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
  - How strong do we want selection effect to be? US, EU antitrust. Biodiversity.

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