# Mergers, market definition, merger simulation

220B, spring 2008

# Staples

- Direct evidence concerning merger effect
  - Never ideal of course
- FTC and court used for market definition, yielding “presumption” about effect!
- What’s going on?!

# Market shares

- In a clearly defined market,
  - High share relates to market power:
    - Cournot expression
    - Expression with supply elasticity from others
    - Marginal revenue
  - High shares of merging partners relate to unilateral effect
    - Opportunity-cost term and primitive simulation
  - High concentration relates to coordination(?)

# Presumptions

- If concentration remains low even after merger, probably no concern
  - “Safe harbor”—Herfindahl < 1000
- If concentration high and increases with merger, worry or at least look more
- In court, “presumption” that shifts burden of proof in principle

# What is this “market”?

- Two strands of thought collide
  – Universe of discourse: include all main substitutes, perhaps potential entrants and other relevant stuff (complements?!)
  – Reverse-engineered definition to make shares as meaningful as possible
    - Merger Guidelines algorithm
    - 2006 *Commentary*

# Market definition algorithm

- Broaden a small step at a time
- When "hypothetical monopoly" would profitably raise (at least one) price by (at least) SSNIP, it's "a market"
  - Break-even or profit-maximizing?
    - Critical loss analysis
  - Narrowest market?
  - Complements or substitutes not in market?

# Predicting price effects

- Arises both for market definition (with profit maximizing HM) and for merger simulation
- Estimate of HM profit function yields estimate of its profit-max price(s)
- Very “delicate” and depends on assumed functional form
  - Relate to pass-through and efficiencies
  - Werden et al 2005

# What Actually Happens?

- “Narrow” and/or “complicated” markets that would emerge from HMG not used
  - So easy to ridicule
- Concentration level/change for presumption H > 1800, dH > 100
  - Probably too worried if literal HMG market
  - Plausibly not worried enough if broad market, high gross margins

# What to do?

- Safe harbor based on most-concerned plausible theory: shift to full collusion
  - Not much worry if small shares in HMG market?
- Presumption based on least-concerned plausible theory: unilateral effects
  - Meaning
  - Implementation: pricing pressure; simulation?

# MCI-Sprint

- Remember the “long-distance market”
  - The Big 3 and many small ones
  - Uncertain prospect of Bell entry
    - What happened … successful; endgame mergers
  - Price premium for brands:
    - why?  Does it matter?
- Merger simulations yielding widely different results
  - As we just discussed
- Efficiencies—market for corporate control

# International

- Merger to monopoly in some routes
  - But perhaps entry; small part of the deal
  - Rules were changing

# Big business market

- Integrated service to many locations
- Reputation, own facilities, size
- ATT, MCI dominant
- Sprint starting to compete successfully
- Perhaps so were Bell, GX, …?

# Internet Backbone

- Voluntary “peering” and interconnection
  - Price, quality of connections
- How incentives depend on share
  - Bilateral yes/no
  - More complex games
    - Cremer, Rey, Tirole JIE;
    - Malueg and Schwartz

# Next time

- Oracle-PeopleSoft
  - Business management software
- Heinz-BeechNut
  - Baby food

# Things to read

- Merger Guidelines Commentary March 2006
- Whinston chapter in Handbook (online)
- Cases for next week
- Vast amount is written…

# Heinz

- “3 to 2” among major baby food suppliers
- Gerber biggest, and everywhere
- H, B mostly separately side-by-side vs G
- Did they compete to be 2nd brand?
- Do we care if supermarkets get lower slotting allowances?
  - “Buyer” welfare?
  - Pass-through mechanisms; “fixed”??

# Are efficiencies merger-specific?

- H’s production facilities, B’s recipes
  - Are recipes really so hard?  Apparently, for H
  - Could B build own modern plant?  Would it?
- Why would synergy take a merger?
  - Because they compete?
  - Other contracting difficulties?
  - Would a contract limit competition as much as a merger?