HAPPINESS INSTITUTIONS

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INTRODUCTION

Happiness measures, like any decisionmaking criteria, will not reside in sterile vacuums, but rather will thrive within policymaking institutions. Appreciating the dynamics within and between these bodies thus can help to illuminate further dimensions of the subjective well-being (SWB) debate. This Commentary seeks to bring those institutional considerations to the foreground. Its principal argument is that happiness measures necessarily implicate issues of deep disagreement that must be resolved by legitimate actors and procedures before such measures can be implemented. Given the current lack of methodological consensus, individual agencies should thus experiment with such measures in discrete rulemakings when the available well-being data are robust and could usefully supplement a rule's cost-benefit analysis (CBA). Only then, through learning and experience, should other government actors consider institutionalizing happiness measures through their respective processes and governing texts. Each stage of this dynamic process, in turn—within agencies, the executive branch, Congress, and the courts—promises distinct sources of information and legitimacy.

The articles, Well-Being Analysis vs. Cost-Benefit Analysis² and Happiness Surveys and Public Policy: What's the Use?,³ offer rich

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^{1.} This idea draws in part on the "principle of institutional settlement" famously developed by Henry Hart and Albert Sacks. See HENRY M. HART, JR. & ALBERT M. SACKS, THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW 4 (William N. Eskridge, Jr. & Philip P. Frickey eds., 1994) ("The principle of institutional settlement expresses the judgment that decisions which are the duly arrived at result of duly established procedures of this kind ought to be accepted as binding upon the whole society unless and until they are duly changed.").

^{2.} John Bronsteen, Christopher Buccafusco & Jonathan S. Masur, Well-Being Analysis vs. Cost-Benefit Analysis, 62 DUKE L.J. 1603 (2013). Though recognizing the potential for conceptual slipperiness, this Commentary will refer to SWB and happiness measures synonymously.

insights into many of the contentious issues endemic to SWB research. In the former paper, John Bronsteen, Christopher Buccafusco, and Jonathan Masur propose a method that they call well-being analysis (WBA) as a "hedonized" counterpart to CBA and consider its operation in practice. Matthew Adler's contribution is valuable for highlighting, among other things, the role of the "observer" in happiness measurement. Specifically, he points out that when observers have diverging rankings of preference profiles, "objective" frameworks such as measures of gross national happiness can only be "observer-relative." Such inevitable variations, he fears, will lead to "arbitrary" conclusions about so-called "objective happiness."

The potential for arbitrariness, however, should not in itself doom the enterprise; it counsels only that pretensions to pure objectivity can be shed. In their place should operate familiar and evolving principles of administrative law and institutional processes that help to ensure that such arbitrariness is appropriately cabined. Part I surveys potential sources of deep disagreements regarding SWB that prevent consensus on its policymaking role. Part II compares an array of institutional mechanisms for resolving those disagreements in the analogous context of CBA. Part III then explores the reasons why the best initial mechanisms for implementing SWB measures reside at the individual agency level, when they can supplement the CBA of particular rules.

^{3.} Matthew D. Adler, *Happiness Surveys and Public Policy: What's the Use?*, 62 DUKE L.J. 1510 (2013).

^{4.} See Bronsteen, Buccafusco & Masur, supra note 2, at 1617–18 ("In WBA, all effects of a regulation are hedonized, which is to say that they are converted into units directly measuring their impact on the subjective well-being of the affected parties. The positive and negative hedonic impacts can then be compared with one another. They are the relevant costs and benefits.").

^{5.} See Adler, supra note 3, at 1588 ("In short, when observers have different rankings of profiles, there will be no v(.) function that represents all of their rankings. Rather, the cardinal measurement of hedonic experience will be observer-relative.").

^{6.} *Id.* For example, translating such measures necessarily entails an exercise in interpretation and judgment: When an individual reports a happiness measure of "3" out of "6" for commuting, for example, reasonable minds can disagree as to whether she was expressing a tradeoff with time or just expressing an ordinal measure relative to socializing. *Id.* at 6.

^{7.} Id. at 1589.

I. DEEP DISAGREEMENTS

If long-running cost-benefit debates are any indication, there are multiple dimensions along which SWB experts will be unlikely to find universal agreement in the near future.8 These areas of deep disagreement may arise for multiple reasons. Perhaps they implicate questions about the ends rather than the means of government. Or perhaps they require second-order measurement specifications that contestable.¹⁰ essentially Or perhaps incommensurable tradeoffs between the monetized nonmonetized, the quantitative and the qualitative. All of these possibilities threaten intractability for academics and government actors alike. At the same time, there may be deep disagreements about whether these disputes are even deep at all; some will argue that sufficient conceptual or technical refinement will reveal them to be quite shallow; others will remain skeptical. This Part surveys a few of these sources of disagreement, but there are many more.

A. Ends, Not Means

Whether the government should promote overall life satisfaction, or positive experiences, or the obtainment of objective goods "is a matter for substantive normative argument." In other words, the preferred choice will likely vary by political administration, just as it will across countries and other jurisdictional units. For example, Bhutan's work with a Gross National Happiness Index reflects the country's own set of values and culture. The index is "distinct from the western literature on 'happiness'" in "internaliz[ing] responsibility and other-regarding motivations." 12

^{8.} See Bronsteen, Buccafusco & Masur, supra note 2, at 1606 ("Despite CBA's prominence... it has been criticized harshly from the moment it was first required by executive order to the present day, and countless times in between." (citations omitted)).

^{9.} See generally AMY GUTMANN & DENNIS THOMPSON, DEMOCRACY AND DISAGREEMENT (1996) (arguing that a framework of "deliberative democracy" should guide moral disagreements and that this framework should be continually reevaluated in light of actual democratic disagreements).

^{10.} See W.B. Gallie, Essentially Contested Concepts, 56 PROC. ARISTOTELIAN SOC'Y 167, 169 (1956) ("[T]here are concepts which are essentially contested, concepts the proper use of which inevitably involves endless disputes about their proper uses on the part of their users").

^{11.} Adler, supra note 3, at 1523.

^{12.} KARMA URA, SABINA ALKIRE, TSHOKI ZANGMO & KARMA WANGDI, CTR. FOR BHUTAN STUD., A SHORT GUIDE TO GROSS NATIONAL HAPPINESS INDEX 7 (2012), available at http://www.grossnationalhappiness.com/wp-content/uploads/2012/04/Short-GNH-Index-edited.pdf.

Because of conflicting visions of well-being and the common good, the appropriate anchoring concepts for SWB will similarly be the subject of continuing political discourse and disagreement among various groups and constituencies.

B. Conceptual Buckets

Defenders of CBA acknowledge that the dollar is an imperfect measure of human welfare, but press on in the belief that it is nevertheless the best available uniform metric.¹³ In its place, Bronsteen, Buccafusco and Masur propose "well-being units (WBUs)" that would "map[] a person's SWB onto a scale that would ideally run from -10 to 10, in which 10 indicates perfect happiness (subjectively defined), -10 indicates perfect misery, and 0 indicates neutrality or the absence of experience." Although this mapping exercise is meant to provide a uniform scale, however, the underlying SWB data will arise from sources containing nebulous conceptual categories that may result in conflicting subjective interpretations and thus nonrandom measurement error. ¹⁵

For instance, one major data source drawing upon the experience sampling method described by Bronsteen, Buccafusco and Masur¹⁶ is a module of questions included in the 2010 and 2012 American Time Use Survey, which is administered by the Bureau of Labor Statistics.¹⁷ The module asks individuals "how they experience [uses of] their time—specifically how happy, tired, sad, stressed, and in pain they felt while engaged in specific activities on the day prior to the interview." But these various categories ("happy," "tired," "sad," "stressed," "in pain") are not self-defining, overlap conceptually, and lack consistent connotations.

^{13.} See EDITH STOKEY & RICHARD ZECKHAUSER, A PRIMER FOR POLICY ANALYSIS 278 (1978) (noting that monetary measures are "a surrogate [for welfare], of course, and an imperfect surrogate at that" but nevertheless arguing that it is still the best available).

^{14.} Bronsteen, Buccafusco & Masur, supra note 2, at 1618.

^{15.} For a similar critique, see Todd B. Kashdan, *The Assessment of Subjective Well-Being (Issues Raised by the Oxford Happiness Questionnaire*), 36 PERSONALITY & INDIVIDUAL DIFFERENCES 1225, 1225 (2004), which criticizes "[t]he operationalization of SWB by the [Oxford Happiness Questionnaire]" as "not based on relevant definition and theory" and thereby "invit[ing] nonrandom error into the study of SWB."

^{16.} Bronsteen, Buccafusco & Masur, *supra* note 2, at 1622–23.

^{17.} See Bureau of Labor Stat., U.S. Dep't of Labor, The Subjective Well-Being Module of the American Time Use Survey: Assessment for Its Continuation 4 (2012), available at http://www.nap.edu/catalog.php?record_id=13535.

^{18.} Id.

While "stressed," for example, is likely to be coded as a negative affect category, some research suggests that its relationship with affect is less than straightforward, especially in the aggregate. More generally, these conceptual buckets require judgments about affect categories and whether they positively or negatively relate to SWB. These relationships, in turn, are likely to be heterogeneous depending on the circumstances and remain the subject of persistent disagreement. This contentious dynamic will be most significant in situations in which regulators attempt to confront new risks that have never before been experienced.

C. Hybridity

Finally, in a world of hybrid measures, where both monetized costs and benefits reside alongside SWB scales, there must be mechanisms for adjudicating among the measures should they point to conflicting policy outcomes. Adler and Bronsteen, Buccafusco and Masur all remain ambivalent about defending hedonic measures as the sole basis for decisionmaking. Adler, for example, grants that "happiness or, more generally, mental states, are at least *one* important aspect of human flourishing," while Bronsteen, Buccafusco and Masur acknowledge that WBA's detachment from wealth implies that they "would not rule out preserving CBA as a complement to WBA." If wide disparities between WBA and CBA suggest that wealth effects are the determining factor, however, then thorny decisions must be made regarding whether and when to privilege such effects. How and when to do so likely requires tradeoffs that cannot be resolved through technical refinement.

^{19.} See, e.g., Weiting Ng, Ed Diener, Raksha Aurora & James Harter, Affluence, Feelings of Stress, and Well-Being, 94 SOC. INDICATORS RES. 257 (2009) (finding that stress correlates positively with well-being at the nation-level, though negatively at the individual-level); Brett W. Pelham, Stress and Happiness: Often, but Not Always, Related, GALLUP (Aug. 21, 2009), http://www.gallup.com/poll/122420/stress-happiness-often-not-always-related.aspx (providing data indicating that states with higher stress levels sometimes have residents with higher happiness levels).

^{20.} Adler, supra note 3, at 1520.

^{21.} Bronsteen, Buccafusco & Masur, *supra* note 2, at 1645; *see also* Anthony Vitarelli, Note, *Happiness Metrics in Federal Rulemaking*, 27 YALE J. ON REG. 115, 135–47 (2010) (providing examples of how hedonic approaches could supplement current regulatory-impact analysis).

II. INSTITUTIONAL RESOLUTION

Instead, deep disagreements about WBA will be resolved, if at all, through institutional procedures involving parties authorized to help narrow, if not settle, such disputes. Some of the existing mechanisms examined in this Part have been used to cabin analogous forms of discretion with respect to CBA and are thus instructive. These processes and the resulting texts help to preserve internal resources by not requiring the re-litigation of each potential area of dispute every time a new regulatory action is proposed.²² Although it is useful to get a sense of each institution in isolation, their interaction and the resulting dialogue can be illuminating as well.

A. Congress

Congress can preclude agencies from the consideration of costs for specific regulatory actions, or otherwise constrain the use of CBA, by specifying substantive and exclusive criteria, such as "safety" or standards "requisite to protect the public health." Congress has also passed a number of cross-cutting CBA statutes that highlight the potential regulatory impacts on specific groups like states and small businesses or on environmental or paperwork burdens in particular. Statutes can also contain deadlines or sunset provisions designed to help spur agency action, revisit it at later points, or to retire a regulatory program altogether.

One way to understand these legislative requirements is as a set of texts that have resolved how to trade off goods, such as clean air

^{22.} See Michael A. Livermore, Cost-Benefit Analysis and Agency Independence 40 (unpublished manuscript) (on file with the *Duke Law Journal*) ("Once particular methodological disputes are settled, some inertia is likely to set in. Conflicts between OIRA and agencies are costly"); Cass Sunstein, The Real World of Cost-Benefit Analysis: Thirty-Six Questions (and Almost as Many Answers) 4 (Jan. 10, 2013) (unpublished manuscript), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2199112 (describing executive-branch documents that "are binding until they are changed, and for that reason, some of the hardest questions cannot be revisited during the process of rule review").

^{23.} E.g., 42 U.S.C. §§ 4904(a)(2), 7409(b)(1) (2006) (discussing an "adequate margin of safety... requisite to protect the public health").

^{24.} E.g., Unfunded Mandates Reform Act of 1995, 2 U.S.C. §§ 1532–1538 (2006).

^{25.} E.g., Regulatory Flexibility Act, 5 U.S.C. §§ 601–612 (2006).

^{26.} E.g., National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4347 (2006 & Supp. V 2012).

^{27.} E.g., Paperwork Reduction Act of 1995, 44 U.S.C. §§ 3501–3508 (2006).

^{28.} See Jacob E. Gersen & Anne Joseph O'Connell, Deadlines in Administrative Law, 156 U. PA. L. REV. 923, 925–28, 935 (2008).

against the monetized costs of necessary technological or other requisite changes, if at all. These judgments also represent legislative resolutions about persistent CBA issues, including how to weigh particular distributional impacts or the relevant time horizons to consider. The process for producing such texts, however, is notoriously costly, with legislative gridlock and abdication serving as reminders of the institution's many self-defeating internal procedures such as filibuster rules,²⁹ as well as partisan incentives to avoid compromise altogether. As a result, codifying narrow WBA requirements in statutes is not only likely to be difficult as an initial matter, but will also be more challenging to revise in light of new data and methodological developments.

B. Executive Branch

Subject to these statutory constraints, Executive Orders 12,866³⁰ and 13,563³¹ require agencies that are not independent regulatory agencies³² to "assess all costs and benefits of available regulatory alternatives." For rules that are "economically significant," agencies are required to submit to the Office of Information and Regulatory Affairs (OIRA) a more thorough CBA. In 2003, after a period of public comment and peer review, the Office of Management and

^{29.} See generally Standing Rules, Orders, Laws, and Resolutions Affecting the Business of the United States Senate, S. Doc. No. 112-1, at 1–1118 (2011); Constitution, Jefferson's Manual, and Rules of the House of Representatives of the United States, H.R. Doc. No. 111-157, at 333–1018 (2011).

^{30.} Exec. Order No. 12,866, 3 C.F.R. 638 (1994), reprinted as amended in 5 U.S.C. § 601 note at 745 (2006), and 5 U.S.C. § 601 note at 126 (Supp. V 2012).

^{31.} Exec. Order No. 13,563, 3 C.F.R. 215 (2012).

^{32.} See Exec. Order No. 12,866 § 3(b), 3 C.F.R. at 641, 5 U.S.C. § 601 note at 746 (defining agencies as those defined as an agency under 44 U.S.C. § 3502(1) (2006) other than those defined as an "independent regulatory agency" under *id.* § 3502(10)).

^{33.} *Id.* § 1(a), 3 C.F.R. at 638, 5 U.S.C. § 601 note at 745; Exec. Order No. 13,563 § 1(a), 3 C.F.R. at 215 (requiring "[o]ur regulatory system" to "take into account benefits and costs, both quantitative and qualitative"). For a discussion of other legislative and executive branch CBA requirements, see generally Curtis W. COPELAND, CONG. RESEARCH SERV., R41974, COST-BENEFIT AND OTHER ANALYSIS REQUIREMENTS IN THE RULEMAKING PROCESS (2011).

^{34.} Exec. Order No. 12,866 § 6(a)(3)(B)(ii), 3 C.F.R. at 645, 5 U.S.C. § 601 note at 748; see also Cass R. Sunstein, The Office of Information and Regulatory Affairs: Myths and Realities, 126 HARV. L. REV. (forthcoming 2013) (manuscript at 13), available at http://papers.csmr.com/sol3/papers.cfm?abstract_id=2192639 (describing "Regulatory Impact Analysis" as "a careful and detailed account of the costs and benefits of economically significant rules").

Budget issued Circular A-4,³⁵ which was intended to provide guidance to agencies "on the development of regulatory analysis" as required by executive order.³⁶

Guidance documents like Circular A-4 are "authoritative" within the executive branch and will be cited and referenced as such during the executive-branch review process.³⁷ They are "binding until they are changed, and for that reason, some of the hardest questions cannot be revisited during the process of rule review." Some of those currently settled hard questions include the choice of 3 and 7 percent discount rates, as well as a circumscribed range for the value-of-statistical life at between \$1 and \$10 million. Hithough Bronsteen, Buccafusco and Masur do not take a position on whether WBA would require discounting, they identify both reasons for and against its use that will likely need to be similarly resolved.⁴⁰

At the same time, Circular A-4 also leaves open other analogous deep disagreements, such as the use of CBA relative to other approaches like cost-effectiveness analysis (CEA). For these, the document adopts a pluralistic approach, encouraging the use of both CBA and CEA with "multiple measures of effectiveness that offer different insights and perspectives," such as quality-adjusted-life-years.⁴¹ These multiple measures, in turn, will be adjudicated within particular rulemakings through an OIRA-coordinated review process involving other agencies and various White House entities.⁴²

Relative to legislative changes that require bicameralism and presentment, revisions to executive orders and guidance documents are less costly, and thus more flexible. Consequently, they are more adaptable to methodological advances, including the development of new data sources. At the same time, these authoritative texts remain

^{35.} OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, CIRCULAR A-4, REGULATORY ANALYSIS (2003), *available at* http://www.whitehouse.gov/sites/default/files/omb/assets/omb/circulars/a004/a-4.pdf.

^{36.} Id. at 1.

^{37.} See Sunstein, supra note 22, at 4.

^{38.} See id.; see also Livermore, supra note 22, at 40.

^{39.} See Office of MGMT. & BUDGET, supra note 35, at 30, 33–34.

^{40.} See Bronsteen, Buccafusco & Masur, supra note 2, at 1639 n.159, 1684-88.

^{41.} See Office of MGMT. & BUDGET, supra note 35, at 13.

^{42.} See Sunstein, supra note 34, at 28 ("Questions about costs and benefits will typically involve a number of agencies and offices.").

resource intensive to produce and revise due to the need to secure support from various entities within the executive branch.⁴³

C. Agencies

Though the presidential review process will reference Circular A-4, individual agencies also issue their own CBA guidance documents. For these agencies, their "specific guidance governs the wide range of issues left open by OIRA," and their documents are often revisited with more frequency. For example, the Environmental Protection Agency (EPA) currently operates under its own 272-pagelong *Guidelines for Preparing Economic Analyses* issued in 2010, which itself reflects revisions from previous years, including 1983, 1991, 1999, and 2000. Independent regulatory agencies, not subject to presidential review, sometimes also formulate their own CBA guidance. In the wake of *Business Roundtable v. SEC*, for example, the Securities and Exchange Commission (SEC) promulgated general CBA guidelines that drew in part from the broad principles of Circular A-4.

Agencies can also issue supplemental guidance about discrete CBA issues. Both the Department of Transportation (DOT) and the EPA, for example, have issued official guidance regarding the value-of-statistical life. The DOT recently adopted a value-of-statistical life

^{43.} Sunstein, *supra* note 22, at 4 ("[T]heir alteration requires some kind of formal process, requiring significant time, effort, and commitment from a large number of public officials, and perhaps a period of public comment as well.").

^{44.} See Livermore, supra note 22, at 19.

^{45.} U.S. ENVTL. PROT. AGENCY, GUIDELINES FOR PREPARING ECONOMIC ANALYSES 1-1 (2010), available at http://yosemite.epa.gov/ee/epa/eed.nsf/pages/Guidelines.html.

^{46.} *Id.*; see also EPA Guidance, NAT'L CTR. FOR ENVTL. ECON., U.S. ENVTL. PROT. AGENCY, http://yosemite.epa.gov/ee/epalib/riaepa.nsf/8a8e79bebcf3a3a0852565a500501ed5/6fb916798827ac10852567570079530b?OpenDocument (last updated Apr. 5, 2013).

^{47.} See, e.g., Memorandum from Dan M. Berkovitz, Gen. Counsel, Commodity Futures Trading Comm'n, & Jim Moser, Acting Chief Economist, Commodity Futures Trading Comm'n, to Rulemaking Teams, Guidance on and Templates for Presenting Cost-Benefit Analyses for Commission Rulemakings 1–2 (Sept. 29, 2010), available at http://www.cftc.gov/ucm/groups/public/@aboutcftc/documents/file/oig_investigation_061311.pdf; see also Arthur Fraas & Randall Lutter, On the Economic Analysis of Regulations at Independent Regulatory Commissions 9 (Res. for the Future, Discussion Paper RFF DP 11-16, 2011), available at http://www.rff.org/RFF/Documents/Rff-DP-11-16_final.pdf.

^{48.} Business Roundtable v. SEC, 647 F.3d 1144 (D.C. Cir. 2011).

^{49.} Memorandum from the Div. of Risk, Strategy, & Fin. Innovation of the SEC & the Office of Gen. Counsel of the SEC, to Staff of the Rulewriting Divs. & Offices, Current Guidance on Economic Analysis in SEC Rulemakings 1–4 (Mar. 16, 2012), available at http://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.shtml.

of \$6.2 million (2011 dollars). The EPA, by contrast, currently recommends a value of \$7.4 million (2006 dollars), updated to the year of the analysis.⁵¹ Its internal process for revising this estimate includes engaging with its Science Advisory Board Environmental Economics Advisory Committee; creating another expert panel to explore issues regarding the meta-analysis of the value-of-statistical life; commissioning reports; submitting a white paper to its advisory board comments and recommendations; and. implementing an unspecified process resulting recommendations.52

The internal procedures through which such agency-level guidance documents are formulated varies by agency, but usually consist of some kind of "horizontal review" within the agency, including consultation with relevant program offices, economists, general counsel, and advisory groups. Then, to the extent necessary, there will be a "vertical review" up the management chain and to the political leadership of the office and agency, particularly when issues are unable to be resolved at the staff level. Similar processes help to inform the drafting of particular rules as well. As compared to legislative and executive-branch resolutions, individual agency-level guidance documents are the most flexible texts given that fewer actors are necessary to make revisions over more specific regulatory areas. Agencies are thus uniquely situated to make the best use of SWB data and analyses as an initial matter, given that the issues subject to deliberation are more well-defined.

^{50.} See Memorandum from Polly Trottenberg, Assistant Sec'y for Transp. Policy, U.S. Dep't of Transp., & Robert Rivkin, Gen. Counsel, to Secretarial Officers & Modal Adm'rs, Guidance on Treatment of the Economic Value of a Statistical Life in Departmental Analyses—2011 Interim Adjustment 1 (July 29, 2011), available at http://www.dot.gov/sites/dot.dev/files/docs/Value_of_Life_Guidance_2011_Update_07-29-2011.pdf.

^{51.} Frequently Asked Questions on Mortality Risk Valuation, NAT'L CTR. FOR ENVTL. ECON., U.S. ENVTL. PROT. AGENCY, http://yosemite.epa.gov/ee/epa/eed.nsf/pages/MortalityRiskValuation.html#whatvalue (last updated Apr. 5, 2013).

^{52.} Id.

^{53.} See CORNELIUS M. KERWIN & SCOTT R. FURLONG, RULEMAKING: HOW GOVERNMENT AGENCIES WRITE LAW AND MAKE POLICY 75–88 tbl.2-1 (4th ed. 2011); Elizabeth Magill & Adrian Vermeule, Allocating Power Within Agencies, 120 YALE L.J. 1032, 1036–40 (2011).

^{54.} KERWIN & FURLONG, supra note 53, at 82.

^{55.} *Id*.

For proposed legislative rules, the Administrative Procedure Act⁵⁶ also requires a period of public notice-and-comment.⁵⁷ Members of the public can also submit their input to the agency about the ways in which either (1) the executive agency mediated by the OIRA-coordinated review process or (2) the independent regulatory agency has resolved methodological issues for particular rules. Reinforced through judicial review,⁵⁸ agencies must consider such comments and publicly explain their rationales for accepting or rejecting them before issuing their final rules.⁵⁹ As a result, agencies will also potentially possess the most information about how SWB measures can usefully supplement the information gained through comments and CBA. The multiple stages of the rulemaking process—from advance notices of proposed rulemaking, to proposals, to withdrawals, to final forms—also allow agencies to gather public input on different formulations and data sources.

III. HAPPINESS INSTITUTIONS

Given the current state of the art regarding happiness measures, the most promising and least costly resolution mechanisms for settling WBA's inherently contentious issues reside at the individual agency level. Testing and piloting WBA at specific agencies and by reference to individual rulemakings will help to build a storehouse of experience with the technique.⁶⁰ Some of the most robust findings in

^{56.} Administrative Procedure Act, 5 U.S.C. §§ 551–559, 701–706 (2006).

^{57.} Id. § 553(c) ("After notice required by this section, the agency shall give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments with or without opportunity for oral presentation.").

^{58.} Under *Motor Vehicle Manufacturers Ass'n v. State Farm*, 463 U.S. 29 (1983), "the agency must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made," *id.* at 43 (quoting Burlington Truck Lines, Inc. v. United States, 371 U.S. 156, 168 (1962)). Courts have sometimes found agency cost-benefit analyses lacking under the standard. *See, e.g.*, Corrosion Proof Fittings v. EPA, 947 F.2d 1201, 1214 (5th Cir. 1991).

^{59.} See United States v. N.S. Food Prods. Corp., 568 F.2d 240, 252–53 (2d Cir. 1977).

^{60.} See Livermore, supra note 22, at 54 ("It has been agencies, not OIRA, that have taken the primary responsibility for developing the methodology of cost-benefit analysis and applying it to their particular regulatory contexts."). Along similar lines, fruitful efforts have occurred with a project called Regulation Room at the DOT, resulting in very thoughtful analyses and data about ways to improve public participation. See generally, e.g., Cynthia R. Farina, Mary J. Newhart, Claire Cardie, Dan Cosley & Cornell eRulemaking Initiative (CeRI), Rulemaking 2.0, 65 U. MIAMI L. REV. 395 (2011); Cynthia R. Farina, Mary Newhart, Josiah Heidt & CeRI, Rulemaking vs. Democracy: Judging and Nudging Public Participation That Counts, 2 MICH. J. ENVTL. & ADMIN. L. 123 (2012).

the happiness literature, for example, deal with the negative hedonic effects of commuting⁶¹ and unemployment,⁶² suggesting that the Departments of Transportation and Labor, respectively, may be particularly receptive agencies. More generally, SWB measures may be especially useful in contexts where market rigidities or cognitive biases render suspect more familiar approaches, such as those based on hedonic prices or contingent valuation.⁶³ When there are reasons to believe, that is, that actual individual preferences are not well-reflected through prices or willingness-to-pay surveys, then SWB measures may provide an alternative, useful metric for agencies to consider.

If agencies can learn from these efforts and come to find WBA to be a useful tool, then these results will filter up in ways likely to encourage Congress or the executive branch to incorporate the accumulated learning into their respective processes. The government's experience with the social cost of carbon is potentially illustrative. For many years, federal agencies did not estimate the monetary benefits of reducing carbon dioxide, a greenhouse gas, until various legal challenges prompted agencies to reconsider their practices. In 2008, for example, the Ninth Circuit considered the DOT's corporate average fuel economy standards for light trucks. The court determined that the DOT had not attempted to measure the benefits from the expected reduction in carbon emissions despite factoring in the regulation's costs. The court thus found the CBA to

^{61.} See, e.g., Alois Stutzer & Bruno S. Frey, Stress That Doesn't Pay: The Commuting Paradox, 110 SCANDINAVIAN J. ECON. 339 (2008); see also Bronsteen, Buccafusco & Masur, supra note 2, at 1626–27.

^{62.} See, e.g., Andreas Knabe, Steffen Rätzel, Ronnie Schöb & Joachim Weimann, Dissatisfied with Life but Having a Good Day: Time-Use and Well-Being of the Unemployed, 120 ECON. J. 867 (2010); Richard E. Lucas, Andrew E. Clark, Yannis Georgellis & Ed Diener, Unemployment Alters the Set Point for Life Satisfaction, 15 PSYCHOL. SCI. 8 (2004).

^{63.} See Matthew Adler & Eric A. Posner, Happiness Research and Cost-Benefit Analysis, 37 J. LEGAL STUD. S253, S281–84 (2008).

^{64.} Note that OIRA "continues to investigate the relevant [SWB] literature and to explore, in a preliminary way, its possible implications for improving regulatory policy in ways that promote the goals of economic growth, innovation, competitiveness, and job creation." *See* OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, 2011 REPORT TO CONGRESS ON THE BENEFITS AND COSTS OF FEDERAL REGULATIONS AND UNFUNDED MANDATES ON STATE, LOCAL, AND TRIBAL ENTITIES 42–46 (2011), *available at* http://www.whitehouse.gov/sites/default/files/omb/inforeg/2011_cb/2011_cba_report.pdf.

^{65.} See Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1180 (9th Cir. 2008).

^{66.} Id. at 1198-99.

be arbitrary and capricious, stating that the agency could not "put a thumb on the scale by undervaluing the benefits and overvaluing the costs of more stringent standards." For these and other reasons, it remanded the rule back to the agency.⁶⁸

Soon thereafter, a number of other agencies sought to estimate the social cost of carbon and, in doing so, wrestled with the underlying conceptual and methodological issues in revealingly different ways. For example, the EPA's 2008 advance notice of proposed rulemaking to regulate greenhouse gases under the Clean Air Act discussed a range of relevant issues, including the EPA's belief that the global (in addition to the domestic) benefits should be considered. In the EPA's words, "[e]stimates of global benefits capture more of the full value to society than domestic estimates and can therefore help guide policies towards higher global net benefits" for greenhouse gas reductions. The EPA accordingly presented a "very preliminary" range of global mean estimates from \$68 and \$40 per ton (at 2 and 3 percent discount rates) and a domestic mean value of \$4 and \$1 per ton at the same discount rates.⁷¹ The agency was careful to note that its analysis was necessarily "incomplete" given that "current methods" could only provide a "partial accounting" of the possible consequences of climate change.⁷²

By contrast, the Department of Energy (DOE) chose to consider only the domestic (as opposed to global) effects of potential carbon dioxide reductions from its rule regulating air conditioners and heat pumps.⁷³ The agency cited an Intergovernmental Panel on Climate Change (IPCC) study, which noted that the large range of benefit estimates in the literature stemmed from disagreements about

^{67.} Id. at 1198, 1200.

^{68.} Id. at 1227.

^{69.} See Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. 44,354, 44,415–16 (proposed July 30, 2008).

^{70.} *Id.* at 44,415.

^{71.} *Id.* at 44,416, 44,446. These figures were presented in 2006 real dollars. *Id.* at 44,416. *See also* INTERAGENCY WORKING GRP. ON SOC. COST OF CARBON, TECHNICAL SUPPORT DOCUMENT: SOCIAL COST OF CARBON FOR REGULATORY IMPACT ANALYSIS UNDER EXECUTIVE ORDER 12866, at 3 (2010), *available at* http://www.epa.gov/oms/climate/regulations/scc-tsd.pdf.

^{72.} See Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. at 44,416.

^{73.} See Energy Conservation Program for Commercial and Industrial Equipment: Packaged Terminal Air Conditioner and Packaged Terminal Heat Pump Energy Conservation Standards, 73 Fed. Reg. 58,772, 58,773, 58,813 (Oct. 7, 2008) (to be codified at 10 C.F.R. pt. 431).

"climate sensitivity, response lags, the treatment of risk and equity, economic and non-economic impacts, the inclusion of potentially catastrophic losses, and discount rates." Citing data limitations and the lack of consensus on U.S. benefits estimates, DOE thus relied upon a meta-analysis of global estimates as the upper bound for its domestic values and eventually settled on a range of \$0 to \$20 per ton of carbon emissions.

In this manner, various individual agencies internally debated the social cost of carbon in the context of specific rulemakings after being prompted to do so by the courts. In 2009, however, the executive branch under President Obama drew upon these disparate experiences when convening the Interagency Working Group on Social Cost of Carbon. Members of this group represented the DOE and the EPA, as well as the Council of Economic Advisers; Council on Environmental Quality; Department of Agriculture; Department of Commerce; Department of Transportation; National Economic Council; Office of Energy and Climate Change; Office of Management and Budget; Office of Science and Technology Policy; and the Department of the Treasury.77 These agency experts met regularly to discuss the relevant literature, public comments, and different modeling assumptions.⁷⁸ The interagency group initially proposed a range of interim values for the social cost of carbon that focused on global estimates,⁷⁹ which were then used in a number of proposed and final rules.⁸⁰ In 2010, the group released a final report with estimates in 2007 dollars of \$5, \$21, \$35, and \$65,81 reflecting various discount rates and assumptions.82

^{74.} *Id.* (quoting *Climate Change 2007: Synthesis Report: The Long-Term Perspective*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms5.html (last visited Apr. 5, 2013)).

^{75.} Id.

^{76.} These estimates were in 2007 real dollars. *See id.* at 58,814; *see also* INTERAGENCY WORKING GRP. ON SOC. COST OF CARBON, *supra* note 71, at 3.

^{77.} See Interagency Working Grp. on Soc. Cost of Carbon, supra note 71, at 1–3.

^{78.} Id. at 2.

^{79.} *Id.* at 10 ("Because of the distinctive nature of the climate change problem, we center our current attention on a global measure of SCC [social cost of carbon].").

^{80.} Id. at 4.

^{81.} These values were for 2010 and expressed in 2007 real dollars. Id. at 3.

^{82.} Specifically, the "first three estimates are based on the average social cost of carbon across models . . . at the 5, 3, and 2.5 percent discount rates, respectively." The fourth value represented worst-case scenarios involving "higher-than-expected impacts from temperature change." *Id.*

Through these executive branch efforts, multiple agencies brought their perspectives and expertise to bear in deliberative meetings to narrow disagreements, including over the use of global versus domestic values. Critics of the interim results, in turn, have expressed concern that the social cost of carbon estimates could eventually be used by Congress at some point as the basis for an eventual carbon tax or permit price. Whether likely in reality or not (especially given recent failed legislative efforts), the overall dynamic demonstrates the ways in which individual agencies' confrontations with difficult valuation issues can eventually lead to more centralized executive branch efforts that draw upon those experiences, which may, in turn, help inform future legislative debates and so on.

CONCLUSION

The field of subjective well-being is growing quickly, but many conceptual and methodological issues remain unresolved. The resulting debates, of the kind occasioned by this symposium, will vary in substance and constituency depending on the policymaking institutions within which they occur. Different institutions may well reach different conclusions on issues of deep disagreement that, in turn, can produce a fruitful dialogue. This Commentary has argued that resolution of SWB's most contentious issues will eventually come, if at all, through these dynamic processes that help settle otherwise intractable disputes.

These institutional interactions will be iterative and multilayered. Congress may pass statutes through costly internal procedures that resolve the ends to pursue (clean water, safe working environments) and the relevant tradeoffs, if any. When Congress fails or declines to decide these issues, the executive branch itself operates under texts that can help settle matters for executive agencies and also provide optional guidance for the independent agencies. When internal executive branch processes leave open these analytical questions, then individual agencies will fill the gaps through guidance documents that are then applied to the contours of individual rulemakings. Each juncture of this institutional dialogue, in turn, presents forums for broader participation by different constituencies, whether through notice-and-comment, legislative hearings, litigation,

^{83.} See Frank Ackerman & Elizabeth A. Stanton, The Social Cost of Carbon: A Report for the Economics for Equity and the Environment Network 3 (2010), available at http://sei-us.org/Publications_PDF/SEI-E3-SocialCostCarbon-10.pdf.

or elections more broadly. Perhaps fittingly, these opportunities may themselves turn out to have positive effects on subjective well-being.⁸⁴

^{84.} See Bruno S. Frey & Alois Stutzer, Beyond Outcomes: Measuring Procedural Utility, 57 OXFORD ECON. PAPERS 90, 105–06 (2005) (finding that reported SWB increases with the right to participate in the political decisionmaking process, though not with actual participation itself); Bruno S. Frey & Alois Stutzer, Happiness, Economy and Institutions, 110 ECON. J. 918, 918 (2000) (finding empirically that institutional factors such as direct participation and local autonomy "systematically and sizeably raise self-reported individual well-being").