Strengthening the Micro Foundations for Coordinated Interaction in Merger Analysis



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Updated Approach to Coordinated Interaction

- □ DOJ and FTC initiatives to modernize CI analysis
- Moving from probabilistic statements to fact-specific inquiries
- □ Stylized facts / correlations to micro-economic foundations
- ☐ Theories focused on maverick firms, competitor asymmetries, and opportunities for mavericks to disrupt CI
- Recent examples: label stock (DOJ), cruise lines (FTC)



Two Areas Warranting Further Analysis

I. Should history matter, and if so, how?

II. How will a merger affect transparency?



Three Steps

Reality check

• Does the general phenomenon apply in the specific market?

Micro-economic foundations

• How does the merger affect the phenomenon?

Sensitivity check

• How big is the effect ?



I. Should History Matter, And If So, How?

In practice, courts have placed substantial weight on history History of price-fixing (FTC v. Elders Grain) History of tacit coordination (FTC v. Cardinal Health) History of price leadership (FTC v. H.J. Heinz) History of cooperation in general (Hospital Corp. of America v. FTC) ☐ History has shaped how agencies have heard evidence and influenced where they have set the bar These approaches appear to be guided by correlations, rather than micro-economic theory

History used as a summary statistic for unobservables



Reality Check

- □ Empirical evidence is very mixed
- ☐ Seemingly low recidivism rates in time series studies (Dick *JLE* 1996)
- ☐ Recidivists tend to be shorter-lived (Dick *JLE* 1996)
- ☐ But, some case studies do suggest learning by doing (Baker *JLE* 1989 and Alexander *REStat* 1994)



Micro-economic Foundations for History

- ☐ Agencies must ask: "Has history mattered in *this market*?" and "How will history affect CI after *this proposed merger*?"
- □ Empirical evidence that history has mattered
 - □ E.g., CI continued after the demise of suspect practices
- ☐ Incorporation of micro-economics of history into the specific competitive effects theory
 - ☐ History can help build current understandings
 - □ History can reveal firms' "types"
 - □ History can "teach" firms how to coordinate
 - ☐ History can improve the accuracy of current and future monitoring



Sensitivity Check

- □ Have "salient characteristics of the market changed appreciably" since the historical episode? (HMG §2.1)
 - Has entry occurred?
 - Has the geographic market broadened?
 - Have power buyers emerged ?
 - Have capacity constraints been relaxed?



II. How Will a Merger Affect Transparency?

- □ Courts give substantial weight to transparency
 - "Secrecy is the antithesis of successful collusion" (US v. ADM)
- □ Agencies also highlight transparency
 - Relevant factors include "the availability of key information concerning market conditions, transactions and individual competitors" (HMG § 2.1)
- ☐ Intuition: transparency improves reaching terms of coordination, detecting deviations, and punishing deviations



Reality Check

- ☐ How accurate is competitor intelligence?
 - Compare merging parties' actual prices against pre-merger intelligence
 - Compare prices against third-party industry intelligence
- □ Have changes in transparency led to changes in pricing?
 - Danish antitrust agency published cement transaction prices, leading average prices to rise 15-20% (Albaek, Molgaard & Overgaard <u>JIE</u>, 1997)
- ☐ Have transaction prices closely tracked announced prices?
 - In *US v. ADM*, court noted that while price changes were routinely preannounced, transaction prices differed substantially.



Micro-economic Foundations for Transparency

- □ Explain how *this merger* will increase transparency
 - E.g., *Premdor-Masonite* CIS (DOJ)
- ☐ Transparency of *what*?
 - Direct information: strategy choices (price, output) ?
 - Indirect information: payoffs (profits, market shares) ?
- ☐ Discount appropriately for strategic customers and signal jamming incentives



Sensitivity Check

- ☐ How much better informed will merging parties (or other firms) be after the merger?
- ☐ Can we quantify the merger's impact on the signal-to-noise ratio?



Should History Matter, And If So, How?

Courts have placed substantial weight on history History shapes how agencies hear evidence and where they set the bar History has been used as a summary statistic for unobservable factors Reality check: empirical evidence is very mixed Goal: incorporate *micro-foundations for history* into the competitive effects theory



How Will a Merger Affect Transparency?

- ☐ Courts and agencies give substantial weight to transparency
- ☐ Intuition: transparency improves reaching terms of coordination, detecting deviations, and punishing deviations
- □ Reality check: how good is the evidence in fact?
- ☐ Goal: explain how *this merger* will increase transparency

