Course Recap

June 4, 2009
Today

- A few final (exam) words
- Course recap
- Evaluations
Final exam details

- Three levels of question difficulty
  - Almost everyone should get
  - Many people will get
  - Only a few people will get

- Format: 15-18 Mult-choice; 2-3 problems
What is this course sequence about?

- 100a: rational choice under scarcity
  - Utility maximization, deriving demand from preferences
  - Profit maximization, deriving supply from costs
  - Applying framework to labor supply, choice over time, uncertainty

- 100b: Markets: behavior and welfare
Should government regulate economic activity?

Politicians love to talk about this:


- “A lot of the problems that are going on in our country now appear to have been related to lax regulation.” –Texas State Senator Steve Ogden (March 21, 2009)
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“. . . I do believe that there is a role for oversight.” – John McCain (same interview)

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Ogden is a Republican
Regulation: Good or Bad?

- Should government regulate economic activity?
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  - “…I do believe that there is a role for oversight.” – John McCain (same interview)
  - “A lot of the problems that are going on in our country now appear to have been related to lax regulation.” – Texas State Senator Steve Ogden (March 21, 2009)
  - Ogden is a Republican
- This is an economic question
Course Objectives

- Understand basic theoretical framework we use to think about
  - If/how/when markets do & don’t “work”
  - What happens when they don’t & what should we do
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- Develop analytic tools you can apply to specific economic questions
  - How does a tax affect behavior and welfare
  - Which goods should the govt. tax to generate revenue
  - What can/should we do to reduce greenhouse gas emissions?
  - What types of goods should the government be in the business of providing?
Structure

- Well functioning (competitive) markets
- Market failure
  - Monopoly (plus oligopoly, game theory)
  - Externalities (e.g. pollution)
  - Public goods
  - Imperfect/Asymmetric Information (covered in Econ 100C; insurance/paying for healthcare)
Well-functioning Markets

- Welfare measurement: Consumer Surplus approximates the consumers’ gains-from-trade
- Compensating variation, equivalent variation, change in CS all can be used to evaluate the welfare impact of a policy
- Market demand: individual demand added horizontally
- Equilibrium in competitive markets: price equalizes $D(p)$ and $S(p)$.
Well-functioning Markets

- Market efficiency: equilibrium in competitive markets realizes all possible gains-from-trade, maximizes welfare
- Regulation: can lead to excess supply or demand
- Taxes create a wedge between consumer and producer prices
- Either will result in unrealized gains-from-trade, DWL, inefficiency
Well-functioning Markets

What conditions are required for perfect competition?

- Firms are price takers, free-entry

- Many firms, so that one firm’s behavior has negligible impact on other

- No spillovers— all costs and benefits of market behavior are experienced by market participants

- No incentive to free-ride

- Perfect information

See econ 100c
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- *Monopoly: when there are barriers to entry (cost structure, returns-to-scale, regulatory), sole producer can set price*
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Monopoly

- Profit-maximizing condition: MR = MC
- Perfect comp: firm is price-taker $\implies$ horizontal demand $\implies$ 
P = MR, so P = MC
- Monopoly: firm is industry $\implies$ downward-sloping demand $\implies$ P $\leq$ MR = MC
- Monopoly underproduces to keep price high, causes DWL
- Efficiency retained with non-uniform pricing (perfect price discrimination, two-part tariffs), but works by allowing monopolist to extract \textit{all} consumer surplus
Oligopoly

- Quantity vs. price competition
- Simultaneous choice vs. leader/follower
- Cournot, Stackelberg quantity duopoly models
- Collusion can increase profits, but is unstable
- Cartel members have incentive to cheat/free-ride
- Basic game theory: Nash Equilibrium in matrix games
Ch31 is not about market failure
It’s about general equilibrium
Extends behavioral and welfare analysis to multiple markets w/ simultaneously determined outcomes
Edgeworth box used to graphically illustrate powerful conclusions about welfare
Competitive equilibrium is Pareto Optimal
I.e. competitive markets “work”
Externalities

- Missing market for external effect
- No one takes ownership over external costs/benefits so production is not socially optimal
- Can correct externality with Pigouvian tax or by assigning property rights
- Each works by internalizing externality
Public Goods

- Free-riding leads private market to underprovide
- Govt frequently provides
- How to know when providing is socially worthwhile?
- Use a revelation mechanism, e.g. Groves-Clarke tax to elicit individuals’ true valuation
- Makes people pay the cost they impose on others