In: Roger D. Congleton, Bernard Grofman and Stefan Voigt (eds.). *The Oxford Handbook of Public Choice*, Volume 1. Oxford: Oxford University Press. (2019).

CHAPTER 39

PUBLIC CHOICE AND HAPPINESS

BRUNO FREY AND ALOIS STUTZER

39.1 Introduction: A Mutual Inspiration

People's quality of life is fundamentally affected by public choices in legislative assemblies, executives, administrative agencies, and courts. These choices set restrictions; define the kind, quality, and quantity of public services and transfers; and influence the efficiency of their provision. This has been well recognized in recent attempts to obtain a broader understanding of individual welfare. The idea, here, is to go beyond measures of economic activity, such as gross domestic product, that include government activity only in terms of its input costs.[1] Any contributions to welfare via, for example, an increased sense of security or local amenities are only captured to the extent that they contribute to goods and services exchanged on formal markets. The most prominent complementary approach makes direct use of people's self-reported assessments of their well-being in general or in domains of their life. These assessments are more evaluative in nature if they are in terms of judgments about satisfaction and more affective if they refer to various positive and negative emotions.[2] Since the turn of the century, an increasing body of research from all the social sciences has contributed to a better understanding of people's subjective well-being, in terms of both the measures that are used to capture it and the determinants that drive it.[3]

In the first part of this contribution, we focus on the applications that happiness research has for public choice theory and discuss how the analysis of self-reported measures of subjective well-being (or happiness in short) can contribute to a better understanding of the extent to which public choices serve individuals' preferences. We will present an analysis of how the study of subjective well-being can inform and inspire

We are grateful to Reto Odermatt for helpful comments.

public choice questions from the following four perspectives: (1) happiness research is productive when public choice is interested in learning about the consequences of alternative institutional arrangements (section 39.2), (2) happiness research helps us to assess specific policies (section 39.3), (3) happiness research allows us to study ideas of procedural utility emerging from political institutions (section 39.4), and (4) happiness research allows us to test theoretical predictions derived from models of the political process in a new way (section 39.5).

In the second part, we take the reverse perspective and discuss how the application of insights from public choice analyses can inform and inspire happiness research on issues related to public policy. We discuss two sets of issues: (1) happiness indicators provide new and complementary information about the satisfaction of citizens' preferences, which strengthens democratic competition (section 39.6). However, (2) the happiness approach suffers from clear limitations if it is understood as a decision rule for good policy (section 39.7). The maximization of an aggregate happiness function is in conflict with the idea of empowered citizens: people are not simply "metric stations." Furthermore, the way happiness data are used in the political process determines the interaction between survey respondents and the government. Many judgments about policy alternatives go beyond a happiness calculus. Section 39.8 concludes.[4]

39.2 Comparative Institutional Happiness Analysis

Comparative institutional analysis (see, e.g., Morgan et al. 2010) is a key tool for learning about the consequences of alternative institutional and policy arrangements. Traditionally, a wide range of indicators is used to assess the performance of governments (see, e.g., La Porta et al. 1999). Research on subjective well-being provides a complementary measure for this type of analysis. In particular, reported subjective well-being can serve as a direct proxy for individual welfare. It is thus possible to evaluate the overall consequences of governmental policies by analyzing the appraisals of individuals who have been affected by a set of rules.

This comparative perspective can be applied to the study of basic constitutional rules, as well as to more specific institutions, that is, laws that regulate single markets or particular behaviors. Happiness research already offers some applications that can inspire work on constitutional rules and work on (behavioral) public policy.

39.2.1 Forms of Electoral Democracy

Constitutional political economy is concerned with different aspects of electoral systems, different checks and balances in parliamentary and presidential systems (see, e.g.,

Persson and Tabellini 2003), and different forms of citizens' participation in direct democracy (see, e.g., Frey and Stutzer 2006), which all have an impact on the outcome of the political process.

Tests that assess the well-being effect of formal democratic institutions across countries so far concentrate on summary measures of political rights and constraints in the political process. Extended political rights and civil liberties thereby seem to be positively correlated with reported satisfaction with life in a cross-section of thirty-six middle- and high-income countries (Bjørnskov, Dreher, and Fischer 2010). In low-income countries, the same authors find that the quality and capacity of the legal system are positively correlated with life satisfaction, while political rights seem to play a lesser role. In a complementary analysis that focuses on indicators of economic freedom, the aspects of legal security, secure property rights, and a low regulatory burden are positively correlated with life satisfaction in a sample of fifty-eight low-income countries (Gehring 2013). Future work might compare differences in subjective well-being between democracies applying proportional and majoritarian electoral systems. It has already been found that satisfaction with democracy is, on average, higher in consensual systems than it is in majoritarian systems, and that the difference between winners' and losers' satisfaction with democracy is smaller in the former case (Bernauer and Vatter 2012).

In a cross-section analysis within Switzerland, the correlation between direct democratic participation rights and subjective well-being was analyzed based on a large survey involving more than six thousand individuals for the period 1992–1994 (Frey and Stutzer 2000). We found that the residents of cantons that offer more extended participation rights report higher levels of life satisfaction. We interpret this result to be in line with the hypothesis that politicians have more incentives and better information to follow citizens' preferences in jurisdictions with direct democracy.

39.2.2 Federalism

Another fundamental constitutional choice involves the allocation of decision-making and taxing power between different levels and across different jurisdictions in a federal system (see, e.g., Frey and Eichenberger 1999). The limited evidence that relates federal institutions to subjective well-being suggests a positive relationship between decentralization and reported satisfaction with life in a cross-country setting and in two country studies. The cross-section analysis involves sixty-six countries and finds the most robust correlation for revenue decentralization (Bjørnskov, Dreher, and Fischer 2008). An analysis across Swiss cantons for the early 1990s reveals a positive correlation between local autonomy (i.e., a municipality's independence from its cantonal authority) and people's life satisfaction (Frey and Stutzer 2000). In an analysis based on the Swiss Household Panel Survey, Flèche (2015) exploits the reorganization that took place in nineteen out of twenty-six cantons during the first ten years of this century that led to a centralization of competences at the level of the cantons vis-à-vis the municipalities

(being reflected in a decline in the share of municipal expenditure as a percentage of total cantonal expenditure of approximately 4 percentage points). Taking cantonal fixed effects into account, she finds that the centralization reforms reduced (at least temporarily) reported satisfaction with life. Interestingly, the effect is particularly strong for people living in small municipalities and in cantons where the reforms were only approved by a small margin.

39.3 Specific Policy Assessments

A comparative view can also be applied when assessing specific policies. In the area of education, for example, the effect of an increase in the number of mandatory school years is analyzed. Here, the focus is on the causal effect of an additional year of schooling brought about by these reforms (Oreopoulos 2007). Exploiting reforms in the United Kingdom and Northern Ireland, the results based on data from the Eurobarometer reveal that the probability of an individual being fairly or very satisfied with life (relative to being not at all or not satisfied) increases by 5.2 percentage points in a sample of respondents ranging in age from eighteen to sixty-five. Potentially, a great many applications are possible with regard to different labor market regulations (see, e.g., Alesina, Glaeser, and Sacerdote 2005 for one on the regulation of working hours; Dräger 2015 on employment protection; and Charles 2004 on the effect of mandatory retirement).

A comparative well-being perspective seems particularly useful when policies are evaluated that regulate behavior characterized by limited rationality. In such a context observed behavior is less helpful for deriving welfare conclusions. Tobacco control policies can serve as an example. Smokers with limited willpower may end up smoking more than they would like to, given their long-term preferences. In such cases, observed consumption behavior provides a biased representation of smokers' preferences. Likewise, a policy that reduces smoking does not imply that smokers are helped to achieve their preferred consumption plan. An analysis of subjective well-being allows us to gain an idea of the net consequences at least in the short term. Based on more than half a million survey responses from Europeans since 1990, Odermatt and Stutzer (2015) find that higher cigarette prices reduce the life satisfaction of likely smokers. They also study and exploit the staggered introduction of smoking bans across Europe. Overall, these bans are barely related to subjective well-being. However, they increase the life satisfaction of those smokers who would like to quit smoking.

39.4 Capturing Procedural Utility

A comparative well-being approach provides an assessment of rules and policies that extends beyond netting (tangible) outcomes in a summary score. Specifically, this

approach allows us to capture people's valuations of the process itself by which the outcomes are generated. People gain well-being from living and acting under institutionalized processes, as they contribute to a positive sense of self by addressing their innate needs for 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 capacities as consumers or income earners; in organizations, as employees confronted with different organizational procedures; and in law, as litigants facing distinct codes of procedure (for an introductory review, see Frey, Benz, and Stutzer 2004).

Some of the findings presented in the previous subsection might reflect the well-being gains that people derive from how they feel treated under alternative institutional conditions. The results for the positive partial correlation between political rights or civil liberties and life satisfaction in medium- and high-income countries (Bjørnskov et al. 2010) is measured after conditioning for membership in associations, social trust, the state of the economy, and other control variables. The residual correlation might thus reflect the valuation of the procedural goods of democracy (Lane 1988) when people feel respected and treated with dignity and perceive some personal control, understanding, and public resonance.

Frey and Stutzer (2005) discuss the potential gains in procedural utility from democracy and show in their study, which is applied to direct democracy, that the positive correlation with life satisfaction is larger for citizens than for foreigners. They argue that, because citizens have access to the direct democratic process, they can reap procedural benefits in addition to the outcome benefits that are available to all inhabitants. In the development context, Olken (2010) evaluates different democratic processes based on a field experiment. Before development projects were chosen in forty-nine Indonesian villages, responsibility for the decisions was randomly assigned either to delegated representatives or to all villagers deciding in direct ballot voting. While there was little difference in the projects chosen, villagers who had a direct say in the project selection reported a much higher level of satisfaction with their choice, expected to benefit more, and were more likely to consider the proposal fair.

Regarding federalism, the study by Flèche (2015) suggests that the drop in life satisfaction after centralization reforms might indeed reflect a loss in procedural utility, because people simultaneously report lower levels of perceived political influence and less interest in politics.

39.5 Testing Public Choice Hypotheses

Based on data on subjective well-being, it is possible to appraise sociopolitical phenomena such as the rise of the regulatory state (e.g., Glaeser and Shleifer 2003) and explore whether different sets of regulations can be better explained by theories of optimal

regulation or by public choice theories (e.g., referring to lobbying by special interest groups). Many public choice hypotheses predict that government activity leans toward a redistribution that favors special interests and tends to disregard measures that improve the overall allocation of private and public resources. We illustrate the potential of the approach by exploring, first, whether left- and right-wing voters care differently about unemployment and inflation as underlying partisan business-cycle models. Second, the approach is applied to theories of bureaucratic rents.

39.5.1 Partisan Preferences over Inflation and Unemployment

In politico-economic models, two basic interrelationships are postulated about the interaction between policymakers and voters with regard to the macroeconomic measures of unemployment and inflation. On the one hand, voters are hypothesized to make the incumbent government responsible for the state of the economy and support it if unemployment and inflation are low, but vote for the opposition if the economic record of the government is poor. This mechanism has been analyzed in a number of empirical studies on popularity and election functions (see, e.g., Lewis-Beck and Paldam 2000; Feld and Kirchgässner 2000). On the other hand, in reaction to citizens' voting behavior, politicians are hypothesized to influence economic performance in order to be re-elected. This mechanism is at the core of research on political business cycles (see, e.g., Frey 1997).

The underlying presumption in both relationships is that voters' welfare is affected by the state of the economy (or at least that unemployment and inflation rates signal a policymaker's quality to the public and, ultimately, his or her capacity to ensure people's well-being). Moreover, competing models of political business cycles either assume opportunistic parties that want to please the median voter with their (macro) economic policy in order to secure re-election (e.g., Nordhaus 1975) or start from the presumption that parties pursue ideological goals but deviate from these if re-election is uncertain (e.g., Frey and Schneider 1978). The latter models hypothesize that left- and right-wing voters are differently affected by economic performance in a systematic way.

These core assumptions are difficult to study on the basis of observed voting behavior alone. However, information about people's subjective well-being allows us to assess these assumptions directly. It is found that unemployment first and foremost reduces the individual well-being of those personally affected. Moreover, high unemployment rates also have nonnegligible effects on people who are employed. Based on survey data from population samples of European Union member countries between 1975 and 1992, Di Tella, MacCulloch, and Oswald (2003) show that aggregate unemployment decreases average reported life satisfaction, even if personal unemployment is kept constant. The cumulative costs of unemployment are found to be substantial. In a related study based on individual panel data for West Germany between 1984 and 2004, Luechinger, Meier, and Stutzer (2010) find that regional unemployment substantially reduces workers'

reported life satisfaction, whereby people working in the private sector are more affected by general economic shocks than people working in the public sector. Within the latter group, for public servants, no negative correlation whatsoever is found between regional unemployment and reported life satisfaction. We are not aware of any politico-economic models that take account of this differential exposure of voters to economic shocks.

Inflation is the second important macroeconomic variable assumed to affect the welfare of voters. Based on the study by Di Tella et al. (2003) mentioned earlier, an increase in the inflation rate by 5 percentage points (which is historically quite likely) shifts 5 percent of the population down to the next-lower life satisfaction category on the four-item scale (e.g., from being "not very satisfied" to "not at all satisfied").

To discriminate between models of political business cycles that are based either on opportunistic policymakers (following Nordhaus 1975) or on policymakers who have partisan motivations (following Hibbs 1977), the previous evidence is not sufficient. Tests need to be done to show whether left- and right-wing voters are differently affected by (macro) economic shocks. In a follow-up study, Di Tella and MacCulloch (2005) analyze whether differential effects are present in their sample of ten European countries between 1975 and 2002. In the basic estimation, it is found that the probability of left-wing individuals reporting high life satisfaction falls by 13.4 percentage points (from 75.1 percent to 61.7 percent) if the rate of unemployment increases by 10 percentage points. For right-wing individuals, the respective effect is smaller, namely, 5.6 percentage points. A reverse order for the magnitude of the effect of inflation on life satisfaction is found. Left-wing individuals are estimated to report a 2.9-percentage-point decrease in their percentage probability of having a high level of life satisfaction if the price level were to increase by 10 percent, while the respective estimate for right-wing individuals is -7.2 percentage points. The empirical findings thus support the underlying assumption of partisan models of political business cycles.

39.5.2 Bureaucratic Rents

Public sector employees are a specific group that is affected by government activity, whereby the monopoly position of the public bureaucracy in providing public services may generate rents for them. In contrast to a model of benevolent bureaucracy, a public choice view predicts that bureaucrats will acquire available rents and protect these from dissipation.

To understand the checks and balances that restrict rent seeking by government sector employees, it is crucial to devise direct measures that reflect the value of rents. A rent is understood as the utility premium of a worker in the government sector compared to an equally qualified worker in the private sector. Such rents can consist, for example, of wage differentials, monetary fringe benefits, nonmonetary job amenities, and, in certain cases, the possibility of extracting bribes.

Luechinger, Meier, and Stutzer (2008) propose a direct measure to capture the rents involved in the government sector, that is, the difference in reported subjective well-being between public bureaucrats and people working in the private sector of a country or state. If bureaucrats report higher life satisfaction, this differential is interpreted as a utility premium, or simply as a rent. Employees in the government sector are taken to benefit from a greater relative advantage or from capturing rents in countries where there is a larger positive gap in reported life satisfaction between bureaucrats and private sector employees, ceteris paribus. In contrast to previous approaches for measuring rents in the government sector, this approach has the advantage of measuring the total net utility differential between people working in the public and private sectors. Life satisfaction can be used to analyze the conditions determining the rents in public bureaucracy. It can be related to political and institutional factors that are argued to facilitate rent extraction, as well as to institutional constraints that are proposed as effective controls, guaranteeing efficiency in the government sector.

In an exploratory study, the approach is applied to data on the life satisfaction of government and private sector employees from twenty-one European and seventeen Latin American countries, based on the European Social Survey and the Latino Barometer, respectively (Luechinger et al. 2008). For each country, the relative well-being differential is calculated for workers employed by the government in comparison to those in the private sector. This approach enables country-specific response behavior to be taken into account. There is large variation in the life satisfaction levels among government employees compared to the values obtained for private employees, as the well-being premiums of the former range from +5 percent to -3 percent. Relative advantages in life satisfaction levels among employees in public bureaucracy do not simply reflect relative differences in the respective economies' levels of development. For example, when taking the level of per capita income into account, the proxy for rents in public bureaucracy is larger when price controls and administrative obstacles hamper internal competition. Bureaucratic rents are also larger when regulatory trade barriers weaken external competition. In contrast, rents are lower in countries with an affordable independent judicial system and a long democratic track record. It is also shown that there is a sizeable positive correlation between the degree of corruption and the satisfaction gap in a country. The fact that rents positively correlate with corruption shows that the benefits acquired through corruption neither are completely dissipated nor do they compensate for potentially lower regular salaries in the government sector.

In a follow-up study, Luechinger, Schelker, and Stutzer (2014) estimate the extent to which institutional efforts to strengthen bureaucratic accountability affect differences in well-being between employees in the private and the public sectors across US states. In one of their two surveys, they find that well-being differences are smaller in states with high transparency, elected auditors, and legal deficit carryover restrictions. No or weak effects are found for performance audits and regulatory review. In a next step, the approach should be applied to analyze reforms in public sector governance.

39.6 Improved Information Strengthens Electoral Competition

Happiness indicators provide new and complementary information about the preference satisfaction in the population. This information provides an important input in the political discourse. Voters hold governments responsible for more than the state of economic affairs. Summary information about people's well-being may therefore strengthen political competition[5] and induce governments to adopt good economic policies. Politicians have an incentive to justify their actions in terms of a broader and better indicator of individual welfare. In addition, yardstick competition between political units and political parties is bolstered. As a result, the current politico-economic process is more closely aligned to citizens' preferences.

We mention two major areas where happiness indicators may help to improve government policy. The first deals with the micro-level, the second with the macro-level.

39.6.1 Valuing Public Goods

When providing public goods, government agencies are increasingly required by law to present cost-benefit analyses in their government programs. The benefits from public goods are difficult to measure as the marginal utility to consumers is not reflected in market exchanges.

Happiness research offers a promising alternative method, called the "life satisfaction approach" (see Frey, Luechinger, and Stutzer 2010). Taking reported subjective well-being as a proxy measure for individual welfare, it is possible to directly evaluate the utility provided by public goods. The marginal utility of public goods (or the disutility of public bads) is captured by correlating the amount of public goods (or public bads) with individuals' reported subjective well-being, controlling for many other determinants of happiness. By comparing the marginal utilities of public goods to the marginal utility of income, the trade-off between income and public goods can be calculated.

Before the advent of economic happiness research, several different approaches to measuring preferences for public goods were developed (see, e.g., Freeman 2003). These valuation methods fall into broadly two classes: stated preference methods and revealed preference methods. With stated preference methods, individuals are directly asked to value the public good in question. The most prevalent method is contingent valuation. With revealed preference methods, the behavior of individuals and the complementary and substitutive relationships between public and various marketed goods are used to infer the value attributed to public goods from market transactions in private goods. Examples are the hedonic market approach, the travel cost approach, and the averting or mitigating behavior method, to name only the most prominent ones.

The life satisfaction approach avoids some major difficulties encountered in both the stated preference and the revealed preference approaches. The contingent valuation method, for example, often overstrains individuals, because the questions asked are hypothetical and the valuation task unfamiliar. Moreover, the respondents may disregard their budget constraints and the substitutes available. The likely result is a symbolic valuation based on people's expressed attitudes (Kahneman and Knetsch 1992). The strategic behavior of respondents may also bias the answers. The revealed preference method builds on the assumption of an undistorted equilibrium where prices reflect individual preferences. However, in many countries, land and housing markets are subject to strong regulations that affect market prices. Moreover, the method relies on the respondents' ability to consider all relevant consequences that potentially ensue from the specific level of a public good's provision. With the life satisfaction approach, it suffices if respondents indicate their own life satisfaction. As the collection of the survey data on subjective well-being is not linked to a specific policy goal, there is no reason to expect strategic answers. Moreover, the happiness approach does not require undistorted equilibrium prices.[6]

The life satisfaction approach has, among other applications, been used to value airport noise nuisance (van Praag and Baarsma 2005), air pollution (Luechinger 2009; Welsch 2006), droughts (Carroll, Frijters, and Shields 2009), flood hazards (Luechinger and Raschky 2009), and terrorism (Frey, Luechinger, and Stutzer 2009).

39.6.2 Aggregate Happiness Indicators to Complement National Income

Following the social indicators approach and the capabilities approach (e.g., Sen 1999), indicators of aggregate happiness are increasingly accepted as complements to the long-established measures of national income to capture overall welfare in the population (Diener 2006). The United Kingdom, Canada, and Australia, as well as some other countries, are committed to producing national measures of well-being. Comparable information across countries is, for example, generated in the European Social Survey for a wide range of aspects of individual well-being (Huppert et al. 2009).

Aggregate happiness indicators have several advantages over traditional measures of economic activity. National accounts focus on items of market production, though many nonmaterial aspects play an important role for individual happiness. Subjective well-being goes beyond market relationships. It takes into account such factors as social relations (family and friends), the experience of autonomy and competence, or the absence of insecurity. Subjective well-being measures consider individual judgments about *outcome* aspects of government activity, while the national product measures these aspects in terms of costs of material and of labor. The empirical indicators of happiness emphasize the personal evaluations that individuals make. This subjectivist approach is in line with the basic methodology

used in economics. In contrast, other alternatives to the national accounts, such as the capabilities approach and the Human Development Index used by the United Nations, focus on objectively observable functionings (Sen 1999).

39.7 Limitations of a Happiness Policy

The more happiness is measured to obtain direct policy objectives rather than inform decision makers (and citizens in particular), the more likely it is that unintended and adverse side effects will arise.

39.7.1 Citizens as Addressees of Policy Advice Rather Than as Metric Stations

Happiness assessments that are designed to serve as a basis for decision rules are closely associated with the perspective of social welfare maximization. The traditional approach of maximizing social welfare is based on a "benevolent dictator" view rejected by constitutional political economy (see Buchanan and Tullock 1962; Brennan and Buchanan 1986). This latter paradigm argues that in a democracy, constitutional rules and institutions should be designed that best allow citizens to reveal their preferences, and provide politicians (the government) with an incentive to follow them.

A maximization of social welfare based on empirically estimated happiness functions reduces citizens to "metric stations." This approach neglects to consider the interaction between citizens, parties, and politicians; the interest representation by organized groups; and the information and learning processes that are induced.

The social welfare maximization approach also disregards the fact that citizens have preferences for *processes* over and above outcomes. Citizens gain "procedural utility" from living and acting under institutionalized processes giving them in the economy and polity a positive sense of self (see section 39.4). People, when reduced to "metric stations," experience a loss in autonomy, which in turn reduces their (procedural) well-being.

39.7.2 Playing the System

Depending on the use of happiness measures in the political process, strategic interactions between government and individuals are likely to be induced. Two kinds of distortions need to be taken into account. First, once a specific aggregate happiness indicator 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 gross national product (GNP), the rates of unemployment and inflation, and other economic indicators declared to be goals of government activity. As the unemployment rate has become a politically crucial indicator, governments have started to influence it to paint a better picture of the state of the labor market than is actually the case (see, e.g., Gregg 1994). In the rare case that a government is unable to manipulate a particular indicator to its benefit, it has an incentive to focus on a different one or create new indicators. This is easily possible in the case of happiness. As has been pointed out earlier, a variety of indicators may capture individual well-being.

A second systematic distortion stems from respondents' incentives 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."

Incentives for manipulation can to some extent be counteracted at the constitutional level of policy. Individuals may agree to establish an institution that is independent of government to collect and aggregate data on individual well-being, following the example of central bank independence. The strategic response behavior of individuals could be neutralized, at least to some extent, by the decoupling of surveys from specific policy issues.

39.7.3 Issues in Policy Choice beyond a Simple Happiness Calculus

Is happiness the ultimate goal to be pursued and maximized? Other important goals for people may be loyalty, responsibility, self-esteem, freedom, or personal development. Whether happiness is the ultimate goal of individuals or whether it is only one of several goals has been a controversial issue in philosophy for centuries.

Empirical happiness research is not well equipped to make any judgment 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 individuals? Even more important: to what extent should the government be allowed to change the preferences of its citizens? Many current interventions might affect people's future well-being due to induced changes in preferences. Consider two extreme cases. Suppose that the government could initially reduce people's material aspirations so that they more strongly appreciate material benefits afterward. Or suppose that the government could raise the national happiness indicator by inducing people to take a "happiness pill." Should such policies be adopted? This question cannot be answered within the happiness maximization calculus, but must be decided at a more fundamental level. A theoretically consistent approach is to resort to the constitutional level, where people make such fundamental decisions behind the veil of uncertainty.

39.8 Concluding Remarks

This contribution argues that there is a productive and stimulating interplay between public choice and empirical happiness research. On the one hand, survey data on subjective well-being allow us to study many political economy questions regarding comparative institutional analysis, or the foundations of voter preferences, or, for example, the measurement of rents. On the other hand, the institutional/constitutional approach to political economy helps us to understand how the insights of happiness research can be used in public policy. In addition to a positive analysis, the constitutional approach also provides a normative framework to guide happiness research in the field of public policy. In particular, it acknowledges the central role that basic institutions play in forming public policy designed to raise individuals' well-being.

At the constitutional level behind the veil of uncertainty, the fundamental rules and institutions are set that determine the decisions taken in the current politico-economic process. The legitimacy of political action finally rests on the voluntary agreements on these fundamental rules by the citizens involved. In particular, individuals' sovereignty includes the choice of how to best pursue happiness. This holds both for the private and the collective realm. Individual sovereignty must not be reduced to a citizen's obligation to report his or her well-being, which is then aggregated in a happiness indicator supposed to be maximized by government.

The political process should rather be institutionally structured so that people's interests become the principal controlling force in politics. Fundamental institutions, or rules of the game, have to be established that provide politicians and public bureaucrats with incentives and information to adequately respond to people's preferences. Happiness research provides insights about how and to what extent institutions have systematic effects on indicators of individual subjective well-being. The focus is on rules and institutions including written constitutional rules, state laws, social norms, traditions, and even self-binding mechanisms.

Happiness research also helps to improve policy decisions within the given rules of the game. The improved measurement of subjective well-being strengthens political competition by allowing decision makers to better evaluate the benefits provided by public goods and to compare various measures assessing the state of society.

In sum, the results gained from happiness research should be taken as *inputs* into the political process. These inputs have to prove themselves in political competition and in the discourse among citizens, and between citizens and politicians.

Notes

1. The most prominent report was delivered by the Stiglitz-Sen-Fitoussi Commission in 2009. Meanwhile, there was also an Enquete Commission on Growth, Prosperity and Quality of Life in Germany between 2011 and 2013 (Enquete-Kommission 2013). The Organisation for

Economic Co-operation and Development (OECD) has built up a new statistics division that is devoted to measuring well-being and progress (OECD 2015), and many countries now prepare special reports based on subjective measures of quality of life (e.g., Australia and Canada). The United Kingdom was the first country to integrate subjective questions on well-being into its regular surveys as part of its official statistics mandate (see, e.g., Office for National Statistics 2015).

2. For the measurement of subjective well-being see, for example, Diener, Inglehart, and Tay (2013); Kahneman and Krueger (2006); and Tay, Chan, and Diener (2014).
3. Owing to space constraints, it is difficult to cover the many contributors to this literature. In economics, there is a series of monographs including, for example, Frey and Stutzer (2002a), Frey (2008), Graham (2011), and Layard (2005), as well as review articles by, for example, Dolan, Peasgood, and White (2008); Frey and Stutzer (2002b); and Stutzer and Frey (2010). Good overviews are also provided in the three World Happiness Reports published so far (Helliwell, Layard, and Sachs 2012 or http://worldhappiness.report/) or in the report of the Legatum Institute (o'Donnell et al. 2014). Policy issues are extensively discussed in Diener et al. (2009) and in Hämäläinen and Michaelson (2014). In psychology, Ed Diener's lab provided major contributions; see, for example, Diener and Biswas-Diener (2008). Valuable collections are offered in David, Boniwell, and Ayers (2013) and in Sheldon and Lucas (2014).
4. This chapter draws on our previous work in Frey and Stutzer (2010, 2012) and develops it further.
5. Recent evidence shows that individual voters' subjective well-being is correlated with reported preferences for the incumbent government and the corresponding voting behavior (Liberini, Redoano, and Proto 2017; Ward 2015).
6. This and further issues are discussed, for example, in Kahneman and Sugden (2005), Frey et al. (2010), and Welsch and Kühling (2009).

References

Alesina, Alberto, Edward Glaeser, and Bruce Sacerdote. 2005. "Work and Leisure in the United States and Europe: Why So Different?" In *NBER Macroeconomics Annual 2005*, edited by Mark Gertler and Kenneth Rogoff, 1–64. Cambridge, MA: MIT Press.

Bernauer, Julian, and Adrian Vatter. 2012. "Can't Get No Satisfaction with the Westminster Model? Winners, Losers and the Effects of Consensual and Direct Democratic Institutions on Satisfaction with Democracy." *European Journal of Political Research* 51(4): 435–468.

Bjørnskov, Christian, Axel Dreher, and Justina A. V. Fischer. 2008. "On Decentralization and Life Satisfaction." *Economic Letters* 99(1): 147–151.

Bjørnskov, Christian, Axel Dreher, and Justina A. V. Fischer. 2010. "Formal Institutions and Subjective Well-Being: Revisiting the Cross-Country Evidence." *European Journal of Political Economy* 26(4): 419–430.

Brennan, Geoffrey, and James M. Buchanan. 1986. *The Reason of Rules: Constitutional Political Economy*. Cambridge, MA: Cambridge University Press.

Buchanan, James M., and Gordon Tullock. 1962. *The Calculus of Consent. Logical Foundations of Constitutional Democracy*. Ann Arbor: University of Michigan Press.

Carroll, Nick, Paul Frijters, and Michael A. Shields. 2009. "Quantifying the Costs of Drought: New Evidence from Life Satisfaction Data." *Journal of Population Economics* 22(2): 445–461.

Charles, Kerwin Kofi. 2004. "Is Retirement Depressing? Labor Force Inactivity and Psychological Well-Being in Later Life." In *Accounting for Worker Well-Being. Research in Labor Economics* 23, edited by S. W. Polachek, 269–299. Amsterdam: Elsevier.

David, Susan, Ilona Boniwell, and Amanda Conley Ayers. 2013. *Oxford Handbook of Happiness*. Oxford: Oxford University Press.

Di Tella, Rafael, and Robert J. MacCulloch. 2005. "Partisan Social Happiness." *Review of Economic Studies* 72(2): 367–393.

Di Tella, Rafael, Robert J. MacCulloch, and Andrew J. Oswald. 2003. "The Macroeconomics of Happiness." *Review of Economics and Statistics* 85(4): 809–827.

Diener, Ed. 2006. "Guidelines for National Indicators of Subjective Well-Being and Ill-Being." *Applied Research in Quality of Life* 1(2): 151–157.

Diener, Ed, and Robert Biswas-Diener. 2008. *Happiness: Unlocking the Mysteries of Psychological Wealth.* Malden, MA: Blackwell.

Diener, Ed, Ronald Inglehart, and Louis Tay. 2013. "Theory and Validity of Life Satisfaction Scales." *Social Indicators Research* 112(3): 497–527.

Diener, Ed, Richard E. Lucas, Ulrich Schimmack, and John F. Helliwell. 2009. *Well-Being for Public Policy*. Oxford: Oxford University Press.

Dolan, Paul, Tessa Peasgood, and Mathew 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.

Dräger, Vanessa. 2015. "Do Employment Protection Reforms Affect Well-Being?" IZA Discussion Paper No. 9114. Bonn: Institute for the Study of Labour.

Enquete-Kommission. 2013. Schlussbericht der Enquete-Kommission "Wachstum, Wohlstand, Lebensqualität—Wege zu nachhaltigem Wirtschaften und gesellschaftlichem Fortschritt in der Sozialen Marktwirtschaft." Drucksache 17/13300, Deutscher Bundestag, Berlin.

Feld, Lars P., and Gebhard Kirchgässner. 2000. "Official and Hidden Unemployment and the Popularity of the Government: An Econometric Analysis of the Kohl Government." *Electoral Studies* 19(2–3): 333–347.

Flèche, Sarah. 2015. "Distaste for Centralization: Evidence from a Quasi-Natural Experiment in Switzerland." CEP Discussion Paper No. 1383, London: LSE.

Freeman, A. Myrick, III. 2003. *The Measurement of Environmental and Resource Values: Theory and Methods*. Washington, DC: Resources for the Future.

Frey, Bruno S., ed. 1997. *Political Business Cycles*. Cheltenham and Northampton, MA: Edward Elgar.

Frey, Bruno S. 2008. *Happiness: A Revolution in Economics*. Cambridge, MA: MIT Press.

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., and Reiner Eichenberger. 1999. *The New Democratic Federalism for Europe: Functional, Overlapping, and Competing Jurisdictions.* Cheltenham: Edward Elgar.

Frey, Bruno S., Simon Luechinger, and Alois Stutzer. 2009. "The Life Satisfaction Approach to the Value of Public Goods: The Case of Terrorism." *Public Choice* 138(3–4): 317–345.

Frey, Bruno S., Simon Luechinger, and Alois Stutzer. 2010. "The Life Satisfaction Approach to Environmental Valuation." *Annual Review of Resource Economics* 2: 139–160.

Frey, Bruno S., and Friedrich Schneider. 1978. "An Empirical Study of Politico-Economic Interaction in the United States." *Review of Economics and Statistics* 60(2): 174–183.

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, NJ, 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): 402–435.

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. "Direct Democracy: Designing a Living Constitution." In *Democratic Constitutional Design and Public Policy, Analysis and Evidence,* edited by Roger Congleton and Birgitta Swedenborg, 39–80. Cambridge, MA: MIT Press.

Frey, Bruno S., and Alois Stutzer. 2010. "Happiness and Public Choice." *Public Choice* 144(3–4): 557–573.

Frey, Bruno S., and Alois Stutzer. 2012. "The Use of Happiness Research for Public Policy." *Social Choice and Welfare* 38(4): 659–674.

Gehring, Kai. 2013. "Who Benefits from Economic Freedom? Unraveling the Effect of Economic Freedom on Subjective Well-Being." *World Development* 50: 74–90.

Glaeser, Edward L., and Andrei Shleifer. 2003. "The Rise of the Regulatory State." *Journal of Economic Literature* 41(2): 401–425.

Graham, Carol. 2011. *The Pursuit of Happiness: An Economy of Well-Being.* Washington, DC: Brookings Institution Press.

Gregg, Paul. 1994. "Out for the Count: A Social Scientist's Analysis of Unemployment Statistics in the UK." *Journal of the Royal Statistical Society Series A* 157(2): 253–270.

Hämäläinen, Timo J., and Juliet Michaelson. 2014. *Well-Being and Beyond: Broadening the Public and Policy Discourse*. Cheltenham: Edward Elgar.

Helliwell, John F., Richard Layard, and Jeffrey Sachs, eds. 2012. *World Happiness Report.* Toronto: CIFAR.

Hibbs, Douglas A. 1977. "Political Parties and Macroeconomic Policy." *American Political Science Review* 71(4): 1467–1487.

Huppert, Felicia A., Nic Marks, Andrew Clark, Johannes Siegrist, Alois Stutzer, Joar Vittersø, and Morten Wahrendorf. 2009. "Measuring Well-Being across Europe: Description of the ESS Well-Being Module and Preliminary Findings." *Social Indicators Research* 91(3): 301–315.

Kahneman, Daniel, and Jack L. Knetsch. 1992. "Valuing Public Goods: The Purchase of Moral Satisfaction." *Journal of Economics and Management* 22(1): 57–70.

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, and Robert Sugden. 2005. "Experienced Utility as a Standard of Policy Evaluation." *Environmental and Resource Economics* 32(1): 161–181.

La Porta, Rafael, Florencio Lopez-de Silanes, Andrei Shleifer, and Robert Vishny. 1999. "The Quality of Government." *Journal of Law, Economics, and Organization* 15(1): 222–279.

Lane, Robert E. 1988. "Procedural Goods in a Democracy: How One Is Treated versus What One Gets." *Social Justice Research* 2(3): 177–192.

Layard, Richard. 2005. *Happiness: Lessons from a New Science*. New York: Penguin.

Lewis-Beck, Michael S., and Martin Paldam. 2000. "Economic Voting: An Introduction." *Electoral Studies* 19(2–3): 113–121.

Liberini, Federica, Michela Redoano, and Eugenio Proto. 2017. "Happy Voters." *Journal of Public Economics* 146: 41–57.

Luechinger, Simon. 2009. "Valuing Air Quality Using the Life Satisfaction Approach." *Economic Journal* 119(536): 482–515.

Luechinger, Simon, Stephan Meier, and Alois Stutzer. 2008. "Bureaucratic Rents and Life Satisfaction." *Journal of Law, Economics, and Organization* 24(2): 476–488.

Luechinger, Simon, Stephan Meier, and Alois Stutzer. 2010. "Why Does Unemployment Hurt the Employed? Evidence from the Life Satisfaction Gap between the Public and the Private Sector." *Journal of Human Resources* 45(4): 998–1045.

Luechinger, Simon, and Paul A. Raschky. 2009. "Valuing Flood Disasters Using the Life Satisfaction Approach." *Journal of Public Economics* 93(3–4): 620–633.

Luechinger, Simon, Mark Schelker, and Alois Stutzer. 2014. "Governance, Bureaucratic Rents, and Well-Being Differentials across US States." *Oxford Economic Papers* 66(2): 443–464.

Morgan, Glenn, John Campbell, Colin Crouch, Ove Kaj Pedersen, and Richard Whitley. 2010. *The Oxford Handbook of Comparative Institutional Analysis*. Oxford: Oxford University Press.

Nordhaus, William D. 1975. "The Political Business Cycle." *Review of Economic Studies* 42(2): 169–190.

Odermatt, Reto, and Alois Stutzer. 2015. "Smoking Bans, Cigarette Prices and Life Satisfaction." *Journal of Health Economics* 44: 176–194.

O'Donnell, Gus, Angus Deaton, Martine Durand, David Halpern, and Richard Layard. 2014. *Well-Being and Policy: Report.* London: Legatum Institute.

Office for National Statistics. 2015. "Personal Well-being in the UK, 2014/15." Statistical Bulletin. http://www.ons.gov.uk/ons/dcp171778_417216.pdf.

Olken, Benjamin A. 2010. "Direct Democracy and Local Public Goods: Evidence from a Field Experiment in Indonesia." *American Political Science Review* 104(2): 243–267.

Oreopoulos, Philip. 2007. "Do Dropouts Drop Out Too Soon? Wealth, Health, and Happiness from Compulsory Schooling." *Journal of Public Economics* 91(11–12): 2213–2229.

Organisation for Economic Co-operation and Development (OECD). 2015. *How's Life? 2015: Measuring Well-Being*. Paris: OECD Publishing.

Persson, Torsten, and Guido Tabellini. 2003. *The Economic Effects of Constitutions.* Cambridge, MA: MIT Press.

Sen, Amartya K. 1999. *Development as Freedom*. New York: Alfred Knopf.

Sheldon, Kennon M., and Richard E. Lucas. 2014. *Stability of Happiness: Theories and Evidence on Whether Happiness Can Change*. Amsterdam: Elsevier.

Stutzer, Alois, and Bruno S. Frey. 2010. "Recent Advances in the Economics of Individual Subjective Well-Being." *Social Research* 77(2): 679–714.

Tay, Louis, David Chan, and Ed Diener. 2014. "The Metrics of Societal Happiness." *Social Indicators Research* 117(2): 577–600.

Van Praag, Bernard M. S., and Barbara E. Baarsma. 2005. "Using Happiness Surveys to Value Intangibles: The Case of Airport Noise." *Economic Journal* 115(500): 224–246.

Ward, George. 2015. "Is Happiness a Predictor of Election Results?" CEP Discussion Paper No. 1343. London: London School of Economics and Political Science.

Welsch, Heinz. 2006. "Environment and Happiness: Valuation of Air Pollution Using Life Satisfaction Data." *Ecological Economics* 58(4): 801–813.

Welsch, Heinz, and Jan Kühling. 2009. "Using Happiness Data for Environmental Valuation: Issues and Applications." *Journal of Economic Surveys* 23(2): 385–406.