

Cost Benefit Analysis

Spring 2023

A. Course Information

EPPS 7304-001 (CN 27644)

Thursday, 4:00 pm - 6:45 pm. CB3 1.304

B. Professor Contact Information

Professor Simon Fass

Office phone: 972 883 2938

Email: via eLearning “Course Messages” (or fass@utdallas.edu only if Course Messages doesn’t work)

Office location: GR 3.224

Office hours: TBD

C. Course Pre-requisites: None

D. Course Description

Cost-benefit analysis is a useful analytical method for policy, program and project assessment in the public, non-profit and private sectors. It is a structured approach to weighing the pros and cons of alternative courses of action. More simply, it compares the benefits that come from policies, programs, or projects to the costs that these actions incur to produce those benefits. This comparison helps to distinguish public and private actions that make better use of resources to reach their objectives from actions that make poorer use of them.

Organized around basic (micro-) economic theories of behavior, the course provides a conceptual and practical introduction to the method and way of thinking. Themes covered include identification of cost and benefit components, valuation of these components, converting future to present values, dealing with uncertainty, estimating impacts in different policy domains, and accounting for transfers between winners and losers that invariably result from intervention.

E. Student Learning Objectives/Outcomes

Students will:

- become familiar with basic underpinnings and other dimensions of cost-benefit analysis,
- appreciate the wide range of applications for this method of judging the worth of actions,
- distinguish between higher and lower quality analyses, and be able to critique both well, and
- be prepared to contribute to preparation of cost-benefit studies and research in practice.

F. Required Materials

Text: Bonner, Suzanne. 2022. Social Cost Benefit Analysis and Economic Evaluation. The University of Queensland, Australia available at: <https://uq.pressbooks.pub/socialcba/>

Software: Microsoft Excel

G. Suggested additional texts

J. Mishan and Euston Quah. 2021. Cost-Benefit Analysis, 6th edition, Routledge

Ginés de Rus. 2014. Introduction to Cost-Benefit Analysis: Looking for Reasonable Shortcuts. Edward Elgar
Boardman, Greenberg, Vining & Weimer. 2018. Cost Benefit Analysis: Concepts & Practice, 5th edition.
Prentice Hall.

H. Academic Calendar

1. January 19: Introduction

The Economist (Apr 23, 2014). *Why doing a cost-benefit analysis is harder than it looks.*

2. January 26: Overview of Cost Benefit Analysis (CBA)

Bonner Chapter 1 and Chapter A1

White, D. and Gary VanLandingham. 2015. *Benefit-Cost Analysis in the States: Status, Impact, and Challenges*, Journal of Benefit Cost Analysis; 6(2):369–399

Layard, R., et al. 2007. *Cost-benefit analysis of psychological therapy*. National Institute Econ Rev 202: 90

Yu, S.Y. 2021. *An In Medias Res Economic Cost-Benefit Analysis of ACT Container Deposit Scheme*. Econ Pap, 40: 78-90

3. February 2: Accounting for Time; Evaluation Measures

Bonner Chapter 2

Adler, M. D. and Posner, E. A. (2000). *Implementing cost benefit analysis when preferences are distorted*. The Journal of Legal Studies, 29(S2):1105–1147

Nelson, R.H. 1996. *How Much is God Worth?* Competitive Enterprise Institute

Thunström, L., Stephen C. Newbold, David Finnoff, Madison Ashworth and Jason F. Shogren. 2020. *The Benefits and Costs of Using Social Distancing to Flatten the Curve for COVID-19*. Journal of Benefit Cost Analysis; 11(2):179–195

4. February 9: More on Time and Measures

Bonner Chapter 3

Hersch, J. 2019. *Catching Up Is Hard to Do: Undergraduate Prestige, Elite Graduate Programs, and the Earnings Premium*. Journal of Benefit Cost Analysis; 10(3):503–553

Ley, E. *Cost-benefit analysis: Evaluation criteria*, Knowledge Brief for World Bank Staff. November 2007

5. February 16: Who Counts? Whose Viewpoints Matter?

Bonner Chapter 4

Boardman, A., Vining, A., and Waters, W. G. (1993). *Costs and Benefits Through Bureaucratic Lenses: Example of a Highway Project*. Journal of Policy Analysis and Management, 12(3):532– 555

Martin, L. and Richard Lotspeich. 2013. *A Benefit-Cost Framework for Early Intervention to Prevent Sex Trading*. Journal of Benefit Cost Analysis. 5(1): 43–87

6. February 23: The Microeconomic Way of Understanding

Bonner Chapter 6

Jensen, JD., Morten Raun Mørkbak, and Jonas Nordström. 2012. *Economic Costs and Benefits of Promoting Healthy Takeaway Meals at Workplace Canteens*. Jour. of Benefit-Cost Analysis: 3:4

Karoly, LA. (2008). Valuing benefits in benefit-cost studies of social programs. Tech Report. RAND Corp

LaFrance, J. T. (1991). *Consumer's surplus versus compensating variation revisited*. American Journal of Agricultural Economics, 73(5):1496–1507

7. March 2: More on Microeconomic Understanding

Bonner Chapter 6 ... cont'd

Lind, R. 1999. *Chapter 17: Analysis for Intergenerational Decision Making*, in P. Portney and J.P. Weyant, eds. *Discounting and Intergenerational Equity*, Resources for the Future.

Newell, R. and W. Pizer, 2002. *Discounting the Benefits of Climate Change Policies Using Uncertain Rates* Resources, Winter, Issue 146.

8. March 9: Mid-term Exam

Class paper draft due before 3 pm

March 16 no class - Spring Break

9. March 23: Estimating and Monetizing Values in Efficient Markets

Bonner Chapter 7

Camerer, C. and H. Kunreuther. 1989. *Decision Processes for Low Probability Events: Policy Implications*, *Journal of Policy and Management*, September. 8(4) pp.565-92.

Linda Thunström, Stephen C. Newbold, David Finnoff, Madison Ashworth and Jason F. Shogren. 2020. *The Benefits and Costs of Using Social Distancing to Flatten the Curve for COVID-19*. *Journal of Benefit Cost Analysis*; 11(2):179–195

Jensen, JD., Morten Raun Mørkbak, and Jonas Nordström. 2012. *Economic Costs and Benefits of Promoting Healthy Takeaway Meals at Workplace Canteens*. *Journal of Benefit-Cost Analysis*: Vol. 3: Iss. 4,

10. March 30: Estimating and Monetizing in Inefficient Markets

Bonner Chapter 8

Carlson, D., Simon Haeder, Hank Jenkins-Smith, Joseph Ripberger, Carol Silva and David Weimer. 2020. *Monetizing Bowser: A Contingent Valuation of the Statistical Value of Dog Life*. *Journal of Benefit Cost Analysis*; 11(1):131–149

Viscusi, W. K. 2013. *Estimating the value of a statistical life using census of fatal occupational injuries data*, Vanderbilt Law and Economics Research Paper No. 13-17

Viscusi, W. K. (2009). *Valuing risks of death from terrorism and natural disasters*. *Journal of Risk and Uncertainty*, 38(3):191–213

11. April 6: The Moral Economy of CBA – Distribution of Impacts

Bonner Chapter 9 and Chapter 11

Zimmerman, D. 1997. *Ch 4: Subsidizing Stadiums: Who Benefits, Who Pays?* in Noll & Zimbalist, eds. *Sports, Jobs & Taxes: The Economic Impact of Sports Teams & Stadiums*,” Brookings 119-45.

Noll, R. and A. Zimbalist. 1997. *The Economic Impacts of Sports Teams and Facilities*, in Noll, R and A. Zimbalist, eds. *Sports, Jobs & Taxes: The Economic Impact of Sports Teams and Stadiums*,” Brookings Institution, pp.55-91.

Cohen, MA. 2015. *Willingness to Pay to Reduce White-Collar and Corporate Crime*. *Journal of Benefit Cost Analysis*.6(2):305–324

Grinols, E. and J. Omorov, 1996, *Development or Dreamfield Delusions?: Assessing Casino Gambling's Costs and Benefits*, *The Journal of Law and Commerce*, Fall, 1996

12. April 13 Uncertainty and Risk

Bonner Chapter 10

Durkin, J.T., and Greeley, A.M. 1991. *A Model of Religious Choice Under Uncertainty: On Responding Rationally to the Nonrational*, *Rationality and Society*, 3:2. 178-196

Marc Jeuland, Marcelino Lucas, John Clemens, and Dale Whittington. 2009. *A Cost–Benefit Analysis of Cholera Vaccination Programs in Beira, Mozambique*. *The World Bank Economic Review*, Vol. 23, No. 2, pp. 235–267

Almansa, C. and Martínez-Paz, J. M. (2011). *What weight should be assigned to future environmental impacts? a probabilistic cost benefit analysis using recent advances on discounting*. *Science of The Total Environment*, 409(7):1305 – 1314

Jaldell, H. 2013. *Cost-Benefit Analyses of Sprinklers in Nursing Homes for Elderly*. *Journal of Benefit-Cost Analysis*; 4(2): 209–235

13. April 20: Arts of Shadow Pricing

Bonner Chapter 12

Diamond, P. and J. Hausman, 1994. Contingent Valuation: Is Some Number Better than No Number? *Journal of Economic Perspectives*, 8(4), pp. 45-64

Blomquist, GC., Paul A. Coomes, Christopher Jepsen, Brandon C. Koford and Kenneth R. Troske. 2014. *Estimating the Social Value of Higher Education: Willingness To Pay For Community and Technical Colleges*. *Journal of Benefit Cost Analysis*. 5(1): 3–41

Hanemann, WM. 1994. *Valuing Environment Through Contingent Valuation*, *J. of Econ Persp.* 8(4), 19-43

Li, J., Michael Mullan and Jennifer Helgeson. 2014. *Improving the Practice of Economic Analysis of Climate Change Adaptation*. *Journal of Benefit Cost Analysis*; 5(3): 445–467

Farrow, S. and Douglas M Larson. 2012. *News and Social Cost: The Case of Oil Spills and Distant Viewers*. *Journal of Benefit-Cost Analysis*: Vol. 3: Iss. 4, Article 4.

14. April 27: Assorted Applications

Walcott, PS, et al. 2018. *Benefit-Cost Analysis of Undergraduate Education Programs: An Example Analysis of Freshman Research Initiative*. *CBE-Life Sciences Education*, 17:rm1, 1–8

Whitson, D. and Horne, J. 2006. *Underestimated costs and overestimated benefits? comparing the outcomes of sports mega-events in Canada and Japan*. *The Sociological Review*, 54(2):73–89

Banerjee, O., Martin Cicowiez and Adela Moreda. 2020. *Evaluating the Economic Viability of Public Investments in Tourism*. *Journal of Benefit Cost Analysis*. 11(1):101–130

Angelis, DL, Ford, D and Dillard, J. 2015. *Chapter 14: Real options in military acquisition: ... a case study of the Javelin anti-tank missile (348-362)* in F. Melese, A. Richter, & B. Solomon (eds). 2015. *Military CBA: Theory and Practice*. Routledge

World Bank. 2016. *The Cost of Fire: An Economic Analysis of Indonesia's 2015 Fire Crisis*. Jakarta

15. May 4 : Submission and Presentation of Class Paper

May 11 (?): Final Exam

I. Grading Policy

Course grade, ranging from A through F, derives from performance on:

mid-term exam	20%
final exam	20%
class paper	25%
class paper presentation	20%
reading summary presentation	15%
Total	100%

The grading structure is:

96% or more = A (4.00)	81% to 85% = B (3.00)	66% to 70% = C (2.00)
91% to 95% = A- (3.67)	76% to 80% = B- (2.67)	65% or less = F (0.00)
86% to 90% = B+ (3.33)	71% to 75% = C+ (2.33)	

J. Class Paper and Reading Summary:

The class paper is 7 single-spaced pages in length, excluding quotes, notes, references, charts, etc. The paper should critically review a major theme or idea relevant to Cost Benefit Analysis. It must assure that:

- the content/argument aligns with class discussions,
- the biblio of at least 15 scholarly articles, books or reports is presented in consistent, standard format ,
- all paraphrased ideas are properly attributed to their authors,
- quoted materials are in quotes with full, complete page references provided,
- all items cited in the body of the paper are properly referenced in the bibliography,
- all items in the biblio are cited in the text, and
- it faithfully adheres to the guidelines in Section K, below.

The reading summary comprises preparation, distribution, and presentation of a synopsis of one class reading. Each student completes a summary of one of the assigned readings listed under Section H, above (or added by the instructor as the semester proceeds). The written summary is two bulleted pages, follows the guidelines detailed in Section K, below, and is distributed to all classmates before class. The student then present the summary during the class session.

K. Guidelines: Professional practice typically requires adherence to some set of standards for document report preparation and submission. These are in place to assure that written work is readable (easy on the eyes) and readily manageable in terms of transmission, storage, and retrieval. Mastering such standards is an important skill, certainly worth acquiring. Accordingly, there are 2 sets of rules that you should try to follow in all written submissions, one for document formatting/presentation and the other for document naming/submission. Grading of submissions will reflect how well this is done.

Format/presentation: (you can use this as a checklist before submitting anything):

- margins: **1-inch on all sides**
- orientation: **portrait**
- font: **Times New Roman, regular, 12 points** (not Calibri default, not HTML, not anything else)
- alignment: **left** (no justification)
- page numbering: **on all pages, centered** at the bottom
- line spacing: **single-space within paras** (not 1.15 or 1.08 MS Word default)
- paragraph spacing: **double-space** between paragraphs
- indentation: none (i.e. other than bulleted lists)
- assignment title: **at top of first page on one line** (i.e. no cover sheet)
- student name: **next line after the title**
- citations in text: in **any commonly accepted format** (e.g., Smith, 2004)
- bibliography: **any standard format** (e.g. APA, Turabian, Chicago, MLA, Bermuda, etc.)
- spelling: **no errors** (i.e., use spelling checker, and review manually for wrong words)
- grammar: **do not be horrible** (i.e., use grammar checker set to strictest/most formal level)
- endnotes: **place after bibliography** (no footnotes)
- tables or graphics: **include only if essential**, place at very end of document.

Naming/submission:

- submit electronically as **attachment** to message in eLearning **Course Messages**
- save and submit attachment as **MS Word document only** (no pdf, Google doc, etc.)
- the document filename must be student's **last name, first name and then nature of submission**
 - e.g., for Bobby Smith, the reading summary is: **Smith Bobby summary**
- **filename means** the name you use to save the assignment, not the message subject heading.

L. Course & Instructor Policies

Make-up Exams:	none
Extra Credit:	none
Late Work:	10% of assignment value lost for each day overdue
Class Citizenship:	civility and politeness are much appreciated

M. Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

“As a Comet, I pledge honesty, integrity, and service in all that I do.”

N. Academic Support Resources

The information contained in the following link lists the University's academic support resources for all students. Please see <http://go.utdallas.edu/academic-support-resources>.

O. UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.