



---

Februar 2007

# **Should National Happiness Be Maximized**

WWZ-Discussion Paper 02/07

Bruno S. Frey, Alois Stutzer

---

The Authors:

**Prof. Dr. Bruno S. Frey**

Institute for Empirical Research in Economics, University of Zurich

Winterthurerstrasse 30

CH - 8006 Zurich

[bsfrey@iew.unizh.ch](mailto:bsfrey@iew.unizh.ch)

**Prof. Dr. Alois Stutzer**

Department of Economics (WWZ), University of Basel

Petersgraben 51

CH - 4051 Basel

[alois.stutzer@unibas.ch](mailto:alois.stutzer@unibas.ch)

---

A publication of the Department of Economics (WWZ), University of Basel

*Address for information:*

WWZ Forum, Petersgraben 51, CH-4003 Basel, Fax +41 61 267 33 33

The WWZ Research Papers document the results of research projects at the WWZ.

© WWZ Forum 2007 and the authors. Reproduction for other purposes than the personal use needs the permission of the authors and the WWZ Forum. Please contact: [forum-wwz@unibas.ch](mailto:forum-wwz@unibas.ch).

# SHOULD NATIONAL HAPPINESS BE MAXIMIZED?

Bruno S. Frey\*  
University of Zurich

Alois Stutzer  
University of Basel

and

CREMA – Center for Research in Economics, Management and the Arts

March 2, 2007

## 1 The Issue

‘Happiness Research’ has attracted a great deal of attention in the social sciences as well as in the general public. This is reflected by a massive increase in the amount of scholarly work on people’s subjective well-being<sup>1</sup> and the frequent featuring of happiness research in the media. The next logical step would seem to be to construct a National Happiness Indicator (in consonance with Gross National Income) for governments to be able to maximize National Happiness. The United Kingdom and Australia, as well as certain other countries, are committed to producing national measures of well-being and, already back in the 1970s, the Kingdom of Bhutan proclaimed that it wanted to maximize Gross National Happiness rather than Gross National Income. On the scientific side, a group of fifty well-known scholars is promoting the idea of “National Indicators of Subjective Well-Being and Ill-Being” (Diener 2005, Kahneman et al. 2004). It has been argued that “Gross National Happiness” is the answer to the paradox that, in cross-sections, happiness is positively correlated with individual income, but over time, average happiness is essentially constant, despite a sharp

---

\* Bruno S. Frey: Institute for Empirical Research in Economics, University of Zurich, Winterthurerstrasse 30, CH-8006 Zurich, Switzerland. Phone: +41 (0)44 634 37 30, fax: +41 (0)44 634 35 99, email: bsfrey@iew.unizh.ch.

Alois Stutzer: Center for Economic Science, University of Basel, Petersgraben 51, CH-4003 Basel, Switzerland. Phone: +41 (0)61 267 33 61, fax: +41 (0)61 267 33 40, email: alois.stutzer@unibas.ch.

Both authors are also affiliated with CREMA – Center for Research in Economics, Management and the Arts.

<sup>1</sup> For surveys on the study of happiness in economics, see Frank (1997), Oswald (1997), Frey and Stutzer (2002a,b), van Praag and Ferrer-i-Carbonell (2004), Layard (2005), and Di Tella and MacCulloch (2006).

increase in average income levels (Di Tella and MacCulloch 2005). The use of National Happiness Indicators has also been suggested by “libertarian paternalists” (e.g. Sunstein 2007: 22) to overcome the problem that individuals are not always able to maximize their own utility.

Maximizing social welfare as the ultimate goal of economic policy had already been promoted by Bentham (1789) and Edgeworth (1881) and, in modern economics, by exponents of quantitative economic policy (Tinbergen 1956 and Theil 1964). However, a major drawback to this approach was that the social welfare function could not be empirically measured.

This situation has changed dramatically. Happiness research has designed several indicators of subjective well-being, relying on different measurement techniques (for a discussion see Kahneman and Krueger 2006): global evaluations of individual life satisfaction, based on representative surveys; the Experience Sampling Method, collecting information on individuals’ actual experience in real time in their natural environments; the Day Reconstruction Method, asking people to reflect on how satisfied they felt at various times during the day; the U (“unpleasant”)-Index, defined as the fraction of time per day that an individual spends in an unpleasant state; and Brain Imaging, using functional magnetic resonance imaging (fMRI) to scan individuals’ brain activities for correlates of positive and negative affect.

Most of the empirical work undertaken so far on happiness research in economics has been based on representative, large-scale sampling of individuals’ global evaluations of their life satisfaction. The great advantage of this measurement approach is its good performance compared to its cost, as well as its availability for a large number of countries and time periods. Thus, for example, the surveys on life satisfaction contained in the World Values Survey today cover 80 countries, representing over 80 percent of the world’s population over 4 periods of time. For many tasks, self-reported measures of life satisfaction have proved to perform in a satisfactory way, especially for the issues economists are mostly interested in. So far, it is the best empirical approximation to the concept of individual welfare used in economic theory that is widely available.

Experience Sampling and Brain Imaging are costly and difficult to apply on a large scale. The Day Reconstruction Method and the U-Index are new and, so far, have only been used empirically on an experimental basis. The future will tell to what extent, and for which

specific issues, happiness researchers will rely on the various measurement approaches. There is now wide-spread consensus among scholars that experienced utility and well-being can be measured with some degree of accuracy (e.g. Kahneman et al. 1999; Diener 2005; Kahneman and Krueger 2006). One indicator that such measurements capture important aspects of well-being in a credible way is shown by the fact that they correlate with behavior and aspects generally associated with happiness. Reliability studies have found that reported subjective well-being is moderately stable and sensitive to changing life circumstances (e.g. Ehrhardt et al. 2000; Schimmack and Oishi 2005). Consistency tests reveal that happy people smile more often during social interactions (Fernández-Dols and Ruiz-Belda 1995), are rated as happy by friends and family members (e.g. Sandvik et al. 1993; Lepper 1998) and by spouses (Costa and McCrae 1988), express positive emotions more frequently, are more optimistic, are more sociable and extravert, and sleep better (Frank 1997, Frey and Stutzer 2002b: 33). Happy people are also less likely to commit suicide (Koivumaa Honkanen et al. 2001; Helliwell 2004).

The possibility of adequately measuring happiness has led to new visions being formed in economics and other social sciences. The most important is certainly the call to use the measurements to *maximize aggregate happiness as a social welfare function*. This paper deals with this new vision and inquires whether the maximization of (measured) happiness is a worthwhile approach to pursue. Our discussion suggests that *it is not*; there are major objections to this approach. We present an alternative view of how the insights gained from happiness research may contribute to policy-making.

Section 2 outlines how the idea of maximizing social welfare has been taken up in happiness research. The following four sections discuss major categories of objections to this approach. The first objection is based on classical welfare economics, while the second is based on happiness research itself. We then deal with the fundamental objections from political economy to happiness maximization. After that, the problem of incentive distortions induced by the happiness maximization approach is discussed. In a separate section 7, we address concerns by libertarian paternalists. In section 8, finally, we develop an alternative approach on how to use the insights of happiness research for policy. We emphasize that we do *not* argue against constructing aggregate happiness indicators as such (they may indeed be useful for several purposes), but only against engaging in maximizing them.

## 2 Maximizing Aggregate Happiness

Focusing on aggregate happiness rather than on Gross National Product (or another measure of economic activity) as an indicator of individuals' welfare has several important advantages. As the limitations of the traditional indicators are well documented (see, e.g., Frey and Stutzer 2002a, chapter 2), it suffices to make a brief list of them here and compare them with measures of happiness.

1. Measures of happiness include non-material aspects of human well-being, such as the influence of social relations, autonomy, and self-determination. These are excluded, or inadequately included, in the traditional national accounts and therewith in GNP. Indeed, one of the major challenges of happiness research is to explain the "Easterlin Paradox" (Easterlin 1974; 1995; 2001), showing that real per capita income has dramatically increased in many countries, but happiness has remained constant (see recently, e.g., Di Tella and MacCulloch 2005). Aggregate happiness measures go well beyond existing extensions of GNP (for a recent survey, see Michalos 2005) such as the "Measure of Economic Welfare" (Nordhaus and Tobin 1972), "Economic Aspects of Welfare" (Zolatas 1981), "Index of Sustainable Economic Welfare" (Daly and Cobb 1989) or "Human Development Index" (United Nations Development Programme 2005). These indicators exhibit a markedly different development over time than happiness indicators (see, e.g., Blanchflower and Oswald 2005).<sup>2</sup>
2. Measures of happiness consider outcome aspects of components already included in GNP via input measures. This holds, in particular, with respect to the vast area of government activity (measured in GNP by the costs of material and labor). It is also directly relevant for (public) health and educational expenditures. "Social Indicators" (e.g. the "Index of Social Progress" by Estes 1988) mostly measure the input side, such as the number of hospital beds and doctors, or the number of class-rooms and teachers.
3. Measures of happiness look at subjectively evaluated outcomes in line with the basic methodological approach of economics. In contrast, the capabilities approach and the "Human Development Index" of the United Nations look at objectively observable functionings (Sen 1985; 1999; Nussbaum 2000).

---

<sup>2</sup> But their result is criticized by Leigh and Wolfers (2006).

One might argue that the next logical step would be to take aggregate happiness as a proxy measure for social welfare. In fact, maximizing social welfare as the ultimate goal of economic policy is an old economics dream, dating back to Bentham (1789) and later to Edgeworth (1881), and introduced into contemporary economics by Tinbergen (1956) and Theil (1964). This dream is closely linked with the attempt to turn economics into a natural science comparable to physics. Consistent with this view, Edgeworth called his book “Mathematical Psychics” (1881). The vision of aggregate happiness as a guideline for policy is well described by Layard in his influential book on “Happiness” (2005):

“(…), there are many major choices where rules provide little guidance. There are public choices like how to treat criminals, or how to solve traffic problems. Simple appeals to principles of freedom or loving-kindness will help little here. (...) The answer can only be found from *overarching objectives of maximizing human happiness*” (p. 124, emphasis added)

Di Tella and MacCulloch (2005) and Di Tella et al. (2001, 2003) implicitly use the same theoretical approach. They empirically determine how individuals evaluate macro-economic conditions, in particular how they compare unemployment with inflation. Using happiness data for twelve European countries and for the time period 1975 to 1991, Di Tella et al. (2001) calculate that a one percentage point increase in the unemployment rate is marginally compensated for by a 1.7 percentage point decrease in inflation. This result is understood as an input on how to set the parameters of a presumed social welfare function in order to choose an optimal policy rule.

The progress made in developing happiness measures also spurs traditional welfare economics on in other ways. First, it enables optimal policies to be derived numerically in evaluation exercises for government policy. Second, in contrast to postulating a social welfare function at the aggregate level based on a wide range of different outcome variables, the well-being figures provided by happiness research offer an overall evaluation based on individual judgments. Moreover, a measure of social welfare based on happiness data is democratic in the sense of attributing equal weight to each person. In contrast, the prices relevant for assessing the value of goods entering GNP are largely determined by the preferences of people with high purchasing power. The preferences of individuals without any income to spend are disregarded.

Despite these developments being advantageous to the idea of social welfare maximization, we argue in the following sections that this approach should be rejected for a number of

reasons. We certainly do *not* suggest that GNP should be maximized; rather, we favor a different approach in order to use the valuable insights gained from happiness research.

### **3 Welfare Economic Objections to Social Welfare Maximization**

Classical welfare economics, which was initially due to, and strongly influenced by, Robbins (1932) and Hicks and Allen (1934), has for a long time raised fundamental arguments against using the concept of aggregate social welfare in contrast to individual welfare. The two most important, and partially interconnected (see Sen 1970) objections to the concept of aggregate social welfare are (1) the impossibility of cardinal measurement and interpersonal comparisons, and (2) the impossibility theorem.

Since Arrow (1951), it has been widely accepted that, given a number of “reasonable” conditions, no social welfare function exists that generally ranks individual orderings of outcomes consistently, except a dictatorship. This impossibility result spawned a huge amount of literature (called “*Social Choice*”), analyzing its robustness to modifications of the assumptions. Theorem after theorem demonstrated that almost all changes in the axiomatic structure left the dictatorial result unchanged (see e.g. Sen 1970, 1995, Slesnick 1998). The conclusion has been drawn that “there is no way we can use empirical observations on their own to produce an ethically satisfactory cardinalization, let alone an ethically satisfactory social welfare ordering” (Hammond 1991: 220-21). Does this verdict apply to happiness functions in their capacity as social welfare functions? The answer depends on whether one thinks that the premises of classical welfare economics still hold.

The ordinalist revolution in economics, on which classical micro-economics is firmly based, takes it for granted that individual welfare can only be measured in an ordinal, but not in a cardinal way, and that it makes no sense to make interpersonal comparisons of utility. These are exactly the fundamental assumptions where the counter-revolution of happiness research sets in. If the accumulated evidence (partly mentioned above) is judged sufficient, in the sense that it allows for the cardinal measurement and interpersonal comparison of happiness, then one or more social welfare functions exist. The most appealing social welfare function is probably the unweighted sum of individual cardinal welfare or happiness.

We do not take a stand here. We think, however, that both cardinality and interpersonal comparability may be less of a problem on a practical level than on a theoretical level.<sup>3</sup> For many applications, milder assumptions are sufficient. An important example is the valuation of public goods and public bads, based on the life satisfaction approach (see, e.g., Frey et al. 2004). Life satisfaction scores are reported on an ordinal scale. Using adequate statistical techniques, like ordered probit or ordered logit, the ordinal information is, however, sufficient to calculate a compensating surplus. Moreover, interpersonal comparability at the level of the individual is not a necessary condition for valuing public goods in the life satisfaction approach. It suffices if individual specific response frames do not systematically vary between different groups exposed to different levels of the public good, either across space or over time.

It may be concluded that, while the objections from classical welfare economics must be taken seriously, the existing state of research suggests that, for many purposes, happiness or reported subjective well-being is a satisfactory empirical approximation to individual utility.

#### **4 Objections from Happiness Research to Social Welfare Maximization**

In happiness research, two phenomena are studied that question the maximization of aggregate happiness as an objective of public policy.

The first phenomenon that gives rise to reservations has to do with one of the most central findings of happiness research: many changes in life circumstances have only a short-lived effect on reported subjective well-being because people adapt to the new situation (Frederick and Loewenstein 1999). Extreme and well-known examples are paraplegics who, after a period of hardship, report themselves long term to be only a little less happy than before, and lottery winners who, after a short period of elation, report themselves to be not much happier than before (Brickman et al. 1978). A more recent study, based on longitudinal data, finds that average life satisfaction drops when subjected to a moderate disability, but fully recovers to the pre-disability level after two years. In the case of a severe disability, however, the recovery is incomplete (Oswald and Powdthavee 2006). On the brighter side, the period of time leading up to marriage significantly raises average happiness but, over the course of

---

<sup>3</sup> Interestingly enough, psychologists (who otherwise are very demanding with respect to measurements) seem to be more comfortable when comparing indicators of feelings or utility across individuals (Kahneman et al. 2004: 432).

marriage, the happiness level returns to only a little above the pre-marriage level (Stutzer and Frey 2006).

The second, closely related phenomenon is the change of people's aspirations due to changes in their life circumstances. In the context of economics, the most important finding is that people quite rapidly adjust to increases in income: after about one year, two-thirds or more of the benefits of an increase in income wear off as people increase their income aspirations (Stutzer 2004; van Praag and Ferrer-i-Carbonell 2004). This process has become known as the aspiration treadmill and has been used to explain the Easterlin Paradox mentioned above.

Hedonic adaptation and the aspiration treadmill are not problematic as such for the measurement of individual welfare. However, they have considerable consequences for social welfare maximization, depending on how they are treated. Imagine if courts have to decide on compensation for disabilities sustained in a car accident. For the same physical disabilities, should they award lower compensation to people who can more readily adapt and higher damages to others who cannot adapt so easily? Or, in the area of government taxation, what costs of taxation should be taken into account? Materialists with high income aspirations suffer a great deal from personal income tax. Should they be exempt from tax and should government services be financed by people who can more readily adapt to whatever their material standard of living is?

In our context, it is important that the way to deal with hedonic adaptation and the aspiration treadmill is not part of social welfare maximization, but must be decided at a more fundamental level. Thus, one needs a social decision making mechanism to indicate how to deal with adaptation and aspiration effects in public policy. Such decisions have serious consequences for economic policy, over and above the social welfare maximization approach.

## **5 Objections from Political Economics to the Maximization of Aggregate Happiness**

The social welfare maximization approach disregards, and tries to substitute for, existing political institutions and processes. This is the "benevolent dictator" view castigated in Constitutional Political Economy, and does not need to be repeated here.<sup>4</sup> The essential message is that, in a democracy, there are constitutionally designed rules and institutions

---

<sup>4</sup> Originally Buchanan and Tullock (1962). See also Frey (1983), Brennan and Buchanan (1986), Mueller (1996; 2003), Vanberg (2005).

allowing citizens to reveal their preferences, and to provide politicians (the government) with an incentive to actualize them. As such, the maximization of a social welfare function is an intellectual exercise. Even if the government were to pay attention to the results, it has no incentive to follow up on them.

The social welfare maximizing approach, based on empirically estimated happiness functions, thus disregards the institutions on which democracy is based. Citizens are reduced to “metric stations”. They are forced into a state of passivity, which tends to increase their alienation from the State. In this respect, a happiness maximization approach is inimical to democracy. It disregards the interaction between citizens and politicians, the interest representation by organized groups and the concomitant information and learning processes.

The latter argument alludes to the fundamental direct interrelation between the approach applied to collective choices in a society and individual well-being. People have preferences for processes over and above outcomes. They gain well-being from living and acting under institutionalized processes, as they contribute to a positive sense of self, addressing innate needs of autonomy, relatedness and competence. We call this contribution to individual well-being ‘procedural utility’. In the economy, individuals have been shown to enjoy procedural utility in their capacity as consumers or income earners; in the polity and society, as citizens subjected to different political and societal procedures; in organizations, as employees confronted with different organizational procedures; and in law, as litigants (for an introductory survey, see Frey et al. 2004, and for an application to democracy, see Frey and Stutzer 2005). If people are reduced to “metric stations”, they experience a significant loss in autonomy when dealing with public affairs and therefore reduced (procedural) well-being.

Happiness research also fails to provide a rule about the scope and limitations of government intervention in the private sphere. Should the government be allowed to prohibit the consumption of alcohol if this were to raise the population’s happiness in the long run, or should this be left to the discretion of the individuals (based on the results of happiness research)? And even more importantly: To what extent should the government be allowed to change the preferences of its citizens? Many current interventions might affect people’s well-being in the future due to a change in preferences. We mention two extreme cases. Imagine that the government adopts a policy to make people humble in order to reduce their material aspirations initially so that they are more appreciative of material benefits afterwards. Or, imagine that the government raises the National Happiness Indicator by inducing people to take a “happiness pill”. Should these policies be accepted? This question cannot be answered

within the happiness maximization calculus, but must be decided at a more fundamental level. A feasible and theoretically consistent approach is to resort to the constitutional level, where people make such fundamental decisions behind the veil of uncertainty (see section 7).

Probably the most fundamental issue is whether happiness is the ultimate goal to be maximized. Other valid goals, for instance, may be loyalty, responsibility, self-esteem, freedom or personal development. It can well be imagined that a single mother with several children does not consider her affective well-being to be of primary importance in her life. Rather, responsibility may carry much more weight. Whether happiness is the ultimate goal of individuals, or whether it is only one of several goals, constitutes an important and controversial issue in philosophy. The maximization of social welfare is not the only, or even the most obvious, ultimate goal to be pursued by public policy.

## **6 Induced Incentive Distortions**

So far, we have assumed that the decision to maximize social welfare in terms of aggregate (measured) happiness does not have any influence on the measurement of subjective well-being. This assumption is highly debatable. Indeed, the political use of aggregate happiness will certainly induce strategic interactions between government and individuals. Two kinds of distortions need to be taken into account.

Once aggregate happiness has become politically relevant, the government, public bureaucracy and various interest groups have an incentive to manipulate it. This has proved to be true for GNP and for other economic indicators declared to be goals of government activity. As the unemployment rate has become a politically important indicator, governments have started to influence it in order to paint a better picture of the state of the labor market than is the actual case. Thus, for instance, people who have been unemployed for a long time are defined as no longer belonging to the workforce, and therefore no longer raising the official unemployment rate. It is also well known that the way of measuring budget deficits has been cleverly manipulated by some European countries when the rules for entering the European Monetary Union required that budget deficits did not exceed three percent of GDP and that the public debt did not exceed sixty percent of GDP. Many EU member countries (most notably Greece and Italy) resorted to accounting tricks or “creative accounting”<sup>5</sup> in

---

<sup>5</sup> Creative accounting does not violate the law, but it is clearly against the spirit of the law and accounting standards. It uses the rules, the flexibility provided by them and the omissions within them,

order to meet these requirements, though in reality they clearly violated them (see, e.g., Forte 2001; von Hagen and Wolff 2004). Such distortions of indicators were so widespread that observers stated that “[...] the determining factor for achieving membership of the planned European Monetary Union (EMU) seems to rely on widespread use of public-sector creative accounting measures” (Dafflon and Rossi 1999: 59-60). In the (rare) case in which a government is unable to manipulate a particular indicator to its benefit, it has an incentive to create new indicators. This is easily possible in the case of happiness. As has been pointed out in the second section, a variety of indicators may capture individual well-being. Governments and pressure groups will choose those most beneficial to their respective interests, or will even create new ones better suited to their purposes.

The second systematic distortion stems from the incentive of respondents to misrepresent their well-being. When individuals become aware that the happiness level they report influences the behavior of political actors, they have an incentive to misrepresent it. They can “play the system”.

The two systematic distortions discussed represent a basic phenomenon, which even applies to the natural sciences. The Heisenberg Uncertainty Principle states that the observation of a system fundamentally disturbs it. In the social sciences, both the observation and public reporting can change the observed behavior of the people involved. This reaction is related to Goodhart’s Law and the Lucas Critique (see Chrystal and Mizen 2003). Goodhart’s Law (1975) states that any observed statistical relationship – such as the happiness function – will tend to collapse once pressure is placed upon it for control purposes. The Lucas Critique (1976) refers more specifically to econometric modeling: a different policy making behavior (such as using an aggregate happiness indicator) influences the expectations of private agents and this changes behavior in a rational-expectations model.

## **7 Concerns by Libertarian Paternalists**

Much evidence has been collected showing that individuals are not always able to maximize their *own* utility (e.g. Thaler 1988, 1992, Kahneman and Thaler 2006), and that therefore, aggregate utility will not be maximized either. These systematic mistakes refer to such instances as myopia, excessive optimism, the focusing illusion, utility misprediction in general, as well as a weakness of will (e.g. Bénabou and Tirole 2004). Thus Sunstein (2007:

---

in order to make financial statements which look different from what is intended by the rule (Jameson 1988).

3) argues that “[...] people are often willing to pay a great deal for goods whose acquisition does not improve their welfare”. Recently, the libertarian (or new) paternalists (e.g. O’Donoghue and Rabin 2003, Thaler and Sunstein 2003) have come up with interesting proposals to make people more satisfied in situations where no coercion is involved. They treat “internalities”, i.e. decisions in which people do not take into account that their choices impose costs on their future selves, analogous to “externalities” in classical Pigovian welfare analysis. The government is called upon to correct for these bargaining failures occurring between the current and future self (Schelling 1978, Thaler and Shefrin 1981, Ainslie 1992). Examples are sin taxes on smoking, obesity or gambling, imposing market restrictions and mandatory saving plans (e.g. O’Donoghue and Rabin 2003). The libertarian paternalists are fully aware of a possible government failure but take it to be smaller in these areas than the consequences of the individual mistakes. The approach is, however, ill at ease with a Coasian (1960) view in which the two selves – in the case of self-control problems - are seen interacting with each other and seeking a solution minimizing harm (Whitman 2006). Many possibilities exist, such as promising a trade-off (such as for a person suffering of a weakness of will with respect to TV: “I watch this film this evening but I will take my children to a basketball play on Sunday”). The solution can also include doing nothing, and in the case of misers, workaholics or anorectics deciding in favor of the current self. The government would undertake corresponding actions only if it were fully informed and would solely pursue the welfare of the persons concerned.

Our approach specified in the next section suggests a related alternative avenue. Institutions have to be considered helping individuals to overcome as best as possible the harm produced by systematically mistaken decisions.

## **8 An Alternative Vision of How to Use Happiness Research for Policy**

Our discussion has endeavored to show that the maximization of aggregate happiness as a social welfare function is a doubtful approach for several reasons:

- Governments are not composed of purely benevolent politicians wanting to make the population as happy as possible. Rather, the personal interests of politicians also matter;
- The essential elements of democratic governance are disregarded: democracy consists of interaction between politicians and citizens on many different levels, structured by the constitution and not simply recording the reported well-being of the citizens;

- The government has an incentive to manipulate the happiness indicators and to create new ones to suit their goals;
- The individuals have an incentive to misrepresent their happiness levels strategically in order to influence government policy in their favor.

Some might also argue that problems of cardinality and interpersonal comparability can never be fully overcome.

Of course, these arguments do *not* mean that the maximization of GNP would be preferable to maximizing aggregate happiness (however that is conceived). We argue that happiness research should not aim at constructing a social welfare function at all, but that the insights provided by happiness research should be used in a different way.

Our vision rests on the fundamental presumption that the quality of the political process is a key factor to people's happiness and that the legitimacy of political action finally rests on the voluntary agreement of the citizens involved. Individual sovereignty should not be reduced to self-reports on one's well-being. It should include choices on how to best pursue happiness, both individually and collectively. The claim is not for 'naïve' consumer or citizen sovereignty in the sense that behavior is always optimal. People, with their bounded rationality and bounded willpower, are sometimes aware of their own limitations (and sometimes only of those of their fellow citizens).

Accordingly, at the collective level, the political process should be institutionally structured so that people's common interests become the principal driving force. Economic policy must help to establish those fundamental institutions, which make politicians and public bureaucrats most responsive to people's common interests and which finally lead to the best possible fulfillment of individual preferences. As argued above, happiness is not necessarily people's ultimate goal; other important goals may be loyalty, responsibility, self-esteem, personal development, justice, religiosity, or freedom. It may even be that people see some virtue in unhappiness if they reckon that discontent is the only way to overcome social ills.

For single individuals, the institutions chosen at the constitutional level serve to help individuals to minimize the harm produced by systematically wrong decisions. In contrast to libertarian paternalism the focus is not on the direct intervention by government via corrective taxes or other means. Rather, the institutions selected give individuals the insights and means to best solve the bargaining situation between the current and future selves or to best deal with the interaction between affective and deliberative processes affecting people's behavior.

Serving this goal is the educational system a more open access to information and enabling free discussion (Frey and Stutzer 2006). This can well mean that individuals adopt the suggestions by libertarian paternalists and agree, e.g., to have collective self-binding mechanisms like a mandatory pension system. Under these circumstances individuals are better able to minimize harm, and to pursue their individual happiness.

Research in constitutional economics helps us to identify which institutions serve this goal. Happiness research provides insights on how, and to what extent, institutions have systematic effects on indicators of individual well-being. The emphasis is on institutions rather than specific policy interventions. To give an example, happiness policy should focus on the relationship between the fiscal constitution of a jurisdiction and people's subjective well-being rather than on the optimal tax scheme in terms of happiness. The range of institutions under study includes self-binding mechanisms, social norms, private and public law (i.e. the rules of the game) as well as constitutional conditions on how to choose rules.

The results gained from happiness research should be taken as *inputs* into the political process.<sup>6</sup> These inputs have to prove themselves in political competition and in the discourse among citizens, and between citizens and politicians. This vision differs fundamentally from an approach emphasizing the maximization of a social welfare function.

The arguments raised should not be understood as arguing against better measures of happiness. Broadly speaking, measuring citizens' happiness should not focus on generating an ever better single aggregate indicator, but rather on improving possibly many different indicators and bringing new insights into the various aspects of individual well-being.

Happiness research has already produced many insights, which can be introduced into the political discussion process. They include policy issues like, for example, the role of direct democratic decision making on citizens' well-being (Frey and Stutzer 2000), the effect of mandatory retirement and mandatory schooling on happiness (Charles 2002; Oreopoulos 2005), the consequences of social work norms and birth control rights on women's well-being (Lalive and Stutzer 2004; Pezzini 2005), the impact of tobacco taxes on smokers' well-being (Gruber and Mullainathan 2005) or the relation between working time regulations and

---

<sup>6</sup> As well, of course, as making more informed decisions on their individual lives such as taking recourse to appropriate self-binding mechanisms in order to overcome problems of utility misprediction identified by happiness research.

people's subjective well-being (Alesina et al. 2005). A competent overview of selected findings, with policy relevance, is provided by Diener and Seligman (2004).

## 9 Concluding Remarks

The objective of our paper was to outline two possible viewpoints on the role of happiness research in public policy. A discussion is warranted as the viewpoint is important in the choice of research questions and thus the kind of knowledge happiness research aims at providing, as well as for the people it aims at addressing.

The huge progress in the measurement of individual welfare makes it tempting to pursue the old dream of maximizing aggregate happiness as a social welfare function. Improvements in individual well-being are claimed to be measured directly and politics is seen as following advice and implementing it with suitable interventions in the political process.

However, we postulate that the appropriate approach is not to maximize aggregate happiness directly in seeking to improve outcomes by direct interventions. Rather, we see the role of happiness research as seeking *to improve the nature of the political processes*. Individuals should become better able of advancing what constitutes their idea of the good life, both individually and collectively. They should be made aware that different issues require different measures and indicators of well-being. Happiness research should remain open to constructing a number of different indicators, reflecting well-being according to different aspects of life. Plurality is a necessary consequence of the procedural view outlined. This is in stark contrast to the maximization approach requiring one single objective.

All this does not mean that it would be useless to construct a National Happiness Indicator. It has an important role to fulfill as an important macroeconomic input in the political discourse. It helps us in overcoming the currently dominant orientation towards the Gross National Product centered on material concerns. Politicians are forced to justify their actions in terms of a broader and better indicator of individual welfare. It is also useful in strengthening the yardstick competition between political units and political parties. "National" Happiness Indicators should therefore be disaggregated to regional, county, and communal levels. The useful role of having one happiness indicator (or, better still, several happiness indicators) is independent of maximizing *the* National Happiness Indicator.

## References

- Ainslie, George (1992). *Picoeconomics: The Strategic Interaction of Successive Motivational States within the Person*. Cambridge: Cambridge University Press.
- Alesina, Alberto, Edward Glaeser and Bruce Sacerdote (2005). Work and Leisure in the United States and Europe: Why So Different? In: Mark Gertler and Kenneth Rogoff (eds). *NBER Macroeconomics Annual 2005*. Cambridge, MA: MIT Press: 1-64.
- Arrow, Kenneth J. (1951). *Social Choice and Individual Values*. New York: John Wiley & Sons.
- Bénabou, Roland J. and Jean Tirole (2004). Willpower and Personal Rules. *Journal of Political Economy* 112(4): 848-887.
- Bentham, Jeremy (1789). *An Introduction to the Principles of Morals and Legislation*. Oxford: Clarendon Press.
- Blanchflower, David G. and Andrew J. Oswald (2005). Happiness and the Human Development Index: The Paradox of Australia. *Australian Economic Review* 38(3): 307-318.
- Brennan, Geoffrey and James M. Buchanan (1986). *The Reason of Rules: Constitutional Political Economy*. Cambridge, MA: Cambridge University Press.
- Brickman, Philip, Dan Coates and Ronnie Janoff Bulman (1978). Lottery Winners and Accident Victims: Is Happiness Relative? *Journal of Personality and Social Psychology* 36(8): 917-927.
- Buchanan, James M. and Gordon Tullock (1962). *The Calculus of Consent. Logical Foundations of Constitutional Democracy*. Ann Arbor: University of Michigan Press.
- Charles, Kerwin Kofi (2002). Is Retirement Depressing? Labor Force Inactivity and Psychological Well-Being in Later Life. NBER Working Paper No. 9033, Cambridge, MA.
- Chrystal, K. Alec and Paul D. Mizen (2003). Goodhart's Law: Its Origins, Meaning and Implications for Monetary Policy. In: Paul D. Mizen (ed.). *Central Banking, Monetary Theory and Practice: Essays in Honour of Charles Goodhart*, vol. 1. Cheltenham, U.K. and Northampton, MA, USA: Edward Elgar: 221-243.
- Coase, Ronald H. (1960). The Problem of Social Cost. *Journal of Law and Economics* 3(1): 31-44.
- Costa, Paul T. and Robert R. McCrae (1988). Personality in Adulthood: A Six-Year Longitudinal Study of Self-Reports and Spouse Ratings on the Neo Personality Inventory. *Journal of Personality and Social Psychology* 54(5): 853-863.
- Dafflon, Bernard and Sergio Rossi (1999). Public Accounting Fudges Towards Emu: A First Empirical Survey and Some Public Choice Considerations. *Public Choice* 101(1-2): 59-84.
- Daly, Herman E. and John B. Cobb (1989). *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future*. London: Green Print.
- Di Tella, Rafael and Robert MacCulloch (2005). Gross National Happiness as an Answer to the Easterlin Paradox? Mimeo, Harvard Business School.
- Di Tella, Rafael and Robert MacCulloch (2006). Some Uses of Happiness Data in Economics. *Journal of Economic Perspectives* 20(1): 25-46.
- Di Tella, Rafael, Robert J. MacCulloch and Andrew J. Oswald (2001). Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness. *American Economic Review* 91(1): 335-341.
- Di Tella, Rafael, Robert J. MacCulloch and Andrew J. Oswald (2004). The Macroeconomics of Happiness. *Review of Economics and Statistics* 85: 809-827.
- Diener, Ed (2005). Guidelines for National Indicators of Subjective Well-Being and Ill-Being. Mimeo, University of Illinois at Urbana Champaign.

- Diener, Ed and Martin E.P. Seligman (2004). Beyond Money: Toward an Economy of Well-Being. *Psychological Science in the Public Interest* 5(1): 1-31.
- Easterlin, Richard A. (1974). Does Economic Growth Improve the Human Lot? Some Empirical Evidence. In: Paul A. David and Melvin W. Reder (eds). *Nations and Households in Economic Growth: Essays in Honour of Moses Abramowitz*. New York and London: Academic Press: 89-125.
- Easterlin, Richard A. (1995). Will Raising the Incomes of All Increase the Happiness of All? *Journal of Economic Behavior and Organization* 27(1): 35-48.
- Easterlin, Richard A. (2001). Income and Happiness: Towards an Unified Theory. *Economic Journal* 111(473): 465-484.
- Edgeworth, Francis Y. (1881). *Mathematical Psychics: An Essay on the Application of Mathematics to the Moral Sciences*. London, UK: Kegan Paul.
- Ehrhardt, Joop J., Willem E. Saris and Ruut Veenhoven (2000). Stability of Life-Satisfaction over Time: Analysis of Change in Ranks in a National Population. *Journal of Happiness Studies* 1(2): 177-205.
- Estes, Richard (1988). *Trends in World Social Development: The Social Progress of Nations, 1970-1987*. New York: Praeger.
- Fernández-Dols, José-Miguel and María-Angeles Ruiz-Belda (1995). Are Smiles a Sign of Happiness? Gold Medal Winners at the Olympic Games. *Journal of Personality and Social Psychology* 69(6): 1113-1119.
- Forte, Francesco (2001). The Maastricht “Excessive Deficit” Rules and Creative Accounting. In: Ram Mudambi, Pietro Navarra and Giuseppe Sobbrío (eds). *Rules and Reason*. Cambridge, UK: Cambridge University Press.
- Frank, Robert H. (1997). The Frame of Reference as a Public Good. *Economic Journal* 107 (445): 1832-47.
- Frederick, Shane and George Loewenstein (1999). Hedonic Adaptation. In: Daniel Kahneman, Ed Diener and Norbert Schwarz (eds). *Well-Being: The Foundation of Hedonic Psychology*. New York: Russell Sage Foundation: 302-329.
- Frey, Bruno S. (1983). *Democratic Economic Policy: A Theoretical Introduction*. Oxford: Robertson.
- Frey, Bruno S. and Alois Stutzer (2000). Happiness, Economy and Institutions. *Economic Journal* 110(466): 918-938.
- Frey, Bruno S. and Alois Stutzer (2002a). *Happiness and Economics: How the Economy and Institutions Affect Well-Being*. Princeton and Oxford: Princeton University Press.
- Frey, Bruno S. and Alois Stutzer (2002b). What Can Economists Learn from Happiness Research? *Journal of Economic Literature* 40(2): 402-35.
- Frey, Bruno S. and Alois Stutzer (2005). Beyond Outcomes: Measuring Procedural Utility. *Oxford Economic Papers* 57(1): 90-111.
- Frey, Bruno S. and Alois Stutzer (2006). Mispredicting Utility and the Political Process. In: Edward J. McCaffery and Joel Slemrod (eds). *Behavioral Public Finance*. Russell Sage Foundation: 113-140.
- Frey, Bruno S., Matthias Benz and Alois Stutzer (2004). Introducing Procedural Utility: Not Only What, But Also How Matters. *Journal of Institutional and Theoretical Economics* 160(3): 377-401.
- Frey, Bruno S., Simon Luechinger and Alois Stutzer (2004). Valuing Public Goods: The Life Satisfaction Approach. IEW Working Paper No. 184, University of Zurich.
- Goodhart, Charles A. E. (1975). *Money, Information and Uncertainty*. London: Macmillan.
- Gruber, Jonathan H. and Sendhil Mullainathan (2005). Do Cigarette Taxes Make Smokers Happier? *Advances in Economic Analysis and Policy* 5(1): 1-43.

- Hammond, Peter J. (1991). Interpersonal Comparisons of Utility: Why and How They Are and Should Be Made. In: J. Elster and J. E. Roemer (eds.). *Interpersonal Comparisons of Well-Being*. Cambridge: Cambridge University Press: 200-254.
- Helliwell, John F. (2004). Well-Being and Social Capital: Does Suicide Pose a Puzzle? NBER Working Paper No. 10896, Cambridge, MA.
- Hicks, John R. and Roy G. D. Allen (1934). A Reconsideration of the Theory of Value, I. *Economica* 1: 52-75.
- Jameson, Michael (1988). *Practical Guide to Creative Accounting*. London: Kogan Page.
- Kahneman, Daniel and Alan B. Krueger (2006). Developments in the Measurement of Subjective Well-Being. *Journal of Economic Perspectives* 20(1): 3-24.
- Kahneman, Daniel, Alan B. Krueger, David A. Schkade, Norbert Schwarz and Arthur A. Stone (2004). Toward National Well-Being Accounts. *American Economic Review* 94(2): 429-34.
- Kahneman, Daniel, Ed Diener and Norbert Schwarz (eds) (1999). *Well-Being: The Foundations of Hedonic Psychology*. New York, NY: Russell Sage Foundation.
- Kahneman, Daniel and Richard H. Thaler (2006). Anomalies: Utility Maximization and Experienced Utility. *Journal of Economic Perspectives* 20(1): 221-234.
- Koivumaa Honkanen, Heli, Risto Honkanen, Heimo Viinamaki, Kauko Heikkila, Jaakko Kaprio and Markku Koskenvuo (2001). Life Satisfaction and Suicide: A 20-Year Follow-up Study. *American Journal of Psychiatry* 158(3): 433-439.
- Lalive, Rafael and Alois Stutzer (2004). Approval of Equal Rights and Gender Differences in Well-Being. IEW Working Paper No. 194, University of Zurich.
- Layard, Richard (2005). *Happiness: Lessons from a New Science*. New York: Penguin.
- Leigh, Andrew and Justin Wolfers (2006). Happiness and the Human Development Index: Australia Is Not a Paradox. *Australian Economic Review* 39(2): 176-184.
- Lepper, Heidi S. (1998). Use of Other-Reports to Validate Subjective Well-Being Measures. *Social Indicators Research* 44(3): 367-379.
- Lucas, Robert E. (1976). Econometric Policy Evaluation: A Critique. In: Karl Brunner and Allan H. Meltzer (eds.). *The Phillips Curve and Labor Markets*. Carnegie-Rochester Conference Series on Public Policy, Vol. 1. New York: North-Holland: 19-46.
- Michalos, Alex C. (ed.) (2005). *Citation Classics from Social Indicators Research. The Most Cited Articles*. Dordrecht: Springer.
- Mueller, Dennis C. (1996). *Constitutional Democracy*. New York: Oxford University Press.
- Mueller, Dennis C. (2003). *Public Choice III*. Cambridge, New York and Melbourne: Cambridge University Press.
- Nordhaus, William and James Tobin (1972). *Is Growth Obsolete? NBER General Series No. 96*. New York: Columbia University Press.
- Nussbaum, Martha C. (2000). *Women and Human Development: The Capabilities Approach*. Cambridge: Cambridge University Press.
- O'Donoghue, Ted and Matthew Rabin (2003). Studying Optimal Paternalism, Illustrated by a Model of Sin Taxes. *American Economic Review* 93(2): 186-191.
- Oreopoulos, Philip (2005). Do Dropouts Drop out Too Soon? Wealth, Health, and Happiness from Compulsory Schooling. Mimeo, Department of Economics, University of Toronto.
- Oswald, Andrew J. (1997). Happiness and Economic Performance. *Economic Journal* 107 (445): 1815-31.
- Oswald, Andrew J. and Nattavudh Powdthavee (2006). Does Happiness Adapt? A Longitudinal Study of Disability with Implications for Economists and Judges. Discussion Paper No. 2208, IZA, Bonn.

- Pezzini, Silvia (2005). The Effect of Women's Rights on Women's Welfare: Evidence from a Natural Experiment. *Economic Journal* 115(502): C208-C227.
- Robbins, Lionel C. (1932). *An Essay on the Nature and Significance of Economic Science*. London: Macmillan. Selections reprinted in Daniel M. Hausman (ed.). (1984) *The Philosophy of Economics: An Anthology*. New York: Cambridge University Press.
- Sandvik, Ed, Ed Diener and Larry Seidlitz (1993). Subjective Well-Being: The Convergence and Stability of Self-Report and Non-Self-Report Measures. *Journal of Personality* 61(3): 317-342.
- Schelling, Thomas C. (1978). Economics or the Art of Self-Management. *American Economic Review* 68(2): 290-294.
- Schimmack, Ulrich and Shigehiro Oishi (2005). The Influence of Chronically and Temporarily Accessible Information on Life Satisfaction Judgments. *Journal of Personality and Social Psychology* 89(3): 395-406.
- Sen, Amartya K. (1970). *Collective Choice and Social Welfare*. San Francisco: Holden-Day.
- Sen, Amartya K. (1985). *Commodities and Capabilities*. Amsterdam: North Holland.
- Sen, Amartya K. (1995). *Rationality and Social Choice*. *American Economic Review* 85(1): 1-24.
- Sen, Amartya K. (1999). *Development as Freedom*. New York: Alfred Knopf.
- Slesnick, Daniel T. (1998). Empirical Approaches to the Measurement of Welfare. *Journal of Economic Literature* 36(4): 2108-2165.
- Stutzer, Alois (2004). The Role of Income Aspirations in Individual Happiness. *Journal of Economic Behavior and Organization* 54(1): 89-109.
- Stutzer, Alois and Bruno S. Frey (2006). Does Marriage Make People Happy, or Do Happy People Get Married? *Journal of Socio-Economics* 35(2): 326-347.
- Sunstein, Cass R. (2007). Willingness to Pay Versus Welfare. Mimeo, University of Chicago.
- Thaler, Richard H. (1988). Anomalies: The Ultimatum Game. *Journal of Economic Perspectives* 2(4): 195-206.
- Thaler, Richard H. (1992). *The Winner's Curse. Paradoxes and Anomalies of Economic Life*. New York: Free Press.
- Thaler, Richard H. and H. M. Shefrin (1981). An Economic Theory of Self-Control. *Journal of Political Economy* 89(2): 392-406.
- Thaler, Richard H. and Cass R. Sunstein (2003). Libertarian Paternalism. *American Economic Review* 93(2): 175-179.
- Theil, Henri (1964). *Optimal Decision Rules for Government and Industry*. Amsterdam: North Holland.
- Tinbergen, Jan (1956). *Economic Policy: Principles and Design*. Amsterdam: North Holland.
- van Praag, Bernard M.S. and Ada Ferrer-i-Carbonell (2004). *Happiness Quantified - a Satisfaction Calculus Approach*. Oxford: Oxford University Press.
- Vanberg, Viktor J. (2005). Market and State: The Perspective of Constitutional Political Economy. *Journal of Institutional Economics* 1(1): 23-49.
- von Hagen, Jürgen and Guntram B. Wolff (2004). What Do Deficits Tell Us About Debts?: Empirical Evidence on Creative Accounting with Fiscal Rules in the EU. Series 1: Studies of the Economic Research Centre. Discussion Paper No. 38, Deutsche Bundesbank.
- Whitman, Glen (2006). Against the New Paternalism. Internalities and the Economics of Self-Control. *Policy Analysis* 563: 1-16.
- Zolatas, Xenophon (1981). *Economic Growth and Declining Social Welfare*. Athens: Bank of Greece.