Economics in Antitrust: A US Perspective

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AEI/Brookings, Brussels
March 24, 12:00-14:00

The views expressed herein are not purported to reflect those of the Federal Trade Commission, nor any of its Commissioners.
Acknowledgements

- James Cooper, FTC
- Dan Hosken, FTC
- Pauline Ippolito, FTC
- Dan O’Brien, FTC
- Paul Pautler, FTC
- Chris Taylor, FTC
- Mike Vita, FTC
- Gregory Werden, US Department of Justice
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

- **Functional Organization:** Requires strong senior management because economists often reach different conclusions than attorneys
  - DOJ and FTC

- **Divisional Organization:** Making economists report to attorneys reduces functional expertise.
  - GAO
  - FTC (1953 to 1961)
II. Merger Enforcement R&D
FTC Merger Enforcement Data

Significant Competitors

Number of Markets Enforced

Closed

Enforced

2 to 1  3 to 2  4 to 3  5 to 4  6 to 5  7 to 6  8+ to 7+

[Bar chart showing enforcement and closed cases for different market concentrations]
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
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

<table>
<thead>
<tr>
<th>Firm</th>
<th>Market Shares mid 2000</th>
<th>Market Shares late 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerber</td>
<td>73</td>
<td>80</td>
</tr>
<tr>
<td>Heinz (Del Monte after 12-02)</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Beech-Nut</td>
<td>13</td>
<td>10</td>
</tr>
</tbody>
</table>
III. Non Merger Enforcement
R&D
When Policy Gets Ahead of Economics

- 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

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 ➔ 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

<table>
<thead>
<tr>
<th>Concern</th>
<th>Academic</th>
<th>Practitioner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Methodological innovation</td>
<td>How well is methodology applied to case</td>
</tr>
<tr>
<td>Outcome</td>
<td>Demonstrate policy tradeoffs</td>
<td>Need an answer</td>
</tr>
<tr>
<td>Check &amp; balance</td>
<td>Peer review</td>
<td>Adversarial litigation</td>
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</tbody>
</table>
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