Effects-Based Analysis: Mergers and Vertical Restraints

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Outline

- I. Policy motivation: movement towards "effects-based" analysis
- II. How to determine Effects?
 - Natural Experiments
 - Theory-based inference
- III. Apply to Mergers and Vertical Practices

Movement towards Effects-Based Analysis of Mergers

Mario Monti's antitrust legacy

- Merger Guidelines; SIEC
- Best Practices
- Chief Economist
- Moving away from "Form" towards "Effect"
- How do we determine effects of mergers?

Movement Toward Effects-Based Analysis of Vertical Practices

- US 1977 Sylvania Decision.
- EC Article 81 Block Exemption Regulation.
- Movement away from "form" towards "effect"
- How do we determine effects of contracts between manufacturers and retailers (RPM, exclusivity, loyalty discounts, bundling, refusal to deal)?

How to Determine Effects?

- "Effects" question compares two states of world,
 - "with" vs. "without" merger
 - "with" vs. "without" vertical restraint
- But only one is observed
- Two ways of drawing inference
 - Natural experiments
 - Theory-based inference

Natural Experiments

- Control group, e.g., without merger
- *Experimental group*, e.g., with merger
- Difference between groups is estimate of merger effect.
- Questions for the parties
 - Did you hold everything else constant?
 - How well does experiment mimic effect in question?

Example: Consummated Merger

- Control Group: Pre-merger period
- Experimental Group: Post-merger period
 - → Did price increase?
- BIG question: "Compared to what?"
 - Compared to "control" cities hit by the same demand and cost shocks
- Jargon: "Differences-in-differences"
 - First difference: pre- vs. post-merger
 - Second difference: target vs. control cities

Marathon/Ashland Joint Venture

- Combination of marketing and refining assets of two major refiners in Midwest
- First of recent wave of oil mergers
 - January 1998
- Not challenged by antitrust agencies
- Change in concentration from combination of assets *less* than subsequent mergers that were modified by FTC

Merger Retrospective (cont.): Marathon/Ashland Joint Venture

- Examine pricing in a region with a large change in concentration
 - Change in HHI of about 800, to 2260
- Isolated region
 - uses Reformulated Gas
 - Difficulty of arbitrage makes price effect possible
- Prices did *NOT* increase relative to other regions using similar type of gasoline



Difference Between Louisville's Retail Price and Control Cities' Retail Price

— Chicago — Houston — Virginia

Theory-based Inference

- Posit pro- and anti-competitive theories
- Which one better explains the evidence?
- Questions for the parties
 - How well does theory explain observed competition?
- Example: Merger Simulation
 - Posit model
 - Estimate parameters
 - Simulate Merger Effects

Vertical Restraints: Natural Experiments

- Growing body of evidence on vertical
 - Control Group (with restraint)
 - Experimental group (without restraint)
- Find that vertical contracts and integration
 - Reduce price
 - Induce demand-increasing services

Representative Experiments

- *Gasoline*: prices 2.7¢/gallon higher in states with vertical divorcement laws
 - Vita and Sacher (2000)
- *Beer*: UK divorcement of "tied" pubs raised price
 - Forced to offer the beer of at least one rival brewer.
 - Slade (1998).

Vertical Theory

- Anticompetitive theories
 - Softening horizontal competition.
 - Multilateral opportunism.
 - Dynamic entry/exit/investment effects.
- Pro competitive theories
 - Elimination of double mark-ups
 - Cost savings.
 - Dealer services efficiencies.

What Vertical Theory Tells us

- There is possibility that vertical restraints harm competition
- Harm occurs in same instances where restraints likely to have efficiencies.
 - Search for screens is probably futile.
- → The "possibility theorems" do not give us practical ways for distinguishing pro-competitive from anti-competitive restraints.

Lessons

- Theory-based inference about effects of vertical restraints is not likely to tell you very much.
- Take lesson from economists who use natural experiments to determine effects of vertical
- →Bring cases when good natural experiments indicate restraints are anticompetitive.
 - Before and after restraint
 - Compare markets with and without restraint

FAQ's About Merger Simulation

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The views expressed herein are not purported to reflect those of the Federal Trade Commission, nor any of its Commissioners Isn't merger simulation built on unrealistic assumptions?

- Behind every competitive effects analysis is an economic model.
 - Simulation makes the model explicit
 - Forces economists to "put cards on table"
- Every model makes unrealistic assumptions
 - Crucial question is whether model ignores factors that lead to biased predictions

Has merger simulation been tested against real data?

- No methodology has been shown to predict effects of real mergers
 - No coordinated effects theory,
 - No unilateral effects theory,
 - No market concentration theory.
- Model should be judged by how useful it is
 - Does it focus investigation?
 - Does it capture current competition?

Is merger simulation worth the money?

- *Demand estimation* is often expensive, open ended, yet can yield very little.
 - Often done without simulation, e.g., Kraft
- Merger simulation does NOT require demand estimation.

- Can be done quickly, with very little information

• Virtue of simulation is focusing investigation on facts and assumptions that matter

Does merger simulation sway decision-makers at agencies?

- Merger simulation is a standard methodological tool
 - No tool is definitive.
 - Used to organize evidence, not to substitute for it.
- First used in 1994 in US v. IBC
 - Expert declaration published in Int'l J. Economics of Bus. with five other examples from real cases.
- Use in recent litigated cases
 - Lagardere; Oracle/Peoplesoft;

Doesn't simulation always predict a price increase?

- Every anticompetitive theory predicts price increase
 - We have safe harbours for concentration
- Use simulation to organize evidence, focus investigation, benchmark efficiency claims, evaluate remedies.
 - Can compute cost reductions that offset price increase.