

13P015

3 ECTS

Cost-Benefit Analysis

Overview and Objectives

The objective of this course is to familiarize the students with the main methodologies of project evaluation, and particularly with Cost-Benefit Analysis as the most widely accepted evaluation tool in economics. At the end of the course students should be aware of the principal issues and concepts of project evaluation, and be able to assess evaluation studies.

Every topic will be explained in theory and in practice, with actual case studies and class examples to be completed by students. For computation, Excel, Stata and NLogit-Limdep statistical software will be used.

Course Outline

1. Conceptual Foundations of Cost-Benefit Analysis and Project Evaluation
 - Welfare measures
 - Costs, Benefits, Transfers
 - Social vs. Private
 - Risk and Uncertainty
 - Efficiency and Equity
2. Time Preferences
 - Discounting and Compounding
 - Market and Social Discount Rates
3. Valuation of Externalities and Public Goods
 - Revealed Preferences
 - Stated Preferences
4. Additional Evaluation Issues
 - Cost-Benefit Analysis vs. alternative evaluation tools
 - Financial Economic Analysis
 - Cost-Efficiency Analysis
 - Social Choice
 - Impact Analysis
 - Equivalency Analysis
 - Multi-Criteria Decision Analysis

Required Activities

The course will require the completion of home assignments, mostly of applied nature, and readings in order to consolidate key concepts.

Evaluation

The grade will be the result of a final exam (60%) and course assignments (40%).

13P015

3 ECTS

Cost-Benefit Analysis

Materials

Arrow, Kenneth, Maureen Cropper, George Eads, Robert Hahn, Lester Lave, Roger Noll, Paul Portney, Milton Russell, Richard Schmalensee, Kerry Smith, and Robert Stavins (1996), Is There a Role for Benefit-Cost Analysis in Environmental, Health, and Safety Regulation? *Science* 272(5259): 221-222.

Arrow, Kenneth, Robert Solow, Paul R. Portney, Edward E. Leamer, Roy Radner, and Howard Schuman (1993), Report of the NOAA Panel on Contingent Valuation Federal Register, US Department of Commerce, 58(10): 4601-4614.

Boardman, Anthony E., David H. Greenberg, Aidan R.

Vining, and David L. Weimer (2011), *Cost-Benefit Analysis: Concepts and Practice*. Fourth Edition, Pearson (Prentice Hall), Upper Saddle River, NJ.

Gramlich, Edward M. (1998), *A Guide to Benefit-Cost Analysis*, 2nd edition, Waveland Press.

U.S. Environmental Protection Agency (2000), *Guidelines for Preparing Economic Analyses*. Washington, D.C: U.S. Environmental Protection Agency.

Sugden, Robert, and Alan Williams (1978), *The Principles of Practical Cost-Benefit Analysis*. Oxford University Press, Oxford, UK