Antitrust Enforcement R&D: Mergers and Vertical Restraints

Luke M. Froeb,

Bureau of Economics, FTC

December 3, 2004; 12:00
Kings College, London

Acknowledgements

James Cooper, Dan O’Brien, Mike Vita, FTC

Tim Brennan, RFF and UMBC

Greg Werden, Tom Barnett, DOJ

Dan Hosken, Chris Taylor, Lou Silvia, FTC.

Outline

I. Policy motivation

II. Mergers

III. Vertical Restraints

1900

Laws enacted in 1900 or before

1960

1980

Laws enacted in 1980 or before

1990

Laws enacted in 1990 or before

Today

Laws enacted in 2004 or before

What do these laws do?

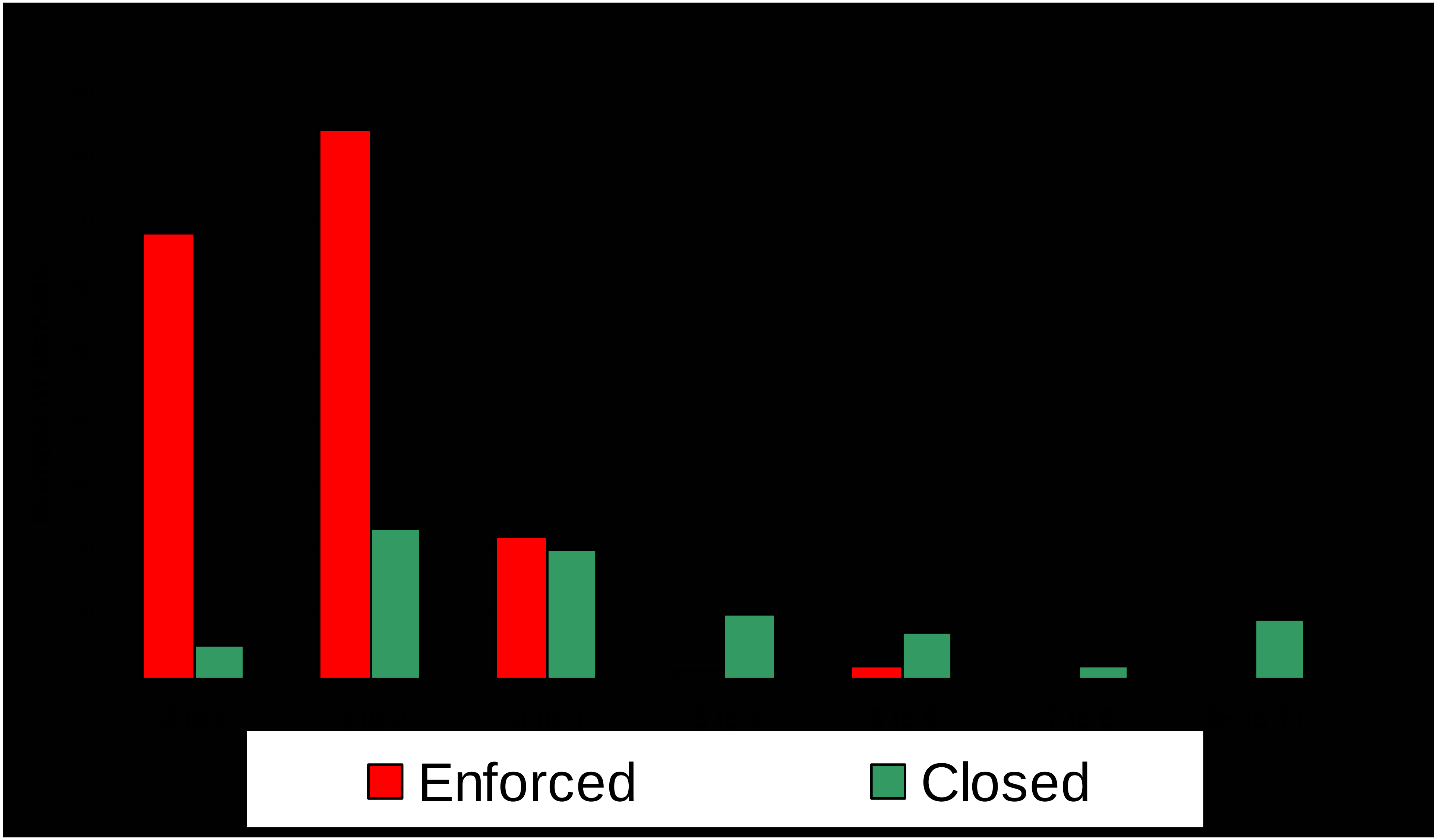
Aimed at

- Cartels
- Mergers
- Abuse of dominance or vertical restraints

Which is most efficient use of scarce enforcement resources?

- ANSWER: Enforcement R&D

FTC Merger Data,1996-2003: Structure just a starting point



What's Wrong w/Structural Presumptions?

Market delineation draws bright lines even when there may be none

– No bright line between "in" vs. "out"

Market Shares may be poor proxies for competitive positions of firms

Market shares and concentration may be poor predictors of merger effects

What is Effect of Merger?

“Effect” question compares two states of the world (“with” vs. “without” merger)

- but only one is observed

Two ways of drawing inference about unobserved state of world

- Natural experiments
- Theory-based inference

Natural Experiments

Control group (without merger)

Experimental group (with merger)

Difference between groups is estimate of merger effect.

BIG questions

- How well does experiment mimic merger effect?
- Did you hold everything else constant?

Example: Consummated Merger

Control Group: Pre-merger period

Experimental Group: Post-merger period

Did price increase?

BIG question: "Compared to what?"

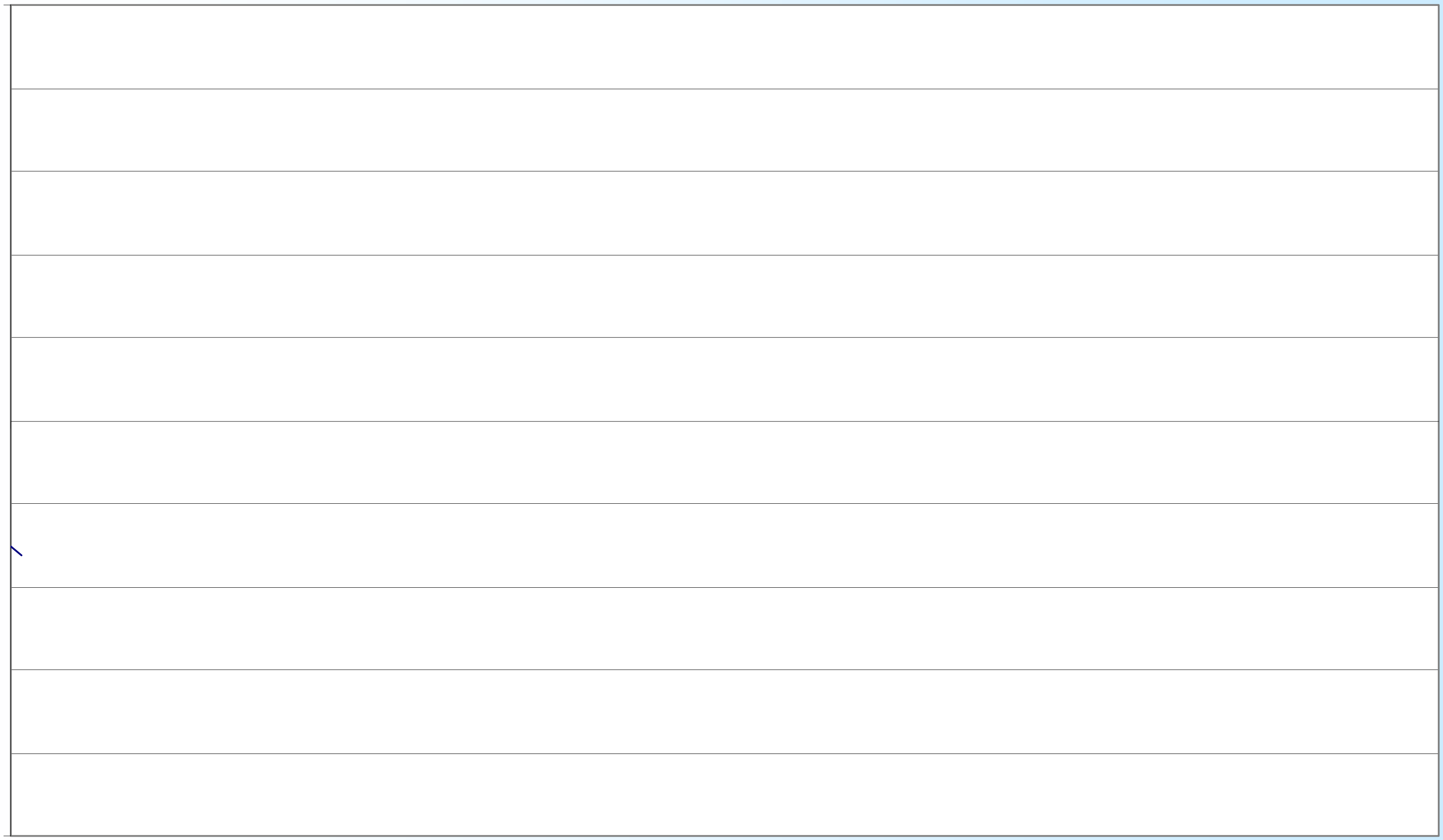
- Compared to "control" cities hit by the same demand and cost shocks
- Economic Jargon: "Differences in Differences Estimation"
  - First difference: pre- vs. post-merger
  - Second difference: target vs. control cities

(Marathon / Ashland Joint Venture)

- Combination of marketing and refining assets of two major refiners in Midwest
- First of recent wave of 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

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



Theory Based Inference

Posit pro- and anti-competitive merger theories

Which one better explains the evidence?

Example: Merger in bargaining markets

Bargaining Theory

From Oracle-Peoplesoft trial:

"the area [that] is the most indeterminate in all of antitrust economics where you have negotiations between two parties. There is no determinate theory that predicts the outcome."

Question: can economics predict effects of mergers in bargaining markets?

John Nash's "Split the Difference" Theory

Same indeterminancy confounded John Nash

Proved any "reasonable" solution would "split the difference"

The gains from bargaining relative to the alternatives to bargaining, determine the terms of any bargain

What happens if a manager offers a $50 sales incentive to salespeople?

- Makes salespeople more eager to reach agreement, so they reduce price by $25.

What Does Nash's Bargaining Theory Imply for Mergers?

If merger changes alternatives to agreement, it also changes the terms of agreement.

Example: Drugs bargaining with an insurance company to get onto a formulary.

- If two substitutes bargain jointly, and no other substitute, merged company gets better price

Evidence: how good are the alternatives to the merging products?

Bargaining Natural Experiment

"Any-willing-provider" (AWP) laws compel managed care plans to include any health care provider willing to accept plan's terms and conditions.

Threat of exclusion from network induces competition between providers to be included in "network."

Prediction: Getting rid of this threat changes price

Bargaining Experiment (cont.)

When a state adopts a allows any willing provider in the network, health expenditures increase by about 2%.

- Mike Vita, “Regulatory restrictions on selective contracting: an empirical analysis of `any-willing-provider’ regulations,” Journal of Health Economics 20 (2001) 955–966

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

– Slade (1998); OFT (2000)

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

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

UK "Beer Orders"
Slade (1998; OFT 2000)

Efficiency rationale: When retail sales a function of price and (possibly unobservable) retailer effort, some vertical control necessary to induce optimal retailer behavior

– Choice of contract depends on multiple factors:

retailer market power (double markup problems);

importance of retailer sales efforts;

opportunities for retailer "shirking"

Beer Orders (cont'd)

Retail sales of beer determined by retail price and "quality", where quality includes:

- cleanliness of pub, proper maintenance of cask beer, quality of food, etc.

- Choice of particular contract with retailer will depend upon particular retailer characteristics:
  - Shepard (Rand, 1993, U.S. petrol stations)
    - found choice between full integration, lessee-dealer, or open dealer determined by particular characteristics (e.g., full or self-serve; repair work; convenience store).
    - Brewery-pub contracts have analogous contractual forms:

      > Managed houses, tenanted houses, free houses

Beer Orders (cont'd)

Anticompetitive theory:

- exclusive dealing "softens" interbrand competition (Dobson & Waterson, 59; Slade, 578-581)
- vertical integration forecloses entry by new breweries

Empirical implications:

- If vertical control efficient, pub divestitures should result in higher prices, lower output
- If vertical control anticompetitive, opposite should occur: lower prices, greater output

Beer Orders (cont'd)

Beer Orders (cont’d)

ad >margins have increasd [sincew i t h