Economics in Antitrust: A US Perspective

Luke M. Froeb

Director, Bureau of Economics US Federal Trade Commission

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OUTLINE

- I. Economists: use and organization
- II. Merger Enforcement R&D
- III. Vertical Enforcement R&D
- IV. Merger Simulation
- v. Price Discrimination

I. Economists: Use and Organization

What Good are Economists?

The development and implementation, competition policy requires the perspective and discipline of economics.

- Formulating policy
- Making enforcement decisions
- Building a court case
- Finding facts

Problems Arise...

- When economics is ignored by policymakers
- When policy gets ahead of economics

Formulating Policy

- Industrial organization economics is the intellectual foundation of competition policy.
- Sound policy formulation entails a restatement of mainstream economic principles, while properly accounting for legal and practical constraints.
- Enforcement R&D

Enforcement R&D

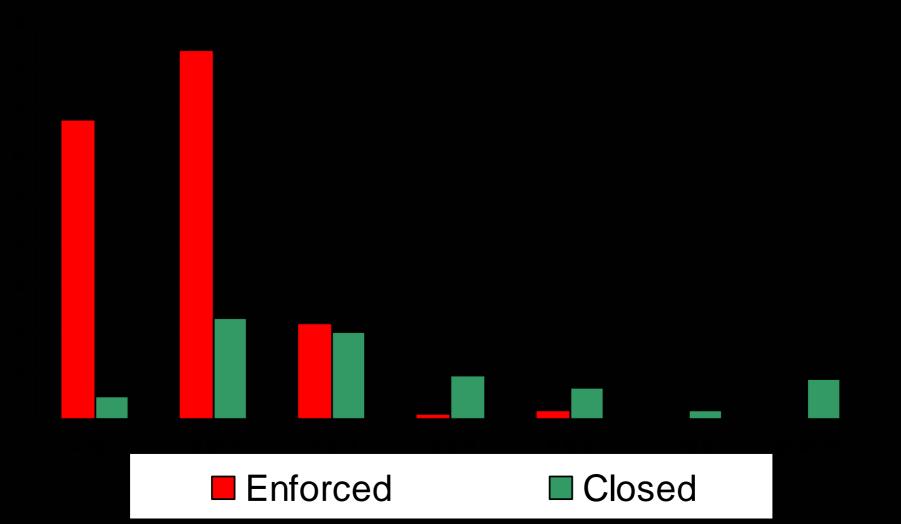
- Development of better theories
 - And TESTING them
 - Must be practicable
- Study enforcement actions and non-actions
 - Merger retrospectives
 - Non-merger retrospectives

Organizing the Economists

- Organization: Functional vs. M-form or "Divisional"
 - Functional expertise vs. faster decision making
- <u>Functional Organization</u>: Requires strong senior management because economists often reach different conclusions than attorneys
 - DOJ and FTC
- <u>Divisional Organization</u>: making economists report to attorneys reduces functional expertise.
 - GAO
 - FTC (1953 to 1961)

II. Merger Enforcement R&D

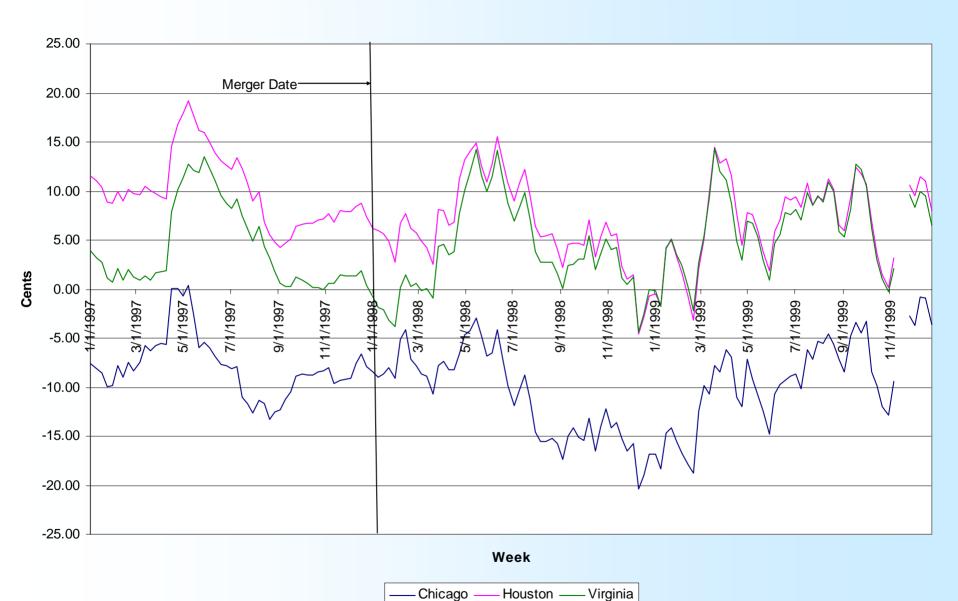
FTC Merger Enforcement Data 1996-2003, "Other Industries"



Merger Retrospective: Marathon/Ashland Joint Venture

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

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



Baby Food Merger

- 2000: FTC Blocks \$185 MM Merger Deal
 - Efficiency claims vs. 3→2 merger
- 2002: Heinz sells off several branded product lines to Del Monte – Natural Goodness baby food included
- Ultimate fate of Natural Goodness brand remains a question mark.

Baby Food Shares Since Merger

US Baby Food Market Shares			
Firm	Market Shares mid 2000	Market Shares late 2003	
Gerber	73	80	
Heinz (Del Monte after 12-02)	11	7	
Beech-Nut	13	10	

III. Non Merger Enforcement R&D

When Policy Gets Ahead of Economics

- 1977 "Preemptive Capacity Expansion" Michael Spence, Bell Journal, 1977
 - Not testable, built on "virtual" parameters
- 1978-80, TiO2 case built on "possibility theorem," i.e., there exists a theory that would fit these facts
- Pro-competitive alternate explanation: Dupont had most efficient technology, logical one to expand.
- Is there a way to tell them apart?
 - Who bears burden of proof?

Is Policy on Vertical Restraints "Ahead" of the Economics

- The so-called "post-Chicago" literature is very good at generating possibility theorems
 - But not very good at testing them
- Science of economics requires testing to move forward

Evidence on Vertical Integration

- Natural Experiment across US States with and without "divorcement laws"
 - Gasoline "divorcement" laws restrict vertical integration of gasoline refiners and retailers.
- Experimental group (with divorcement)
 - Six states (Hawaii, Connecticut, Delaware, Maryland, Nevada, Virginia), and DC
- Control Group (without divorcement laws)

Evidence on Vertical Integration (continued)

- Divorcement raises the price of gasoline by about 2.7¢ per gallon (loss of \$100 million in consumers' surplus annually).
- → Vertical integration REDUCES price
- Michael Vita (FTC), "Regulatory Restrictions on Vertical Integration ...," J. of Regulatory Economics," 18 (2000), 217-33).

IV. Merger Simulation

Litigation Poses Difficult Questions

- What would profits have been absent some illegal behavior?
 - Patent infringement
 - Antitrust violation
- Will this merger raise price?
- How much did this conspiracy raise price?
- These questions compare two states of the world, but only one is observed

How Do We Predict the Unobserved State of the World?

- Natural experiments
 - Only as good as the data
- Classroom experiments
 - FCC used experiment to predict effects of ATT-Comcast
- Structural models
 - Driven by behavioral assumptions

Structural Models are Built on Assumptions

- Models tell you
 - What matters, why, and how much
- Models force economists to "put cards on table"
 - Assumptions are explicit;
 - Clear link from evidence to conclusions
 - Attack "linkage" (model) or attack evidence
- CAUTION: Make sure model can explain observed state of the world before being used to predict unobserved state

Structural Models are Only Tools

- Can focus investigation by identifying:
 - "What" matters, "why," and "how much"
 - Offer way to weigh efficiencies against anticompetitive effects
- But if don't fit the facts
 - Misleading predictions
 - Divert attention from more probative analysis

Rise of Structural Models

- 1995 IBC-CBC → challenge
 - Product and geographic delineation problems.
 White pan bread in Chicago
- 1996 L'Oreal-Maybelline → no challenge
 - L'Oreal did not compete much with Maybelline despite big shares
- Both Cases, models fit the facts of the industry

Thesis \rightarrow Antithesis

- Ten years building merger models
 - Focus on methodological innovation
- Dave Scheffman critique
 - "fit accompli": Does the model fit the facts?
 - Makes cases too easy to bring (false positives)
 - Huge logical leap from retail elasticities to upstream price increases
 - What about intermediate steps?

From Vanderbilt to the FTC

	Academic	Practitioner
Concern	Methodological innovation	How well is methodology applied to case
Outcome	Demonstrate policy tradeoffs	Need an answer
Check & balance	Peer review	Adversarial litigation

Thesis → Antithesis → Synthesis

- "A Daubert Discipline for Merger Simulation"
 - Gregory J. Werden, Senior Economic Counsel, U.S.
 Department of Justice
 - David Scheffman, LECG & Adjunct Professor at Vanderbilt
- If you use models, must fit facts of case
- Every assumption should be:
 - supported by evidence, or
 - subject to sensitivity analysis
- Mergers vs. Damages

Misuse of Structural Models

- Finding facts to fit the model
 - Beware of answers looking for questions
 - Looking under street lamps for lost keys
- Inadequate data
- Unsupported assumptions that drive results
- Point estimates with no sensitivity analysis
- Not appropriate in many cases