Monday, August 25

Read Chapter 3 and start 4
Homework handed out
No class next Monday
Check for Notes Page for current events.
Market Failure

- Occur because of inefficient market conditions (violate assumptions of well-functioning competitive market)
- Conditions for efficient markets

1. Many buyers and sellers
2. Increasing costs in all industries (no monopoly)
3. Exclusion principle (it’s a private good)—others can’t consume good or service
4. Subtractability (rivalrousness)—consumptive uses
5. Complete/Perfect information
6. Complete mobility of resources
7. No externalities.
Theory of Public Goods vs. Theory of Externalities

T. of Public goods—environmental Quality—clean air

T. Of Externalities— Good whose production or consumption generates environmental damage, mkt failure is an externality.

Both are made worse by imperfect information
Types of Market Failure

• Imperfect Competition, i.e, monopoly, monopsony

• Imperfect Information, moral hazard

• Public Goods
  • Improperly designed Property Rights Systems

• Externalities
Property Rights

• Private property, government property, common-property, *res nullis* (no one has control)

Common property—owned in common rather than privately

  successful—grazing rights in switzerland

  unsuccessful—open access/res nullius
Open-Access

• Tragedy of the Commons
• Common Pool resources (non-exclusivity and divisible)
  – Bison
  – graph
Public Good

• Characterized by degree of rivalry and excludability
  – **Non-rivalrous** (adjective)—a good is non-rivalrous when the benefits are indivisible, meaning one person’s consumption does not keep the other person from consuming it simultaneously.
  – **Non-excludability**—Once a good is provided, those who fail to pay for it cannot be excluded from enjoying it.
<table>
<thead>
<tr>
<th>EXCLUDABLE</th>
<th>RIVALRY</th>
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<tbody>
<tr>
<td></td>
<td>MC=0</td>
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<table>
<thead>
<tr>
<th>Infinite Cost/Impossible to exclude</th>
<th>Pure Public Goods</th>
<th>Open Access</th>
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</thead>
<tbody>
<tr>
<td>Moderate Cost</td>
<td>Public Goods</td>
<td>Closed Access or Open access</td>
</tr>
<tr>
<td>Negligible Cost</td>
<td>Public Goods</td>
<td>Private Goods</td>
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Market Failure in the Public Goods Market

• Non-Revelation of Preferences—individuals rarely reveal WTP

• Leads to FREE RIDERS—because they can consume (non excludable and non rivalrous), they allow someone else to purchase it.

• Imperfect Information play a role—don’t realize what benefits are associated with provision.
Solutions to Public Good

• In a free market Public Good will be underprovided
• Direct government provision of public good - fire protection, parks, roadways
• Political Procedures and Voting Rules to identify public preferences
• Provision of public information and information about goods (green packaging)
Externalities

• Definition—The welfare of some agent, either a firm or household, depends not only on his or her own activities but is under the control of another agent (firm or household)

Externalities can be good or bad

• Bees
• Smoke and the laundry
The Market for Steel

\[ MC_s = MPC + MEC \]

\[ MC_p = S \]

\[ D = MPB \]

Price ($/unit)

Quantity (units)

Q*  Qm
Mkt allocation of pollution under ext?

1. Output too large
2. Too much pollution produced
3. Prices of products created along w/poll too low
4. As long as costs are external, no incentives to create less pollution per unit are introduced by the market
5. Recycling and re-use of polluting substances are discouraged since release is cheap.
• Property rights-set of valid claims to a good or resource that permits its use and transfer of its ownership or sale
• In environmental public good issues, who has the “Rights” is unclear.
• Assignment of rights is often left to law or ethics
Coase Theorem

- Def: proper assignment of property rights, even externalities, will allow bargaining such that an efficient solution may be obtained.
  - Assume
    - Transactions are costless
    - Damages are accessible and measurable