

Benefit-Cost
Outline of Topics Covered for Midterm No. 1
March 15, 2000

I. Principle of Optimization and Its Implications

- a. Perfect markets work well
- b. Imperfections cause inefficiencies
- c. Policies to address the imperfections

II. When Markets Fail

- a. Taxes
- b. Externalities
- c. Monopoly (including natural monopoly)
- d. Public goods
 - i. Principle of optimization for public goods
 - ii. Free-rider problem

III. Criteria for Evaluating Public Policies

- a. Pareto Criterion
- b. Kaldor-Hicks Rule
- c. Majority Voting
- d. Application to Public Goods

IV. Using Markets to Evaluate Benefits and Costs

- a. Basics of markets and consumer/producer surplus
 - i. Information requirements

- iii. Calculating changes from elasticities

- iv. Solving for market equilibrium

b. Examples

- i. Natural monopoly (subway problem)
- ii. Public good that lowers costs
- iii. Government procurement

V. Using Distorted Markets

- a. Externalities
- b. Markets that do not clear

VI. Valuation over Time (Discounting)

- a. Rationale for discounting
- b. General formula
- c. Special Cases
 - i. Constant payment, infinite time
 - ii. Constant payment finite time
 - iii. Payments that decay at constant rate
 - iv. Payments that appreciate at constant rate
- d. Inflation