Economics 1: Fall 2010

J. Bradford DeLong, Michael Urbancic, and a cast of thousands...

http://delong.typepad.com/econ_1_fall_2010/
Ladies and Gentlemen, to Your iClickers...

• In our “immiserizing technological progress” example: if we place everyone “behind the veil of ignorance” and have them decide, which is the better argument:
  – A. 1/7 of the population gains consumption equal to 15 cups of coffee; 6/7 loses consumption equal to 5/6 of a cup of coffee; 15 x 1/7 – 6/7 x 5/6 = (15-5)/7 = +10/7. It is a good and just thing.
  – B. 1/7 of the population gains consumption equal to 37.5% of their initial consumption; 6/7 loses consumption equal to 8.3% of their initial consumption; 1/7 x 37.5% - 6/7 x 8.3% = -1.8%. It is a bad and unjust thing.
  – C. There is no good or bad, just or unjust here: it is merely good for some and bad for others. You shouldn’t try to ascribe a single label too it.
  – D. Of course the new arrangement is just. People get what they earn.
  – E. Of course it is unjust. It makes the poorer worse off. The only good society is one in which the poor are as well-off as possible—the only possible justification for inequality is if it makes the pie bigger and that redounds to the benefit of the poor.
Our Market General Equilibrium

• Coffee:
  – 100 blue-collar workers producing 1000 cups

• Yoga
  – 20 white-collar instructors plus 20 blue-collar assistants producing 100 lessons

• Prices:
  – \( \frac{w^b}{p^c} = 10 \)
  – \( \frac{w^w}{p^c} = 40 \)
  – \( \frac{p^y}{p^c} = 10 \)

• Blue-collar workers:
  – Earning a wage of 10 cups of coffee a day
  – Spending it half on coffee—5 cups—and the rest on yoga lessons— ½ a yoga lesson a day

• White-collar workers:
  – Earning a wage of 10 cups of coffee a day
  – Spending it half on coffee—20 cups—and the rest on yoga lessons— 2 yoga lessons a day
Comparing the Equilibria

• Before: 1 (white collar) yoga instructor and one (blue collar) assistant to teach five yoga students
• After computerization: 1 (white collar) yoga instructor to teach five yoga students
• Prices:
  – \( w^b/p^c = 10 \) before, and \( = 10 \) after
  – \( w^w/p^c = 40 \) before, and \( = 60 \) after
  – \( p^y/p^c = 10 \) before, and \( = 12 \) after
• Consumption:
  – Blue collar workers:
    • Consume 5 cups of coffee and ½ a yoga lesson a day before,
    • Consume 5 cups of coffee and 5/12 of a yoga lesson a day after
  – White collar workers:
    • Consume 20 cups of coffee and 2 yoga lessons a day before,
    • Consume 30 cups of coffee and 2½ yoga lessons a day after
What the Fracking Frack?

• This episode of technological change was not a good deal for everyone

• Consumption:
  – Blue collar workers consume 5 cups of coffee and ½ a yoga lesson a day before, and 5 cups of coffee and 5/12 of a yoga lesson a day after
    • They have lost 1/12 of a yoga lesson, or 1/12 of their total consumption
  – White collar workers consume 20 cups of coffee and 2 yoga lessons a day before, and 30 cups of coffee and 2 ½ yoga lessons a day after
    • They have gained 10 cups of coffee plus half a yoga lesson, or 15/40 of their total consumption
But We Could Fix It...

- PDC says: let us impose a 2-cup per student displaced-yoga-assistant fee on each yoga instructor...
- Redistribute the money it to the blue-collar workers as compensation for market displacement...
  - Blue collar workers consume 5 5/6 cups of coffee and 35/72 of a yoga lesson
    - They gained 5/6 cup of coffee – 1/72 a yoga lesson
  - White collar workers consume cups of coffee and 2 1/12 yoga lessons a day
    - They have gained 5 cups of coffee plus 1/12 of a yoga lesson
Ladies and Gentlemen, to Your iClickers

• What do you think is the best reason *not* to impose such a tax?
  – A. It diminishes incentives for the next generation to become educated white-collar yoga instructors
  – B. Once PDC realizes it can impose a 2-cup a student fee, it could impose a 6-cup a student fee—and that would be grossly unfair
  – C. All taxes—but especially redistributive taxes—are a violation of your natural right to keep what you have made by the work of your hands
  – D. There is no reason to impose such a tax save for *force majeur*. There is no reason to suppose that the first allocation with assistants was any more just or more fair than the second allocation with computers
  – E. Once you start down the road of income redistribution your government becomes a sea of corruption and special dealing: better to simply have a government (a) enforce property rights and (b) enforce contracts and otherwise step back from the arena.
Economics 1: Fall 2010: Monopoly

J. Bradford DeLong

October 27, 2010, 12-1
Wheeler Auditorium, U.C. Berkeley
Competitive Markets Are Good Things

• They give scope to decentralized individual initiative
• Where large-scale planning is more efficient, they give incentives to figure out how to do it
• They push decision-making out to the periphery of society where the information is
• They provide powerful incentives for people to fulfill their social roles as stewards of resources and choosers of objectives
• They make the right decisions
For Example...

[Diagram showing a demand curve and marginal cost line intersecting at a point on the quantity axis]
Monopoly

• From the Greek: single—mono—seller...
• Counterpart is monopsony
  – Example of Sutter Health
• Can think of five market structures
  – Competition
  – Oligopoly
    • Could work like competition
    • Could work like monopoly
  – Monopoly
  – Group loyalty
    • Real estate brokers
  – Monopolistic competition—leave for later
Monopoly

- Price
- Quantity
- Marginal Cost
- Demand
Ladies and Gentlemen, to Your iClickers...

• What did you do on the Calculus AP exams (or equivalent)?
  
  – A. I got a 5 on the Calculus BC AP (or have gotten into vector calculus and linear algebra here at Berkeley).
  
  – B. I got a 4 on the Calculus BC AP (or have finished a full year of calculus here at Berkeley and am still normal).
  
  – C. I got a 5 on the Calculus AB AP (or have finished a semester of calculus here at Berkeley and am still normal).
  
  – D. I got a 4 on the Calculus AB AP.
  
  – E. None of the above
Let’s Do the Math...

• $Q = Q_0 - \beta P; \ P = (Q_0 - Q)/\beta$
• Revenue $R = PQ$
• What happens to revenue when we increase $Q$ by a small amount? Say by one unit?
  
  $P' = (Q_0 - (Q+1))/\beta = (Q_0 - Q)/\beta -1/\beta = P - 1/\beta$
  
  $R' = P'(Q + 1) = (P - 1/\beta)(Q+1)$
  
  $R' = PQ + P - Q/\beta -1/\beta$
  
  $R' = R + (P - Q/\beta) -1/\beta$
• Marginal Revenue $= R' - R = (P - Q/\beta) -1/\beta$
Let’s Do the Math II

- Marginal Revenue = $R' - R = (P - Q/\beta) -1/\beta$
- Monopolist will set marginal revenue equal to marginal cost
  - $(P - Q/\beta) = MC$
- Competitive market sets marginal revenue for the swing producer equal to marginal cost
  - $P = MC$
- Monopolist underproduces
If You Are Into Analytic Geometry
If You Are Into Analytic Geometry II
If You Are Into Analytic Geometry

III

Under competition:
CS = A + B + C

Under monopoly:
CS = A
monopoly profits = B;
deadweight loss = C

Price

Marginal Cost

Marginal Revenue

Quantity
How Important Is Controlling Monopoly?

• Used to be a big deal
• Milton Friedman’s teacher Henry Simons:
  – The most important arm of government is the Bureau of Antitrust of the Federal Trade Commission
• The Stigler-Bork countermove:
  – There are substitutes, which will curb the power of monopoly
  – There will be entry, which will erode and eventually vanquish monopoly
  – The Bureau of Antitrust is ineffective
    • At least as likely to take its mission as the protection of inefficient producers from competition as the protection of consumers from monopolists
    • At least as likely to put constraints on efficient bigness as to remove harmful monopolies
    • Likely to be captured by the industry
      – Maybe monopolies are “efficient” after all
• Why are these arguments more convincing to economists today than they were back in 1910?
Where Do Monopolies Come From?

• Are Monopolists mean, nasty people?
• Sheryl Sandberg on Mark Zuckerberg of Facebook:
  – He is shy and introverted and he often does not seem very warm to people who don’t know him, but he is warm. He really cares about the people who work here...
• Facebook does not have a near-monopoly on its market segment because Mark Zuckerberg is meaner than average...
Where Do Monopolies Come From II?

- Monopolists are not Albert Schweitzer figures
  - But they are not meaner than usual, at least for executives
- Monopolies come from mergers
  - U.S. Steel
  - International Harvester
  - Federated Department Stores
- Monopolist-like behavior comes from coordination
  - Who wants to start a price war? “Ruinous competition”
- Monopolies come from intellectual property
  - The old Ford, the old IBM
- Monopolies come from economies of scale
  - The old AT&T
  - Economies of scale on both the producer and the consumer side
    - Not just AT&T, but Facebook, Google, Microsoft
The Dilemma

• You want people to be properly rewarded for their investments in intellectual property, large-scale operations, et cetera
• You also want price to equal marginal cost at the level of the margin of production
• When there are increasing returns to scale, it is not possible to do both of these things at once
  – That is what we saw on problem set 5
    • Monopolist: \( P \neq MC \)
    • Non-profit: investments are not rewarded
    • Public provision: costs are not covered
  – Abandoning the market also creates incentive problems
    • Monopolists really like making money; what do non-profits and public bureaucracies like?
Ladies and Gentlemen, to Your iClickers

• How important do you think controlling monopoly is?
  – A. I’m with modern Chicago: government is too thumb-fingered and too many monopolies are the result of efficiency-enhancing investments for antitrust policy to be worth pursuing.
  – B. I’m with pre-WWII Chicago: the Bureau of Antitrust of the FTC should be the largest and most powerful instrumentality of government
  – C. Monopolies that grow up “organically” should be let alone—but mergers between competitors should be subject to very strict scrutiny
  – D. Even monopolies that grow up “organically” should be broken up as soon as their phase of rapid growth is over
Test Your Knowledge

• Should governments take steps to impose taxes and bounties to make sure that economic changes are win-win?
• What are the four principal benefits of competitive markets?
• What are the five principal market structures?
• Why do monopolists tend to produce too little?
• What are the New Chicago arguments against antitrust?
• What were the Old Chicago arguments for very aggressive antitrust?
• What are the four principal sources of monopoly?