Benefits of Competition

Lecture 2
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Price Level

• Benefits consumers
• Normally increases total surplus
  – Recall relationship to Pareto efficiency
  – Price closer to marginal cost
  – Consumption incentive for consumers
  – Single-market analysis: second-best?
• Deadweight-loss triangles
How Big Are Triangles?

- Simple back-of-envelope formula

\[
\frac{L}{pQ} \approx \frac{e}{2} \left[ \frac{\Delta p}{p} \right]^2
\]

Applying the formula

- Given (Lerner index) markup
- Change in markup—typically more relevant for policy
  - How much can a likely change shrink \(L\)?
- Using model to predict markup based on elasticity, number of firms, etc.
  - In monopoly/Cournot case, role of \(e\) shifts dramatically
  - Compare CP fig. 4.3 and Table 4.1
Lerner equation and competition

• The Lerner equation
  – Another (sometimes more helpful) way to write MR=MC
• Gross margin inversely proportional to residual demand elasticity for the firm
  – Key concept!

Competition increases residual demand elasticity

• More ways to gain customers by making better offers
  – Shift from competitors as well as from alternative goods
  – Slope of residual demand is shallow (demand sensitive to price, etc.)
• Fewer customers at any price level
  – For any given slope, higher elasticity
Productive Efficiency

• Across firms
  – More competition “assigns” most output to firms with lowest costs
    • Extreme cases
    • Less-extreme cases
  – Exit of the incompetent: special case

• Within firms

Does competition make a given firm more productively efficient?

• Monopolist’s incentive to lower its cost
• Finite greed?
• Does competition help owners make workers minimize cost?
  – Profit maximization a better assumption with competition than without?
• How gold mining stocks respond to gold prices
  – Interpreting statistical results
Even without incentives for firms

- If firms make random offers, consumers still get more choices; best of (N+1) draws is better than best of N draws
- If firms have random costs but then price in oligopoly fashion, selection effect too
- Variation, heritability, selection

Will competitors diversify?

- Might a monopoly diversify?
  - Intel and CISC/RISC
  - Microsoft and software style
  - Big 3 autos in 1970s
- Differences in CEO opinions, strategy focus, etc
- What about economic incentives?
Economic Incentives to Diversify

- TV stations and majority tastes
  - Monopoly may diversify better than competition if no price effect
  - Changes if price effect or many stations
- Strategic diversity and yacht racing
- Peanut allergy treatments

Entry and Competition

- The intellectual train-wreck that is CP p. 76
- Where is entry easy?
  - Airlines, they said
  - How long is the long run?
What’s Next

• Re-read CP chapters 2 and 3
  – Still don’t obsess over multi-product costs or over definition of entry barrier
• Read CP ch 4, up to top of p 107
  – Skip “Natural monopoly” section