

Editorial

Letter from the Editors

On behalf of the Society for Benefit-Cost Analysis (SBCA) we are delighted to offer the first issue of Volume 6 (2015) of the *Journal of Benefit-Cost Analysis (JBCA)*. This collection of invited articles represents the inaugural issue with our new publisher, Cambridge University Press. We envision it to be a landmark issue for the *JBCA*.

This inaugural issue with Cambridge University Press comprises articles by distinguished scholars with years of experience of applying benefit-cost analysis (BCA) to public policy. Five articles are on the topics of social discount rate, dealing with unknowns and ignorance, uncertainty in regulation, regulation-induced impacts on jobs, and dealing with addictive goods such as smoking. Three articles make up a symposium on what should be done when willingness to accept (WTA) and willingness to pay (WTP) measures differ specifically and perspectives on behavioral economics in BCA generally. We offer a brief synopsis of each article drawing on the authors' own words that appear in the abstracts in this issue; we give full credit to them.

"Musings on the Social Discount Rate" is by Arnold C. Harberger (UCLA) and Glenn P. Jenkins (Eastern Mediterranean University, Northern Cyprus and Queen's University, Canada). This article is an outgrowth of Harberger's keynote address at the 2013 SBCA meetings. Harberger and Jenkins describe it as an essay of persuasion, by which they hope to narrow the range of differences that they observe among professionals on the magnitude of social discount rate. The main concern is with weighted average measures of the social discount rate where the components are the marginal productivity of investment and the marginal rate of time preference. They believe that these components should best be measured using national accounts data that span the whole economy and reflect the product actually produced and the rewards actually perceived. Their estimates of social discount rates average about 8% for advanced countries and 10% for healthy, developing countries and Asian Tigers.

"Grappling with Ignorance: Frameworks from Decision Theory, Lessons from Literature" is by Devjani Roy (Harvard University) and Richard Zeckhauser (Harvard University). The motivation for this article is the observation that some of the most important decisions demand grappling with massive uncertainties. The uncertainties force decision makers to confront consequential amazing developments (CADs) that are unknown and unknowable. Roy and Zeckhauser study ignorance through literature convinced that writers present descriptive insights about

decision-making by depicting how literary characters choose creatively. They identify biases due to overconfidence, salience, and selective attention and suggest that through building intellectual capital, doing cheap intuitive scans, and following with superior contemplation, measured decisions will result. Policies based on grappling with ignorance are going to be better than simply not considering the problem at all.

“Uncertainty in the Cost-Effectiveness of Federal Air Quality Regulations” is by Kerry Krutilla (Indiana University), David H. Good (Indiana University), and John D. Graham (Indiana University). This article presents a cost-effectiveness analysis of nine air quality regulations issued by the U.S. Environmental Protection Agency during the years 2010–2013. Krutilla, Good, and Graham independently assess uncertainty about the compliance costs of the regulations and the estimates of lives saved. Evaluation of lives saved is based on a formal uncertainty analysis that integrates expert judgments about the effects of fine particle exposures on mortality risks. Probability distributions for several types of cost-effectiveness ratios, including the gross and net cost per life saved, net cost per life year saved, and net cost per quality-adjusted life year gained are generated. Cost-effectiveness ratios exhibit considerable uncertainty and vary widely across regulations. There is both the possibility that benefits from life savings alone are sufficient to cover the rules’ costs and the possibility that no lives will be saved and cost-effectiveness ratios will be infinite. The results suggest the high value of better information about the effects of fine particle exposures on mortality risks.

“Public Policy Induced Changes in Employment: Valuation Issues for Benefit-Cost Analysis” is by Robert H. Haveman (University of Wisconsin) and David L. Weimer (University of Wisconsin). This article explores the welfare effects of government-induced changes in employment, both direct and indirect, under varying market conditions. Haveman and Weimer begin with policy-induced employment changes that reshuffle workers among jobs in an efficient economy. Next, they consider economies with two distortions, inflexible wages and illiquidity that prevent individuals from borrowing against future earnings. Estimates are developed for the opportunity costs of hiring or releasing an employee during periods of high unemployment with and without other market distortions. They estimate an opportunity cost for firing that is positive and equal to about 73% of pre-firing compensation, primarily because of the “scarring effect” of unemployment. Further, they estimate an opportunity cost for hiring an unemployed worker that is less than the worker’s opportunity cost of time.

“Retrospective and Prospective Benefit-Cost Analyses of U.S. Anti-Smoking Policies” is by Lawrence Jin (Cornell University), Don Kenkel (Cornell University and National Bureau of Economic Research), Feng Liu (Shanghai University of Finance and Economics), and Hua Wang (Cornell University). BCA of

policies designed to improve societal welfare by “nudging” consumers to make better choices confronts both tough theoretical and applied issues. Jin, Kenkel, Liu, and Wang present behavioral BCA of U.S. anti-smoking policies using a conceptual framework that extends the standard market-based approach and allows for individual failures to make lifetime utility-maximizing choices of cigarette consumption. They compare their market-based approach to both the “health benefits” approach and the “consumer surplus offset” controversy in recent BCAs of several health-related regulations. The counterfactual simulations of smoking prevalence rates and cigarette demand over time are based on a dynamic population model. The retrospective BCA results imply that the overall impact of anti-smoking policies from 1964 to 2010 reduced total cigarette consumption by 28%. Discounted at a 3% rate, the 1964–present value of the consumer benefits from anti-smoking policies through 2010 is \$573 billion (\$2010). A prospective BCA of simulated future anti-smoking Food and Drug Administration (FDA) regulations is estimated to have a 2010–present value of consumer benefits 30 years into the future of \$100 billion. Although they are unable to develop hard estimates of costs of the policies, they discuss evidence that suggests the consumer benefits substantially outweigh costs for policies through 2010. The nature of potential FDA tobacco regulations makes it less clear that the net benefits of future policies will be positive.

A round-table session at the 2014 SBCA meetings moderated by Jack Knetsch led to the symposium on how BCA should deal with differences in WTA and WTP. The lively discussion there made it clear that this topic is one that links recent contributions in behavioral economics and BCA and that it is worthy of a symposium published in the *JBCA* so that readers who missed the session can benefit from the insights that evolved. Fortunately Jack Knetsch, Kip Viscusi, and James Hammitt were able to contribute manuscripts. Their initial drafts were circulated among these three so that they could have the opportunity to revise after reading the other papers. Their drafts also received editorial review. The articles are listed in the order that they were given with the moderator having the last word. Consensus is too much to expect, but we trust these articles enrich and elevate the discussion.

“Reference-Dependence Effects in Benefit Assessment: Beyond the WTA–WTP Dichotomy and WTA–WTP Ratios” is by W. Kip Viscusi (Vanderbilt University). The starting point for this article is the observation that the debate has focused on differences between WTA and WTP, but that policies involving cost and risk may have reference point effects for both. It follows that there are four, not just two potential valuation measures. Viscusi presents experimental evidence for water quality policies that suggests that cost reference effects matter in that context. In contrast, there is no evidence of significant reference effects for labor market estimates of values of statistical life. Given these results, he recommends

that the use of benefit measures other than WTP should be restricted to cases where pertinent empirical evidence exists and there is a supporting assessment of the underlying rationality of the determinants of the reference-dependence effects.

“Implications of the WTP–WTA Disparity for Benefit–Cost Analysis” is by James K. Hammitt (Harvard University, Center for Risk Analysis and Toulouse School of Economics, LERNA). The starting point for this article is the observation that differences between WTA and WTP do not create a new problem, but accentuate an existing one. It is that the Kaldor–Hicks compensation test is ambiguous when its two components conflict and that it is most likely to matter when the difference is large. The key point is that often the individuals who get the benefits and the individuals who bear the costs are the same individuals and that their preferences for the policy cannot depend on whether they ask whether their WTP for the benefit exceeds the cost they will incur or their WTA to forgo the benefit exceeds the cost they will save. For cases in which there are distributional impacts between individuals who benefit and individuals who pay, Hammitt recommends evaluating the fundamental question – whether the benefits to some justify the harms to others.

“The Curiously Continuing Saga of Choosing the Measure of Welfare Changes” is by Jack L. Knetsch (Simon Fraser University). The starting point for this article is the fact that WTA/WTP disparity studies provide strong evidence that people value many losses more than otherwise commensurate gains. The finding is consistent with individuals valuing many changes not as final states, but rather as positive or negative changes relative to a neutral reference state. It follows, Knetsch argues, that not only are losses most accurately assessed with the WTA measure, but also most positive changes that reduce losses. Further, BCA practice rarely takes such reference dependence into account and is likely to greatly understate the value of proposals that reduce losses. The failure to take possible valuation disparities into account appears to undermine the estimation of elasticities and setting effective levels of Pigouvian taxes as well.

These eight articles in this inaugural issue with Cambridge University Press exemplify the types of articles we hope to publish in future issues. They build on the foundation of the *JBCA*. The focus will continue to be on advancing the theory, methods, and applications of BCA. BCA is useful in determining whether or not specific public projects, programs, and policies improve the well-being of society. BCA is the leading evidence-based method devoted to answering this sometimes challenging question on a case-by-case basis. The *JBCA* is committed to encouraging and publishing theory, cases, techniques, implementation, and pedagogy surrounding BCA and related economic analysis. We welcome submission of manuscripts that make contributions on these topics.

We intend to provide greater access through both open access and free access for limited periods for selected articles. This new feature is made possible through the combined support of Cambridge University Press, and what we anticipate will be transformational funding from the John D. and Catherine T. MacArthur Foundation. We are deeply grateful for their support. We also thank the members of the SBCA Journal Committee: Lisa Robinson, David Weimer, Kip Viscusi, and the newest member Susan Dudley.

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