

Subjective Well-Being and Policy

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Abstract This paper analyses whether the aggregation of individual happiness scores to a National Happiness Index can still be trusted once governments have proclaimed their main objective to be the pursuit—or even maximization—of this National Happiness Index. The answer to this investigation is clear-cut: as soon as the National Happiness Index has become a policy goal, it can no longer be trusted to reflect people's true happiness. Rather, the Index will be systematically distorted due to the incentive for citizens to answer strategically and the incentive for government to manipulate the Index in its favour. Such a distortion would arise even if the measurement of subjective well-being correctly reflected actual happiness before the intervention of government. Governments in a democracy should establish the conditions *enabling individuals to become happy*. The valuable and important results of happiness research should be introduced into the political process. Each person should be free to pursue happiness according to his or her preferences. This process

is supported by obedience to the rule of law, human rights and free media, as well as by extended political participation rights, decentralized public decision-making, an open and effective education system fostering upward mobility and the possibility to find suitable employment.

Keywords Well-being · Happiness · Life satisfaction · Policy · Manipulation · Government

1 Quantitative Happiness Research

Philosophers have studied happiness from the very beginning of their science more than 1,000 years ago. Recently, research on happiness has been fundamentally transformed by social psychologists,¹ who have shown us how to measure happiness in a reliable way. Economists² have followed suit and have introduced advanced econometric techniques to study the subject. They have, in particular, analysed the influence of economic determinants such as income, unemployment, inflation and inequality on happiness.³

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¹ Csikszentmihalyi (1992), Kahneman et al. (1999), Wilson and Gilbert (2003), Lyubomirsky (2008), Diener (2009), Franklin (2010).

² Van Praag and Kapteyn (1973) and Easterlin (1974) are pathbreaking. See the surveys by Frey and Stutzer (2002a, b, c, 2005), Di Tella and MacCulloch (2006), Dolan et al. (2008), Frey (2008), and the collection of articles by Easterlin (2002, 2010), Eid and Larsen (2008), Dutt and Radcliff (2009), Frey and Stutzer (2012).

³ Social scientists beyond economists have also engaged in the study of happiness, in particular the sociologist (Veenhoven 1989) and the political scientist (Lane 2000). See also Feierabend and Feierabend (1966), Davies (1970) and Gurr (1970).

Research on subjective well-being (the more precise term for happiness) distinguishes three concepts (see Frey and Stutzer 1999):

- *positive affect* capturing short run emotional states of mind;
- *life satisfaction* considering more cognitive and long-term aspects; and
- *eudaimonia* as the most fundamental concept going back to Greek philosophy and referring to a good and virtuous life as a whole.

Quantitative research on well-being focuses on *life satisfaction* as the intermediate concept: it is more basic than a fleeting emotional reaction, but refrains from claiming that it has any normative content. This is the concept mainly discussed in this contribution.⁴ The purpose is not to compare the three concepts of happiness in a thorough way but rather to analyse how the concept of life satisfaction is transformed once it has become the official goal of government policy.

Section 2 discusses life satisfaction as a particular variant of subjective well-being. The following section shows how an aggregate measure of happiness (the “National Happiness Index”) becomes the subject of political manipulation once it has become an official goal of government policy. The concluding section reconsiders the concept of happiness in the light of these systematic manipulations by government and draws consequences for happiness policy.

2 Life Satisfaction

Life satisfaction is normally measured in representative surveys⁵ by asking the question: “Taken overall, how satisfied are you with the life you lead?” This question makes clear that a reasoned answer is expected. The survey results correspond well to behaviours commonly associated with happiness: happy individuals smile more in social interactions; they initiate more social contacts, are more optimistic about the future, help more, have less problems at work, commit less suicides, tolerate more frustration and are in better health and live longer due to a better functioning immune system.⁶ The measures have been found to

be reliable, consistent and valid (Diener 2009; Diener et al. 2012).

Life satisfaction has been extensively used in the economics of happiness by econometrically estimating a happiness function in which life satisfaction is the dependent variable to be explained by a large set of determinants comprising genetic (Inglehart and Klingemann 2000; De Neve et al. 2012), socio-demographic (e.g., age, family status, children; Frey and Stutzer 2002b), economic [income, unemployment, inflation, inequality; see, e.g., Diener and Suh (2000), Alesina et al. (2004)], cultural and religious as well as political and institutional (extent of political participation rights and decentralisation; Frey and Stutzer 2002b) factors. Some of the results may appear rather obvious; for instance that persons with higher income on average are happier than those with lower income, or that inflation reduces happiness (Di Tella et al. 2001). Other findings, however, were rather unforeseen. Before the advent of economic happiness research, losing one’s job was barely considered to have a strong negative effect on life satisfaction—otherwise the oft-advanced proposition that unemployment is mostly voluntary⁷ would have been untenable. Other determinants of happiness, such as friendship, religion or materialism, have rarely been taken into account in economics. Some influences are unexpected and/or against standard economic theory: the young and the old are (*ceteris paribus*) happier than those of medium age (Frey and Stutzer 2002b); the self-employed are happier despite the fact that they work harder and longer, bear more risk and on average have lower incomes than those employed by an institution (Benz and Frey 2008); donating money and working as a volunteer contribute to the givers’ happiness (Meier and Stutzer 2008); and rising income over time does not raise happiness, at least not in a linear way (Frey and Stutzer 2002a: 413–416). Well-being research also helps to identify activities depressing happiness, such as commuting (Stutzer and Frey 2008) or having a materialistic attitude to life. Such findings, e.g., that we tend to mispredict the utility gained from consumption in the future, raise doubts about human rationality under well-defined conditions (rather than in a general and therefore rather useless way).

3 Transformation of the Concept of Happiness

3.1 Political Intervention

The happiness measures that we have shortly discussed above rely on the assumption that the individuals

⁴ In line with the literature, however, the more appealing term “happiness” will be generally used whenever there is no danger of misunderstanding.

⁵ There are other approaches to measurement such as the Day Reconstruction Method by Kahneman et al. (2004) or the U-index (Kahneman and Krueger 2006).

⁶ See Frey and Stutzer (2002a, b), Frey (2008), and especially for length and longevity Diener and Chan (2011), summarized in Frey (2011).

⁷ For a similar argument see Minford (1983), as quoted in Clark and Oswald (1994).

concerned reply to the survey questions in a truthful way. Random factors possibly influencing the answers (such as, for example, the weather, or some purely personal irregularity) are not relevant because they cancel each other out when they are aggregated. The answers therefore have considerable trustworthiness though they must, of course, be taken with a measure of caution. One can well argue that the happiness measures are not worse than other measures commonly used in economics, such as imports, exports, income or Gross National Product. They are subject to well-known limitations⁸ but have proven to be very useful for capturing the state of the economy. Interpreted with care, the aggregate concept of individual well-being, the National Happiness Indicator, is useful—in particular when compared to the more narrow concept of Gross National Income.

Recently, the governments of the United Kingdom, France, Germany and even China stated that they wanted to pursue National Happiness as a prime goal of policy. This had already been done a long time ago by the Kingdom of Bhutan and is to some extent also enshrined in the constitution of the United States (“the pursuit of happiness”). However: *Once this policy goal is fully enacted and pursued, the relationship between actual and measured happiness is fundamentally disrupted.* There are two reasons for this disruption:

- (a) The persons asked about their satisfaction with the life they lead are induced to answer strategically, i.e., they have an incentive to *misrepresent* their true state of well-being;
- (b) The governments have a strong incentive as well as many possibilities to *manipulate* the National Happiness Index in their favour.

These two kinds of distortions that affect the National Happiness Index will be discussed in turn.

3.2 Strategic Misrepresentation of Subjective Well-Being

Once governments declare the maximization—or at least the pursuit—of the National Happiness Index to be their primary policy goal, individuals will tend to misrepresent their happiness levels for strategic reasons. They have an incentive to support or to punish the government. An individual with a left-wing ideology living under a right-wing government is inclined to state that she is less happy than she actually is. She therewith signals her disapproval

with the politicians in power. Conversely, a right-wing person living under a right-wing government tends to state that he is happier than he is in actual fact. He therewith signals his approval of the politicians in power. The persons asked are able to misrepresent their state of happiness at no cost, as their true state of happiness cannot be directly observed. The cost of misrepresentation may consist in moral qualms of having indicated a wrong happiness level. Most people are probably hardly bothered by these moral considerations.

Proclaiming an increase in the National Happiness Index as an official government goal will lead to a *systematic* distortion of the measured subjective happiness levels. It cannot a priori be stated in what direction the truthfulness of the National Happiness Index will be affected. The overall outcome will be determined by the extent of the upward or downward misrepresentation by individuals as well as by the size of the groups involved.

3.3 Manipulation of the National Happiness Index by Government

The government is strongly motivated to manipulate important economic indicators such as the unemployment and inflation rates, national income, the budget deficit and the public debt. It is aware that it is not only the actual experiences that count when the citizens cast their vote at election time. Most citizens have only limited direct experience about economic factors. They therefore resort to how they *perceive* the state of the economy to be. These perceptions are strongly shaped by the media, which reproduce the official statistical figures provided by the Central Statistical Office, a public agency responsible to government.

Governments have substantial *possibilities* to manipulate these statistical indicators. They have frequently exploited these opportunities to their advantage (see also Frey and Gallus 2012).

Undesirable statistics are regularly hidden. Governments seem to do so with great ease.⁹ One method consists in outsourcing part of the public debt to bodies not directly related to government. Public debt is also diminished in most countries by the fact that the implicit public debt (comprising future expenditures that have contractually been promised) is rarely included in the statistics. Similar practices are regularly applied with respect to the yearly budget deficit. Italy, Greece and California are just some examples, which have recently been particularly visible

⁸ With respect to national income, for instance, some governments have simply included parts of the shadow economy so as to boost the figures. It remains unknown, however, to what extent these practices have occurred (see, e.g., Schneider and Enste 2002; Torgler et al. 2010; Schneider 2011).

⁹ On this and the following, see, e.g., Dafflon and Rossi (1999), Forte (2001), Milesi-Ferretti (2004), Koen and Van den Noord (2005), Von Hagen and Wolff (2006), Balassone et al. (2007), Buti et al. (2007), Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2009) and European Commission (2010).

(see, e.g., The Economist 2012a). Other seemingly objective figures that are regularly the target of “creative accounting” are the unemployment rate, where the long-term unemployed are often excluded from the counts (see, e.g., Gregg 1994; Webster 2002), and the inflation rate (see, e.g., The Economist 2012b on the Argentinian case).

The manipulation of particular economic indicators is thus widespread; it may even be the rule rather than the exception. Not surprisingly, governments regularly deny such manipulating activity.

The Human Development Index and other broad indicators of economic development also offer governments substantial possibilities for manipulation. Politicians are even more strongly motivated to manipulate the National Happiness Index in their favour. The name, “National Happiness Indicator”, indicates that it must be the overarching goal of policy. National Happiness therefore becomes the self-declared policy priority. The individuals and the media thus focus on the development of the National Happiness Index. Political discussion becomes dominated by changes in that index as it claims to capture the overall well-being of the population. The government is strongly motivated to prevent a fall in the National Happiness Index. It can do so with policies improving actual conditions and therewith raising the Index. However, it can also manipulate the Index without improving the actual conditions and well-being of the population (see also Frey and Gallus 2013).

The government can readily manipulate the National Happiness Index in its favour. The Index is based on *subjective* evaluations of respondents to surveys. These can be more easily manipulated than indicators based on more objective data, such as most of the components in the Gross National Product.

To begin with, government can try to influence people’s perception of the state of the economy. An important channel for such an endeavour is the media. It has an important impact on the population’s mood, as shown for instance by Deaton (2012). The next stage where government can manipulate the happiness index is the survey design. The arrangement of the questions as well as contextual factors have been shown to have an impact on stated happiness (ibid.). Groups that are expected to report very low levels of happiness (e.g., prisoners) can be excluded, while those at the other end of the spectrum of the happiness scale (e.g., tourists) can be included. At the stage of survey implementation, governments can follow up non-respondents who are expected to report high levels of happiness, while remaining passive on non-respondents who are expected to report low levels of happiness (e.g., those living in areas with high unemployment). Once the survey has been completed, government can exclude “outliers” with low levels of unemployment, arguing that those respondents

must have been insincere when answering the questions (see, e.g., Simmons et al. 2011). Government can also resort to more outright forms of manipulation, e.g., by changing or dropping responses. The results cannot be traced back to an observable underlying truth since they are entirely subjective. Finally, government can choose to declare the adoption of a new—more favourable—happiness indicator as a leading index. If the most prevalent method of representative surveys is not conducive to its goals, government can opt from a wide panoply of other methods, such as the Day Reconstruction Method or the U-Index, which measures the time an individual feels unhappy, brain scanning or blood pressure (see, e.g., De Prycker 2010; Oswald and Powdthavee 2008).

To summarise, once the subjective well-being of the population—as captured by the National Happiness Index—is declared the unique policy goal, governments have a clear incentive and many possibilities to manipulate this National Happiness Index in their favour. As a consequence, the National Happiness Index will be distorted and no longer a reliable indicator of the citizens’ well-being.

4 The Concept of Happiness Reconsidered

Research on subjective well-being has devoted little attention to the question of what happiness actually is. Rather, based on quantitative measurements of happiness, psychologists, economists and other social scientists have sought to identify what factors determine individuals’ happiness and what consequences should follow. This approach deviates from the main interest of philosophers and thus sets the basis for a productive division of labour among researchers from different disciplines.

This paper also deviates from the issue of what happiness is. Rather, it analyses the question of whether the aggregation of individual happiness scores to a National Happiness Index can still be trusted when governments proclaim that their main objective is to pursue, and even maximize, this National Happiness Index. The answer to this investigation is unambiguous: once the National Happiness Index has become a policy goal, it can no longer be trusted to reflect the true happiness of people. The Index will rather be systematically distorted due to the incentive for citizens to answer strategically and the incentive for government to manipulate the Index in its favour. This would apply even if the measurement of subjective well-being had approximated actual happiness well *before* the intervention of government.

Two consequences follow:

- (a) The National Happiness Index will no longer be a reliable indicator of people’s happiness. It will no

longer reflect how happy people are because the information included in the National Happiness Index will be distorted. It may well be that on the basis of this Index the government will claim that its citizens have become happier while in actual fact they have become less happy, or even miserable.

- (b) For policy purposes, it is advantageous to use *many different aggregate indicators* to capture the population's well-being. This implies using the conventional economic indicators, in particular Gross National Income and extensions such as the Human Development Index. In addition, issue-specific indicators such as the rate of unemployment, the rate of inflation and income distribution convey important information. While they are also subject to manipulation by government (as argued above) they are based on less subjective measures than is the National Happiness Index. Moreover, the larger the number of indices used to capture the effects of government policy, the better observers can detect distortions. This is partly due to the fact that government politicians find it difficult to manipulate many different indicators in their favour, rather than concentrating only on the manipulation of a single National Happiness Index.

More fundamentally, citizens should be advised to reject the idea of governments maximizing their happiness. This corresponds to a “benevolent dictator” approach (Buchanan and Tullock 1962; Brennan and Buchanan 1985), which undermines democracy. It is tantamount to a political arrangement in which the “right” policy is imposed from above and it undermines the political discourse among citizens with different views and preferences (see, more fully, Frey and Gallus 2012; Frey and Stutzer 2012). Rather, governments in a democracy should establish the conditions *enabling individuals to become happy*. The valuable and important results of happiness research should be introduced into the political process. Each and every person should be free to pursue happiness according to his or her preferences. This process is supported by obedience to the rule of law and human rights, by free media as well as by extended political participation rights, decentralized public decision-making, an open and effective education system fostering upward mobility and by the possibility to find suitable employment.

References

- Alesina A, Di Tella R, MacCulloch R (2004) Inequality and happiness: are Europeans and Americans different? *J Public Econ* 88:2009–2042
- Balassone F, Franco D, Zotteri S (2007) The reliability of EMU fiscal indicators: risks and safeguards. Working paper 633, Banca d'Italia
- Benz M, Frey BS (2008) Being independent is a great thing: subjective evaluations of self-employment and hierarchy. *Economica* 75:362–383
- Brennan G, Buchanan JM (1985) *The reason of rules: constitutional political economy*. Cambridge University Press, Cambridge
- Buchanan JM, Tullock G (1962) *The calculus of consent: logical foundations of constitutional democracy*. University of Michigan Press, Ann Arbor
- Buti M, Martins JN, Turrini A (2007) From deficits to debt and back: political incentives under numerical fiscal rules. *Cesifo Econ Stud* 53:115–152
- Clark AE, Oswald AJ (1994) Unhappiness and unemployment. *Econ J* 104:648–659
- Csikszentmihalyi M (1992) *Flow: the psychology of happiness*. Rider, London
- Dafflon B, Rossi S (1999) Public accounting fudges towards EMU: a first empirical survey and some public choice considerations. *Public Choice* 101:59–84
- Davies JC (1970) The J-curve of rising and declining satisfactions as a cause of some great revolutions and a contained rebellion. In: Graham HD, Gurr TR (eds) *The history of violence in America*. Bantam, New York
- De Neve JE, Christakis NA, Fowler JH, Frey BS (2012) Genes, economics, and happiness. *J Neurosci Psychol Econ* 5:193–211
- De Prycker V (2010) Happiness on the political agenda? Pros and cons. *J Happiness Stud* 11:585–603
- Deaton AS (2012) The financial crisis and the well-being of Americans. 2011 OEP hicks lecture. *Oxf Econ Pap* 64:1–26
- Di Tella R, MacCulloch R (2006) Some uses of happiness data in economics. *J Econ Perspect* 20:25–46
- Di Tella R, MacCulloch RJ, Oswald AJ (2001) Preferences over inflation and unemployment: evidence from surveys of happiness. *Am Econ Rev* 91:335–341
- Diener E (ed) (2009) *The science of well-being—the collected works of Ed Diener*. Springer, Dordrecht
- Diener E, Chan MY (2011) Happy people live longer: subjective well-being contributes to health and longevity. *Appl Psy Health Well-Being* 3:1–43
- Diener E, Suh EM (eds) (2000) *Culture and subjective well-being*. MIT Press, Cambridge
- Diener E, Inglehart R, Tay L (2012) Theory and validity of life satisfaction scales. *Soc Indic Res*. Advance online publication. doi:10.1007/s11205-012-0076-y
- Dolan P, Peasgood T, White M (2008) Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *J Econ Psychol* 29:94–122
- Dutt AK, Radcliff B (eds) (2009) *Happiness, economics and politics: towards a multi-disciplinary approach*. Edward Elgar, Cheltenham
- Easterlin RA (1974) Does economic growth improve the human lot? Some empirical evidence. In: David PA, Reder MW (eds) *Nations and households in economic growth: essays in honour of Moses Abramowitz*. Academic Press, New York
- Easterlin RA (ed) (2002) *Happiness in economics*. An Elgar Reference Collection, Cheltenham
- Easterlin RA (2010) *Happiness, growth, and the life cycle*. Oxford University Press, New York
- Eid M, Larsen RJ (eds) (2008) *The science of subjective well-being*. Guilford, New York
- European Commission (2010) *Report on greek government deficit and debt statistics*. COM 1, Brussels

- Feierabend IK, Feierabend RL (1966) Aggressive behaviors within polities, 1948–1962: a cross-national study. *J Confl Resolut* 10:249–271
- Forte F (2001) The Maastricht “excessive deficit” rules and creative accounting. In: Mudambi R, Navarra P, Sobbrío G (eds) *Rules and reason: perspectives on constitutional political economy*. Cambridge University Press, Cambridge
- Franklin SS (2010) *The psychology of happiness. A good human life*. Cambridge University Press, Cambridge
- Frey BS (2008) *Happiness: a revolution in economics*. The MIT Press, Cambridge
- Frey BS (2011) Happy people live longer. *Science* 331:542–543
- Frey BS, Gallus J (2012) Happiness policy and economic development. *Int J Happiness Dev* 1(1):102–111
- Frey BS, Gallus J (2013) Political economy of happiness. *Appl Econ* (in press)
- Frey BS, Stutzer A (1999) Measuring preferences by subjective well-being. *J Inst Theor Econ* 155:755–778
- Frey BS, Stutzer A (2002a) What can economists learn from happiness research? *J Econ Lit* 40:402–435
- Frey BS, Stutzer A (2002b) *Happiness and economics: how the economy and institutions affect human well-being*. Princeton University Press, Princeton
- Frey BS, Stutzer A (2002c) The economics of happiness. *World Econ* 3:25–41
- Frey BS, Stutzer A (2005) Happiness research: state and prospects. *Rev Soc Econ* 63:207–228
- Frey BS, Stutzer A (2012) The use of happiness research for public policy. *Soc Choice Welf* 38:659–674
- Gregg P (1994) Out for the count: a social scientist’s analysis of the unemployment statistics in the UK. *J Roy Stat Soc A* 157:253–270
- Gurr TR (1970) *Why men rebel*. Princeton University Press, Princeton
- Inglehart R, Klingemann HD (2000) Genes, culture, democracy, and happiness. In: Diener E, Suh EM (eds) *Culture and subjective well-being*. MIT Press, Cambridge
- Kahneman D, Krueger AB (2006) Developments in the measurement of subjective well-being. *J Econ Perspect* 20:3–24
- Kahneman D, Diener E, Schwarz N (eds) (1999) *Well-being: the foundation of hedonic psychology*. Russell Sage Foundation, New York
- Kahneman D, Krueger AB, Schkade D, Schwarz N, Stone A (2004) A survey method for characterizing daily life experience: the day reconstruction method (DRM). *Science* 306:1776–1780
- Koen V, Van den Noord PJ (2005) Fiscal gimmickry in Europe: one-off measures and creative accounting. Working paper 417, OECD Economic Department
- Lane RE (2000) *The loss of happiness in market economies*. Yale University Press, New Haven
- Lyubomirsky S (2008) *The how of happiness: a scientific approach to getting the life you want*. Penguin Press, New York
- Meier S, Stutzer A (2008) Is volunteering rewarding in itself? *Economica* 75(297):39–59
- Milesi-Ferretti GM (2004) Good, bad or ugly? On the effects of fiscal rules with creative accounting. *J Public Econ* 88:377–394
- Minford P (1983) Labour market equilibrium in an open economy. *Oxf Econ Pap* 35:207–244
- Oswald AJ, Powdthavee N (2008) Death, happiness, and the calculation of compensatory damages. *J Legal Stud* 37:217–252
- Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2009) *Die Zukunft nicht aufs Spiel setzen*. Available via <http://www.sachverstaendigenrat-wirtschaft.de/jahresgutachten-2009-2010.html>. Cited 18 June 2012
- Schneider F (ed) (2011) *Handbook on the shadow economy*. Edward Elgar, Cheltenham
- Schneider F, Enste D (2002) *The shadow economy: theoretical approaches, empirical studies, and political implications*. Cambridge University Press, Cambridge
- Simmons JP, Nelson LD, Simonsohn U (2011) False-positive psychology: undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychol Sci* 22:1359–1366
- Stutzer A, Frey BS (2008) Stress that doesn’t pay: the commuting paradox. *Scand J Econ* 110:339–366
- The Economist (2012a) California—not quite Greek, but still weak. *The Economist*, 16 June 2012
- The Economist (2012b) Official statistics—don’t lie to me, Argentina. *The Economist*, 25 Feb 2012
- Torgler B, Schneider F, Schaltegger C (2010) Local autonomy, tax morale, and the shadow economy. *Public Choice* 144:293–321
- Van Praag BMS, Kapteyn A (1973) Further evidence on the individual welfare function of income: an empirical investigation in The Netherlands. *Eur Econ Rev* 4:33–62
- Veenhoven R (1989) *Conditions of happiness*. Reidel Publishing Company, Dordrecht
- Von Hagen J, Wolff GB (2006) What do deficits tell us about debt? Empirical evidence on creative accounting with fiscal rules in the EU. Discussion Paper 148, Governance and the Efficiency of Economic Systems, Frankfurt am Main
- Webster D (2002) Unemployment. How official statistics distort analysis and policy and why. *Radical Statistics* 79/80
- Wilson TD, Gilbert DT (2003) Affective forecasting. *Adv Exp Soc Psychol* 35:345–411