
- Frey, B. S. (2012a), Peace, war, and happiness: Bruder Klaus as wellbeing facilitator. *International Journal of Wellbeing*, 1(2), 226–34.
- Frey, B. S. (2012b), Well-being and war. *International Review of Economics*, 59(4), 363–75.
- Frey, B. S. (2018), *Economics of Happiness*. Cham: Springer.
- Frey, B. S. (2019), What are the opportunities for future happiness research? *International Review of Economics*, <https://doi.org/10.1007/s12232-019-00318-9>.
- Frey, B. S., J. Gallus and L. Steiner (2014), Open issues in happiness research. *International Review of Economics*, 61(2), 115–25.
- Frey, B. S., S. Luechinger and A. Stutzer (2007), Calculating tragedy: assessing the costs of terrorism. *Journal of Economic Surveys*, 21(1), 1–24.
- Frey, B. S. and A. Stutzer (2000), Happiness, economy and institutions. *The Economic Journal*, 110(466), 918–38.
- Frey, B. S. and A. Stutzer (2002a), What can economists learn from happiness research? *Journal of Economic Literature*, 40(2), 402–35.
- Frey, B. S. and A. Stutzer (2002b), *Happiness and Economics: How the Economy and Institutions Affect Well-being*. Princeton: Princeton University Press.
- Frey, B. S. and A. Stutzer (2014), Economic consequences of miscalculating utility. *Journal of Happiness Studies*, 15(4), 937–56.
- Glaeser, E. L., J. D. Gottlieb and O. Ziv (2016), Unhappy cities. *Journal of Labor Economics*, 34(S2), S129–S182.
- Gui, B. and R. Sugden (eds) (2005), *Economics and Social Interaction: Accounting for Interpersonal Relations*. Cambridge: Cambridge University Press.
- Helliwell, J. and H. Huang (2008), How's your government? International evidence linking good government and well-being. *British Journal of Political Science*, 38(04), 595–619.
- Hills, T., E. Proto and D. Sgroi (2015), Historical analysis of national subjective wellbeing using millions of digitized books: introducing the HPS Index. VoxEU.org, September 18. <https://voxeu.org/article/building-historical-index-happiness-using-google-books>.
- Hollander-Blumoff, R. and T. R. Tyler (2008), Procedural justice in negotiation: procedural fairness, outcome acceptance, and integrative potential. *Law & Social Inquiry*, 33(2), 473–500.
- Huang, P. H. (2018), Subjective well-being and the law. In E. Diener, S. Oishi and L. Tay (eds), *Handbook of Well-being* (pp. 932–44). Salt Lake City, UT: DEF Publishers.
- Kahneman, D., E. Diener and N. Schwarz (eds) (1999), *Well-being: The Foundations of Hedonic Psychology*. New York: Russell Sage Foundation.
- Kahneman, D. and A. B. Krueger (2006), Developments in the measurement of subjective well-being. *Journal of Economic Perspectives*, 20(1), 3–24.
- Layard, R. (2005), *Happiness: Lessons from a New Science*. New York: Penguin Press.
- Layard, R. and G. O'Donnell (2015), How to make policy when happiness is the goal. *World Happiness Report*, 76–87. ISBN: 978-0-9968513-2-9
- Liberini, F., M. Redoano and E. Proto (2017), Happy voters. *Journal of Public Economics*, 146(C), 41–57.
- Lind, E. A. and T. R. Tyler (1988), *The Social Psychology of Procedural Justice*. New York: Plenum Press.
- Lindqvist, E., R. Östling and D. Cesarini (2018), *Long-Run Effects of Lottery Wealth on Psychological Well-being*. Research Working Paper 24667, National Bureau of Economic Research.
- Luechinger, S. (2009), Valuing air quality using the life satisfaction approach. *The Economic Journal*, 119(536), 482–515.

- Luechinger, S., S. Meier and A. Stutzer (2008), Bureaucratic rents and life satisfaction. *Journal of Law, Economics, and Organization*, 24(2), 476–88.
- Luechinger, S. and P. A. Raschky (2009), Valuing flood disasters using the life satisfaction approach. *Journal of Public Economics*, 93(3–4), 620–33.
- Mikucka, M., F. Sarracino and J. K. Dubrow (2017), When does economic growth improve life satisfaction? Multilevel analysis of the roles of social trust and income inequality in 46 countries, 1981–2012. *World Development*, 93, 447–59.
- Musson, A. and D. Rousselière (2017), Clap along if you know what happiness is to you! Wealth, trust and subjective well-being. CIRIEC Working Paper 2017/02, CIRIEC, Université de Liège.
- Odermatt, R., N. Powdthavee and A. Stutzer (2017), Overoptimistic entrepreneurs: predicting wellbeing consequences of self-employment. Discussion Paper 11098, IZA.
- Odermatt, R. and A. Stutzer (2018), Subjective well-being and public policy. In E. Diener, S. Oishi and L. Tay (eds), *Handbook of Well-being* (pp.954–68). Salt Lake City, UT: DEF Publishers.
- O'Donnell, G. and A. J. Oswald (2015), National well-being policy and a weighted approach to human feelings. *Ecological Economics*, 120, 59–70.
- OECD (2017), *How's Life? 2017: Measuring Well-being*. Paris: OECD Publishing.
- Probst-Hensch, N. (2017), Happiness and its molecular fingerprints. *International Review of Economics*, 64(2), 197–211.
- Putnam, R. D. (2000), *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.
- Rodríguez-Pose, A. and V. Tselios (2019), Well-being, political decentralisation and governance quality in Europe. *Journal of Human Development and Capabilities*, 20(1), 69–93.
- Ryff, C. D. (2017), Eudaimonic well-being, inequality, and health: recent findings and future directions. *International Review of Economics*, 64(2), 159–78.
- Sen, A. K. (1977), Rational fools: a critique of the behavioral foundations of economic theory. *Philosophy & Public Affairs*, 6(4), 317–44.
- Sgroi, D., T. Hills, G. O'Donnell and A. J. Oswald (2017), Understanding happiness: a Cage policy report. Centre for Competitive Advantage in the Global Economy, University of Warwick.
- Stutzer, A. (2004), The role of income aspirations in individual happiness. *Journal of Economic Behavior & Organization*, 54(1), 89–109.
- Stutzer, A. and B. S. Frey (2010), Recent advances in the economics of individual subjective well-being. *Social Research: An International Quarterly*, 77(2), 679–714.
- The Economist*. (2016), Schumpeter: against happiness. September 24, 60.
- Weimann, J., A. Knabe and R. Schöb (2015), *Measuring Happiness: The Economics of Well-being*. Cambridge, MA: MIT Press.
- Welsch, H. (2002), Preferences over prosperity and pollution: environmental valuation based on happiness surveys. *Kyklos*, 55(4), 473–94.
- Welsch, H. (2006), Environment and happiness: valuation of air pollution using life satisfaction data. *Ecological Economics*, 58(4), 801–13.
- Welsch, H. (2008), The social costs of civil conflict: evidence from surveys of happiness. *Kyklos*, 61(2), 320–40.
- White, M. D. (2015), The problems with measuring and using happiness for policy purposes. Mercatus Research, Mercatus Center, George Mason University, Arlington, VA.