More on oligopoly

Economics 121
Spring 2006
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Problem set 2

• Due now…or in Jenny’s mailbox by 4pm tomorrow
• How did it go?
Horizontal Merger Risks

• Two rivals merge
  – Sprint, Nextel
  – Maytag, Whirlpool
  – Oracle, PeopleSoft
• Substantial loss of competition?
• “Merger simulation” using calibrated oligopoly model

Merger simulation

• Usually use differentiated-product static models
• Same set of products, more unified control of pricing
• (How much) does that encourage higher prices?
  – Standard deduction for merger efficiencies?
Change in residual elasticity

- Initially, each product has MC c and price p
- Residual demand elasticity $e = p/(p - c)$
- Part of this is *cross*-elasticity
  - Diversion ratio $d$
  - Still there post-merger, but not a loss to the firm
- Predict new price, $p'$

Merger simulation calculation

- The calculation
  - Responses to responses…
- Other “demand systems”
- Omits
  - “coordinated effects”, dynamics
  - Entry
  - Repositioning
  - Efficiencies
Efficiencies

- “Consumer welfare standard”: only count efficiencies in MC, to extent passed through
  - Total-surplus standard: rectangles and triangles
- Credible, “merger-specific”
  - Cooperation between rivals without merger
- How much MC reduction is enough?

PS2/review/etc

- PS2
- Entry as part of competition
  - What costs are “marginal”
  - Barriers to entry—CP perspective… LR/SR
- Studying
Empirical/statistical insights

• Discuss attempts to test/estimate relationships suggested by oligopoly models/thinking
• Complicated, problematic
• Are there “thresholds”? 
• How much competition is “enough”? 

Concentration, profits

• CP and others refer to profitability as “performance”
  – Inverse measure
  – What does it capture?
  – What does it leave out?
    • Low costs?
    • Variety
    • Innovation
Profit regressions

- Profits in industry k as predicted by:
  - Concentration in industry k
  - Demand elasticity in industry k
  - Entry barriers in industry k
  - Other factors

Problems with Profit Regressions

- Measurement error on both sides
- Error measuring profits
  - Accounting problems
  - Capital
  - Consequence: estimates more random, less likely to look statistically significant
  - Not biased
- Beware of MDs, journalists discussing statistics!
Measurement error in concentration

- Market definition
  - “Right” measure of concentration
- Random errors in right-side variable bias estimated effects toward zero
  - Understanding why…
  - The reverse regression—how much does it help?

Next Tuesday

- Remember my AM office hours
- Finish off this chunk of oligopoly, further applications
- Any questions before midterm 2
- What’s next: “business practices”