

Economics 1: Fall 2010

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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; $15 \times 1/7 - 6/7 \times 5/6 = (15-5)/7 = +10/7$. 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; $1/7 \times 37.5\% - 6/7 \times 8.3\% = -1.8\%$. 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:
 - $w^b/p^c = 10$
 - $w^w/p^c = 40$
 - $p^y/p^c = 10$
- 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— $\frac{1}{2}$ 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 $\frac{1}{2}$ a yoga lesson a day before,
 - Consume 5 cups of coffee and $\frac{5}{12}$ 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 $2\frac{1}{2}$ 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 $\frac{1}{2}$ a yoga lesson a day before, and 5 cups of coffee and $\frac{5}{12}$ of a yoga lesson a day after
 - They have lost $\frac{1}{12}$ of a yoga lesson, or $\frac{1}{12}$ 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 $2\frac{1}{2}$ yoga lessons a day after
 - They have gained 10 cups of coffee plus half a yoga lesson, or $\frac{15}{40}$ 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 $5 \frac{5}{6}$ cups of coffee and $\frac{35}{72}$ of a yoga lesson
 - They gained $\frac{5}{6}$ cup of coffee – $\frac{1}{72}$ a yoga lesson
 - White collar workers consume cups of coffee and $2 \frac{1}{12}$ yoga lessons a day
 - They have gained 5 cups of coffee plus $\frac{1}{12}$ 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 majeure*. 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

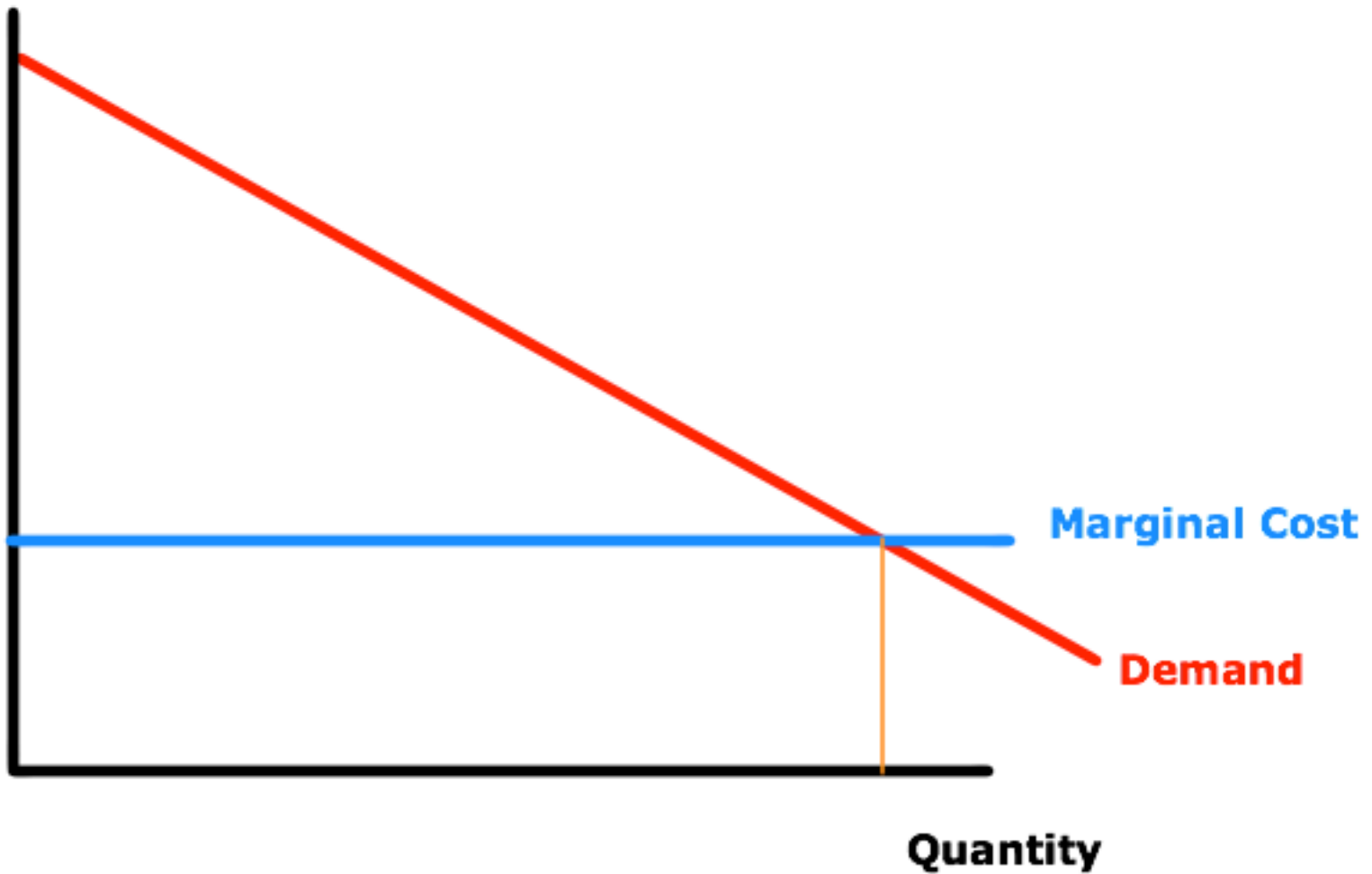
October 27, 2010, 12-1
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Competitive Markets Are Good Things

- 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...

Price

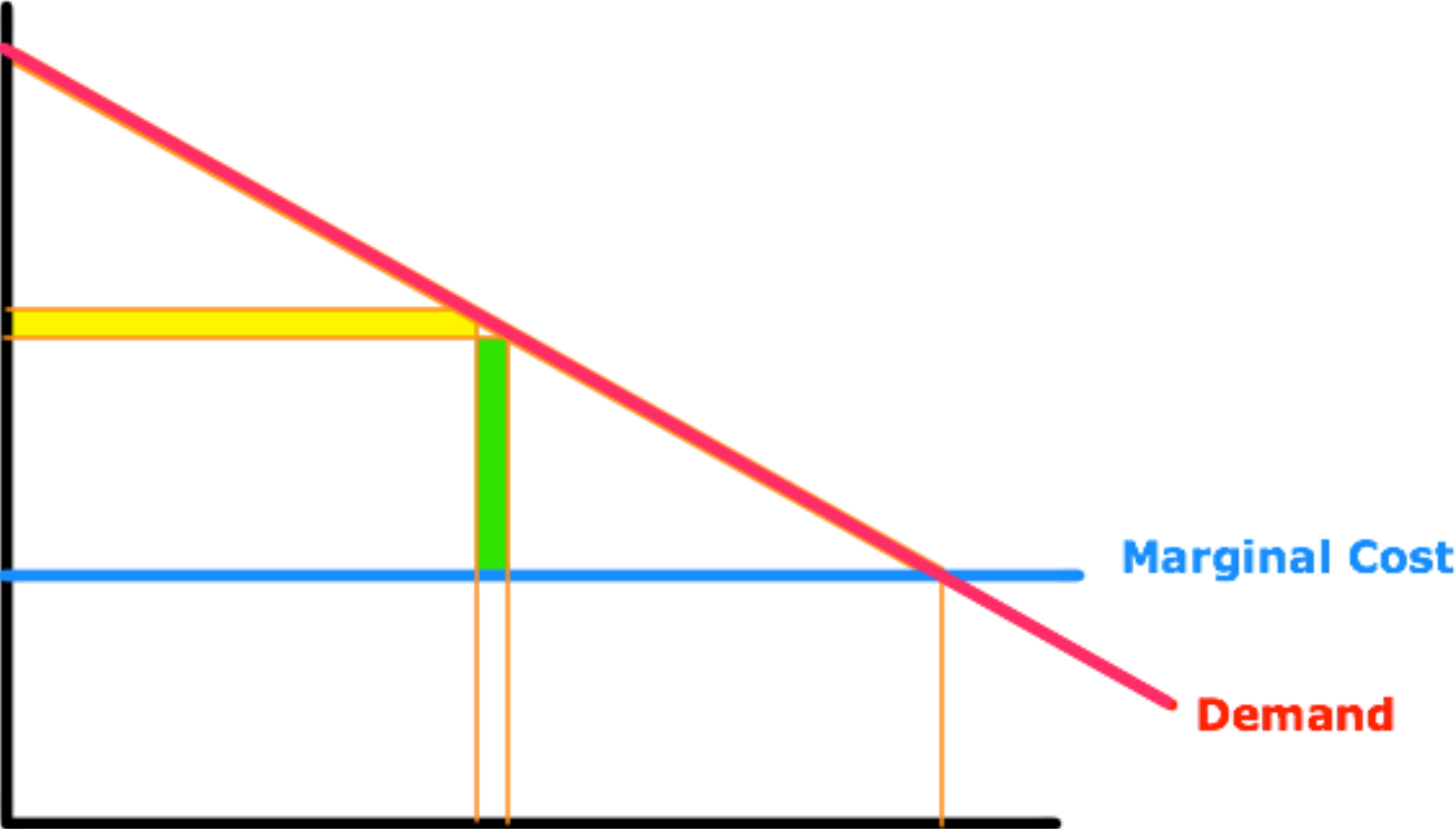


Monopoly

- 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

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

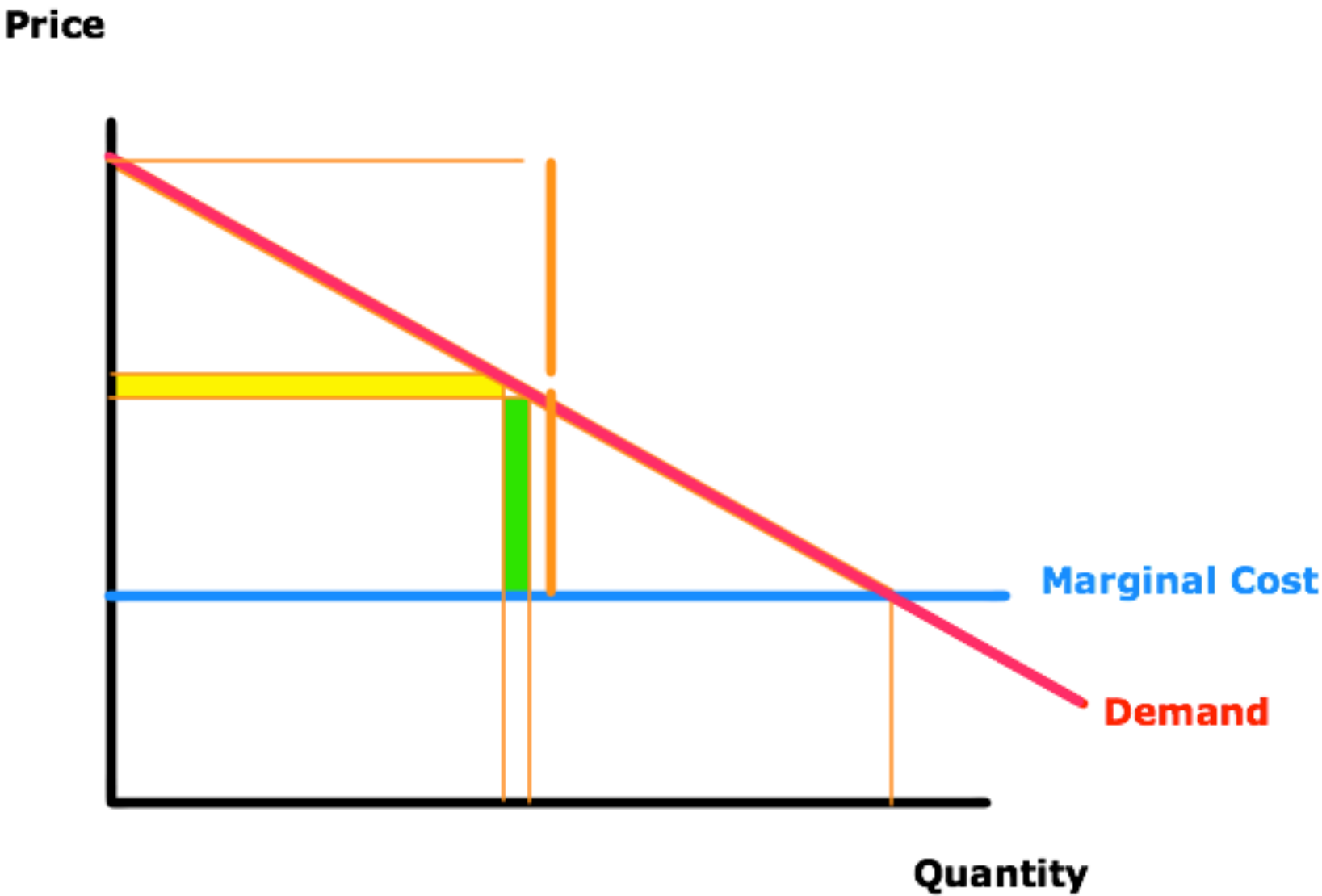
Let's Do the Math...

- $Q = Q_0 - \beta P$; $P = (Q_0 - Q)/\beta$
- 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

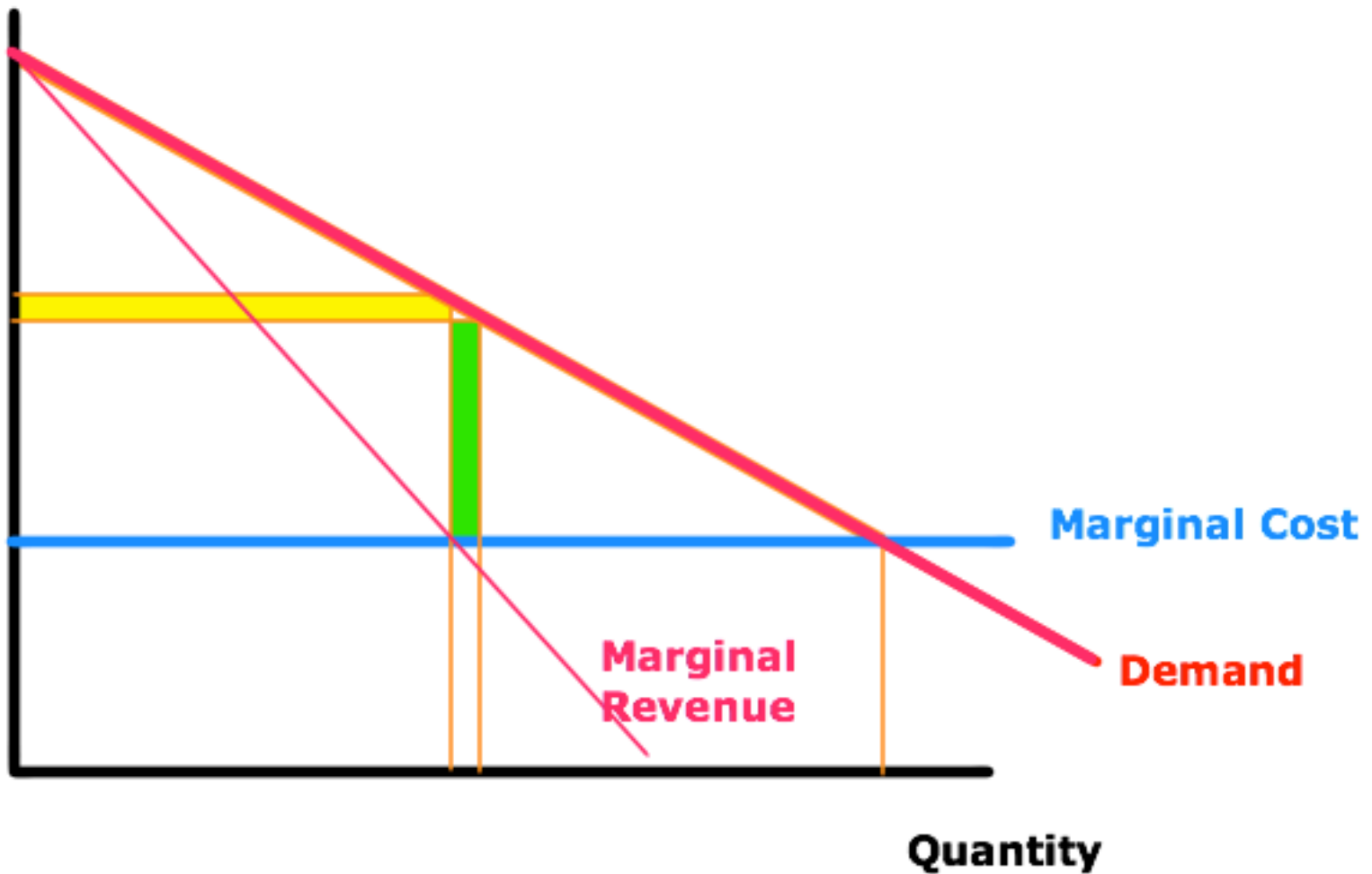
- Marginal Revenue = $R' - R = (P - Q/\beta) - 1/\beta$
- Monopolist will set marginal revenue equal to marginal cost
 - $(P - Q/\beta) = MC$
- Competitive market sets marginal revenue *for the swing producer* equal to marginal cost
 - $P = MC$
- Monopolist underproduces

If You Are Into Analytic Geometry



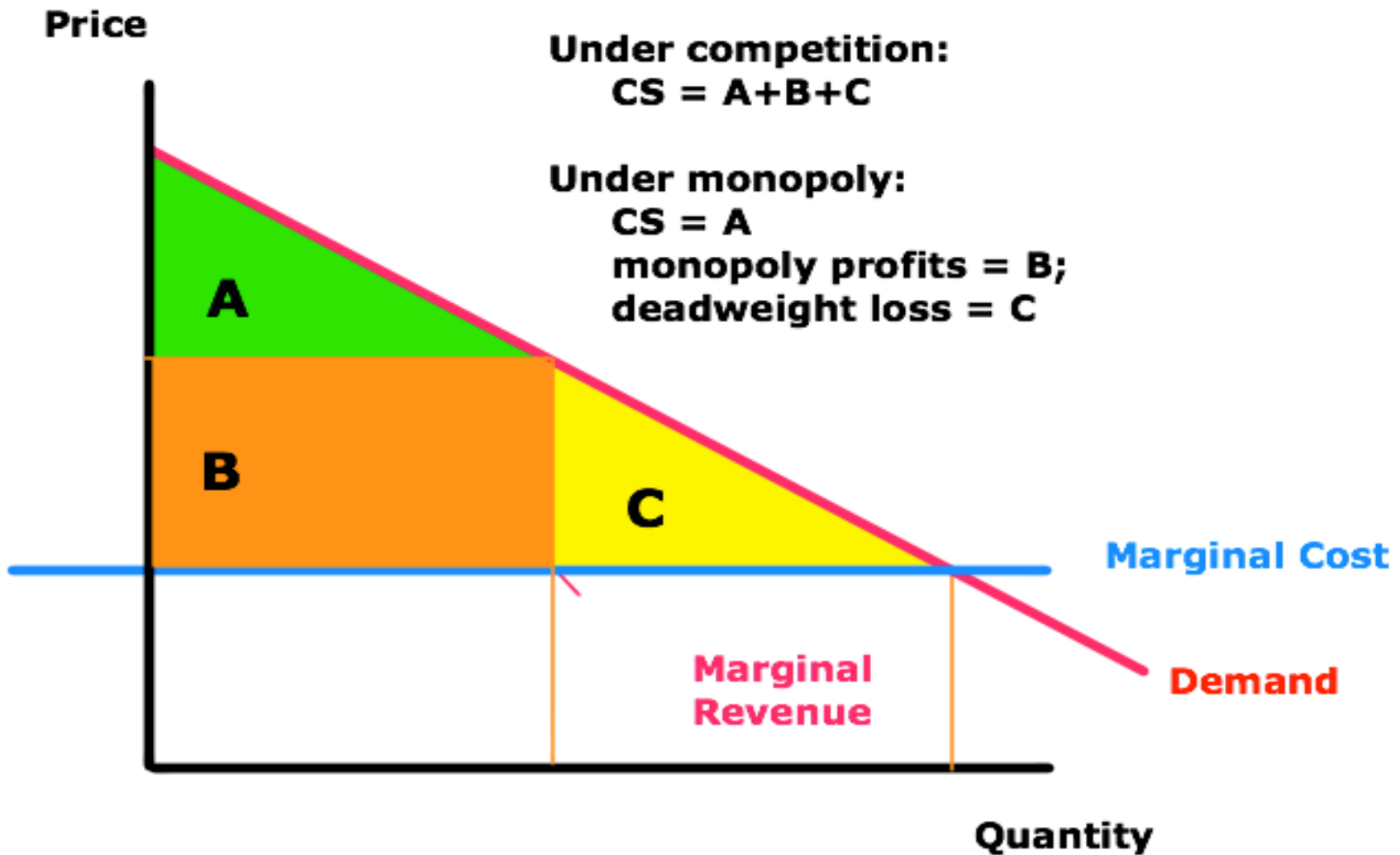
If You Are Into Analytic Geometry II

Price



If You Are Into Analytic Geometry

III



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?