

**PPPA 6015.10:
Economics Applied to Public Policy:
Benefit Cost Analysis
Fall 2018**

Instructor:
Office:
Phone/E-mail:
Office Hours:

Prof. J. Cordes
MPA 623
994-5826/cordes@gwu.edu
Tues, 4-5 PM; Wed, 4-5 PM
Thur. 4:00-8:00 PM; by appt.

Required

Boardman, *et. al. Cost-Benefit Analysis: Concepts and Practice*, 5th edition.

Supplemental

Canadian Benefit Cost Guide: Regulatory Analysis, 2007 (Blackboard).

HM Treasury: Appraisal and Evaluation in Central Government, 2003 (Blackboard)

Recommended

Cass Sunstein, *Risk and Reason*, Cambridge Press, 2002 (Blackboard)

Course Description

PPPA 6015 is the second course in a two-semester sequence that is intended to develop the student's ability to use economic analysis to analyze and evaluate outcomes of public policy. It is the empirical sequel to PPPA 6014, and focuses on turning the economic theory of policy analysis into practice. The main analytical framework linking the theory of micro-economic policy analysis to the empirical evaluation of policy is applied welfare economics, and more specifically, benefit-cost analysis.

Learning Objectives

Through lectures, discussions, readings, assignments, exams, and a class project, students will develop knowledge and skills that will enable them to:

- (1) understand the conceptual foundations, strengths, and limitations of applied welfare economics and cost-benefit analysis (CBA) as tools of policy analysis;
- (2) undertake a welfare economic/benefit-cost analysis of a public policy;
- (3) apply economic theory to public policy problems;
- (4) evaluate and compare policy alternatives using cost-benefit analysis and economics generally.

Assessment and Grading

The grade in PPPA 6015 is based on the following work products:

- (1) Take-home examination (30%);
- (2) Benefit-Cost Analysis project (50%). (See the CBA guidelines handout for details): (i) project proposal (5%); (ii) List of Potential Costs & Benefits (5%); (iii) Literature & Data Review (5%); Class Presentation (5%); Final Paper (30%)
- (3) Graded Assignments (15%)

(4) Class participation (5%)

(5) Practice problems (0%)

The graded assignments and practice problems are designed to reinforce the concepts from class and prepare you for the exams. The intent of the practice problems is to help you absorb some of the specific concepts we will be covering, and will provide preparation and feedback for the course examination. The problems are listed in the course schedule under the class in which the concepts are covered. I recommend that you do them AFTER the class under which they are listed. Answers to the problems will be posted the week after the practice problems are posted.

Class Discussion: Class participation will count for 5% of the grade. You can participate either in class or on a discussion board set up for this purpose.

COURSE OUTLINE

I. Aug. 28: Overview of Cost-Benefit Analysis and Applied Welfare Economics: (Lecture 1 and 2)

What is Cost-Benefit Analysis; what questions is it intended to answer; what are its main elements?

Boardman, *et. al.* (BGVW), Chapter 1.

Canadian ***Benefit Cost Analysis Guide***: pp. 1-39 (skim), or HM Treasury ***Green Book***: 1-36 (skim), or Budget of the United States Government, Fiscal Year 2012, "Analytical Perspectives Performance and Management," Chs. 8 and 9.

Sunstein, 2002. ***Risk and Reason***: Preface, and pp. 1-27.

Arrow, Kenneth, et al. 1996. "Benefit-Cost Analysis in Environmental, Health, and Safety Regulation: A Statement of Principles" AEI-Brookings Joint Center.

What is Applied Welfare Economics; what role can and should it play in the policy process?

BGVW, Chapter 2.

Vining and Weimer, Welfare Economics as the Foundation for Public Policy Analysis:

Incomplete and Flawed but Nevertheless Desirable, @ ***Journal of Socio-economics***, Spring 1992, pp. 25-37.

Sample Benefit Cost Studies to be discussed on blackboard and in class for the week of Sept. 11.

Guzman, in press. "Cost-Benefit and Fiscal Impact Analysis of Ohio Historic Preservation Tax Credit." *Journal of Benefit Cost Analysis*

Klapp, Levin, and Zander, 2017. "A benefit-cost analysis of a long-term intervention on social and emotional learning in compulsory school." *The International Journal of Emotional Education*.

Practice Problem Sets #0 #1

CBA Project Proposal due Friday, Sept. 21

II. Sept. 4: Conceptual Issues and Foundations of Applied Welfare Economics. (Lecture 2)

The concept of economic efficiency in applied welfare economics and benefit costs analysis: Pareto

efficiency, actual vs. potential Pareto improvements, compensation criteria. How public policies affect economic efficiency.

BGVW. Chapter 2.

Hassett K. & P. Swagel. "Creative Accounting: MoMA's Economic Impact Study," *WSJ*, Aug. 30, 2006.

Empirical building blocks: Willingness-to-pay and Social opportunity cost.

BGVW, Chapters 2 and 3 (Ch. 2, 4th edition)

Critical Perspectives and Rejoinders:

President of the United States, Memorandum on Regulatory Review, Feb. 2009

Arguments Con:

Sagoff and Maclean, in Carrow, Cordes, and Churchill, eds., *Social Values and Public Policy*, Greenwood/Praeger, 1998.

Center for Progressive Reform, "A Return to Common Sense..."

http://www.progressivereform.org/articles/PRIA_909.pdf

Kelman, Steven, A Cost-Benefit Analysis: An Ethical Critique, @ *Regulation*, Jan. /Feb. 1981.

Arguments Pro:

Sunstein, Preface, pp. 1-27, and Ch. 8 in *Risk and Reason*.

The Economist: "The Regulator's Best Friend?"

Mannix, in press. "Benefit-Cost Analysis as a Check on Administrative Discretion." *Supreme Court Economic Review*.

Cordes, 2017. "Using cost-benefit analysis and social return on investment to evaluate the impact of social enterprise: Promises, implementation, and limitations." *Evaluation and Program Planning*.

Dudley, Belzer, e. al. 2017. "Consumer's Guide to Regulatory Impact Analysis: Ten Tips for Being an Informed Policymaker. *Journal of Benefit-Cost Analysis*, 8(2), 187-204.

PEW, 2013. *States' Use of Cost-Benefit Analysis*

Practice Problem Set #2

Graded Assignment #1 distributed (due Sept. 18).

III. Sept. 11, 18, 25: Willingness-to-Pay & Social Opportunity Cost (Lectures 3-5)

Compensating and equivalent variations; Consumer surplus, producer surplus; social surplus.

BGVW, 3 (Ch. 4 in 4th edition), HM Treasury, *Green Book*, Annex 2

<http://www.economist.com/news/finance-and-economics/21573091-how-quantify-gains-internet-has-brought-consumers-net-benefits>

Benefits and social costs in primary and secondary markets; transfers vs. real benefits and costs.

BGVW, Chs. 5, 6, and 7) (Chs. 4 and 5 in 4th edition).

Haveman and Weisbrod, Defining Benefits of Public Programs: Some Guidance for Policy Analysts, in Haveman and Margolis, eds. *Public Expenditure and Policy Analysis*, 3rd. Edition, Houghton-Mifflin, 1983.

Krutilla, "Using the Kaldor-Hicks Tableau for Cost-Benefit Analysis and Policy Evaluation." *Journal of Policy Analysis and Management*, 2005.

Schmitz and Schmitz, "Benefit-Cost Analysis: Distributional Considerations under Producer Quota Buyouts," *Journal of Benefit Cost Analysis*, 2010, v. 1.
 Steinberg, and Young, in press. "Cost Benefit Analysis" in *Economics for Nonprofit Managers*.
 Wilhelm, 2008. *Public Funding of Sports Stadiums*. Policy Brief, Center for Public Policy and Public Administration, University of Utah.
 Haveman and Weimer, 2015. "Public Policy Induced Changes in Employment: Valuation Issues for Benefit Cost Analysis."
 Harberger, "Labor Market Issues," Introduction to Benefit Cost Analysis, Dec. 2008.
 Robinson and Hammit, "Implications of Behavioral Economics for Benefit Cost Analysis," *Journal of Benefit Cost Analysis*, 2011.
 Gayer and Viscusi, 2014. *Overriding Consumer Preferences with Energy Regulations*. George Mason University, Mercatus Center.

Practice Problem Sets #3 and #4
CBA Project Cost-Benefit List (due) Oct. 12
Graded Assignment #2 (due Oct. 16)

IV. Oct. 2: Discounting and the Issue of Time in Benefit-Cost Analysis (Lectures 6 - 8).

The Mechanics of Discounting
 BGVW, Ch. 9

Practice Problem Set # 5

The Social Discount rate
 BGVW, Ch. 10; HM Treasury, *Green Book*, Annex 6
 Arrow, et.al. 2012. How Should Benefits and Costs be Discounted in an Intergenerational Context? Resources for the Future Discussion Paper 12-53.
The Economist, "How to Value a Grandchild," Dec. 4, 2006.

Assignment #3 (due Oct.23)
CBA Project Literature Review (due)Nov. 9

V. Oct. 16 Oct. 23, Mar. 3: Estimating Benefits and Costs in Practice: (Lectures 8 and 9)

BGVW, Predicting and Monetizing Impacts, Chapters 5 and 8 (available on blackboard).
 Brownell, et. al. "The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages," New England Journal of Medicine, 2009.
 Karoly, "Valuing Benefits in Benefit-Cost Studies," in Weimer and Vining, eds. *Investing in the Disadvantaged*, Georgetown University Press, 2008.
 Sunstein, 2013. "The Real World of Cost-Benefit Analysis: 36 Questions (and almost as many answers)". Harvard Law School Public Law and Legal Theory Working Paper Series.
 Sunstein, 2014. "The Limits of Quantification."
 Bayefsky, 2014. "Dignity as a Value in Cost-Benefit Analysis." *Yale Law Journal*.
 Hahn and Dudley, 2007. How Well Does the U.S. Government Do Benefit Cost Analysis?
Review of Environmental Economics and Policy.

- Deck and Chestnut, *Benefits Transfer: How Good is Good Enough?*
- Conney and Lynch-Cerrulo, 2014. "Social Rate of Return (SROI): A Case Study of JVS. Obtaining Estimates from "Analogous/Related Markets"
- BGVW, Ch. 15 (Ch. 14 in 4th edition)
- Cropper, et. al. 2011." Valuing Mortality Risk Reductions: Progress and Challenges." National Bureau of Economic Research, Working Paper 16971
- Robinson, 2007. "How US Govt. Agencies Value Mortality Risk."
- Viscusi, 2008. How to Value a Life.
- Cameron, 2009. One Hundred Reasons Why we Should Replace the "Value of a Statistical Life" (VSL) with "Willingness to Pay for a Micro-Risk Reduction." (quite amusing).
- Hammit and Robinson, 2011. "The Income of the Elasticity per Statistical Life: Transferring Estimates between High and Low Income Populations." *Journal of Cost-Benefit Analysis*.
- Dana, "Valuing Foreign Lives and Settlements," *Journal of Benefit Cost Analysis*, 2010, V. 1.
- Applebaum, 2011. "As U.S. Agencies Put More Value on a Life, Businesses Fret," *NYT*, Feb. 16.
- Obtaining estimates from Demonstration Projects and Controlled Experiments
- BGVW, Ch. 14 (blackboard)
- Bloom, et. al. "The Benefits and Costs of JTPA Title II-A Programs: Key Findings from National Job Training Partnership Act" *Journal of Human Resources* 32(3).
- Pandey, Cordes, and Pandey, 2018. "Use of social impact bonds to address social problems: Understanding contractual risks and transaction costs" *Nonprofit Management and Leadership*.
- Greenberg and Robins, 2008. "Incorporating Nonmarket Time into Benefit-Cost Analyses of Social Programs: An Application to the Self-Sufficiency Project. *Journal of Public Economics*.
- Weisbrod, Benefit-Cost Analysis of a Controlled Experiment: Treating the Mentally Ill in Haveman and Margolis, pp. 230-259.
- Belfield, et. al. 2006. "The High/Scope Perry Pre-School Program: Cost-Benefit Analysis Using Data from the Age 40 Follow-Up" *Journal of Human Resources*, pp. 162-190.
- Greenberg, et. al. "A Synthesis of Random Assignment Benefit-Cost Studies of Welfare-to-Work Programs, *Journal of Benefit Cost Analysis*, 2010, v. 1.

Practice Problem Set #6

Existence value and contingent valuation

- BGVW, Ch. 13 and Ch. 16 (Ch. 9 and Ch. 14 in 4th edition)
- Kling, et. al. 2012. "From Exxon to BP Has Some Number Become Better Than No Number?" *Journal of Economic Perspectives*.
- Carson, 2012. "Contingent Valuation: A Practical Alternative when Prices Aren't Available." *Journal of Economic Perspectives*.
- Hausman, 2012. Contingent Valuation: From Dubious to Hopeless. *Journal of Economic Perspectives*.
- Vedantam, S. 2006. "In a Sea of Uncertainty, We All Have an Anchor" *Washington Post*, Oct. 23: A02.
- Brookshire, et.al. AValuing Public Goods: A Comparison of Survey and Hedonic Approaches, *American Economic Review*, March 1982.

Cummings R. G. and L. Taylor. 1999. "Unbiased Value Estimates for Environmental Goods: A Cheap Talk Design for the Contingent Valuation Method," *American Economic Review*.
 NOAA: "Report of the NOAA Panel on Contingent Valuation," 1993.
 Berger and Blomquist, 2002. *Valuing the Arts: A Contingent Valuation Approach*.
 Johnson, B. et.al. 2001 "Value of Public Goods Generated from a Major League Sports Team: The CVM Approach," *Journal of Sports Economics* 2(1).

Practice Problem Set #7

Obtaining Estimates from Secondary Sources

BGVW, Ch. 16

Deck and Chestnut, *Benefits Transfer: How Good is Good Enough?*

Practice Problem Set #8

VI. Oct. 30, Nov. 6,: Dealing With Uncertainty (Lectures 10 and 11)

Some general principles for decision-making under uncertainty

BGVW, Ch. 11 (blackboard).

HM Treasury, *Green Book*, Annex 4.

Manski, "Policy Analysis with Incredible Certitude," NBER Working Paper, 16207, 2010.

Mueller and Stewart, 2011. "Balancing the Risks, Benefits, and Costs of Homeland Security" *Homeland Security Affairs*.

Stewart and Mueller, 2014. "Are Airports Too Safe?" *Journal of Air Transport Management*

Posner, "The Probability of Catastrophe," *Wall Street Journal*, January 4, 2005. (Selected chapters from Posner book), optional.

Hallegatte, "A Cost Benefit Analysis of the New Orleans Flood Protection System." AEI-Brookings Regulatory Analysis 06-02

Chen and Warburton, "Do Speed Cameras Produce Net Benefits?" Evidence from British Columbia, Canada." *Journal of Policy Analysis and Management*, 25(3).

Practice Problem Set #9

VII. Nov. 13: Dealing with Distributional Issues (Lecture 12)

Distributional Weighting of Benefits and Costs

BGVW, Ch. 19 (both editions).

Harberger, "Addressing Social Concerns," *Intro. to Benefit Cost Analysis*, Dec. 2008.

Harberger, AOn the Use of Distributional Weights in Benefit-Cost Analysis,@ *Journal of Political Economy*,@ 86, no. 2, 1978, S87-S120.

Sunstein, 2014. The Poor Need Ryan's Regulatory Reform

<http://www.delawareonline.com/story/opinion/2014/07/29/poverty-part-iv-poor-need-ryans-regulation-reform/13313363/>

Miller, 2014. Paul Ryan Anti-Poverty Plan Targets Regressive Regulations

http://www.rollcall.com/news/paul_ryan_anti_poverty_plan_targets_regressive_regulation_commentary-235571-1.html

Kaldor-Hicks Compensation in Practice (time permitting)

Cordes and Weisbrod, A When Government Programs Create Inequities, @ *Journal of Policy Analysis and Management*, 1985.

Cordes, Goldfarb, and Barth, A Compensating When Government Harms, @ in Zeckhauser and Leebaert, eds., *What Role for Government*, Duke University, 1983.

VIII. Nov. 20: Cost Effectiveness Analysis (Lecture 13)

BGVW, Ch. 18 (both editions).

Cheesman: "Performance Measurement and Program Evaluation for Drug Courts, Module 5"

Quinn, et. al. 1984. "Cost Effectiveness of Two Math Programs as Moderated by Pupil SES"

Education Evaluation and Policy Analysis

Reinhart: "Cost Effectiveness Analysis and U.S. Health Care, March 2009

<http://economix.blogs.nytimes.com/2009/03/13/cost-effectiveness-analysis-and-us-health-care/#more-2413>

Take home examination distributed on Blackboard Nov.20 , due back by Dec. 4

IX. Student Presentations: Nov. 27, Dec. 4

Final Paper due Dec. 20

University Policies

Religious Holidays: <http://provost.gwu.edu/policies-procedures>

Student Disability Services: <http://www.gwired.gwu.edu/dss>

Academic Integrity: <http://studentconduct.gwu.edu/academic-integrity>