Antitrust Enforcement R&D: Mergers and Vertical Restraints

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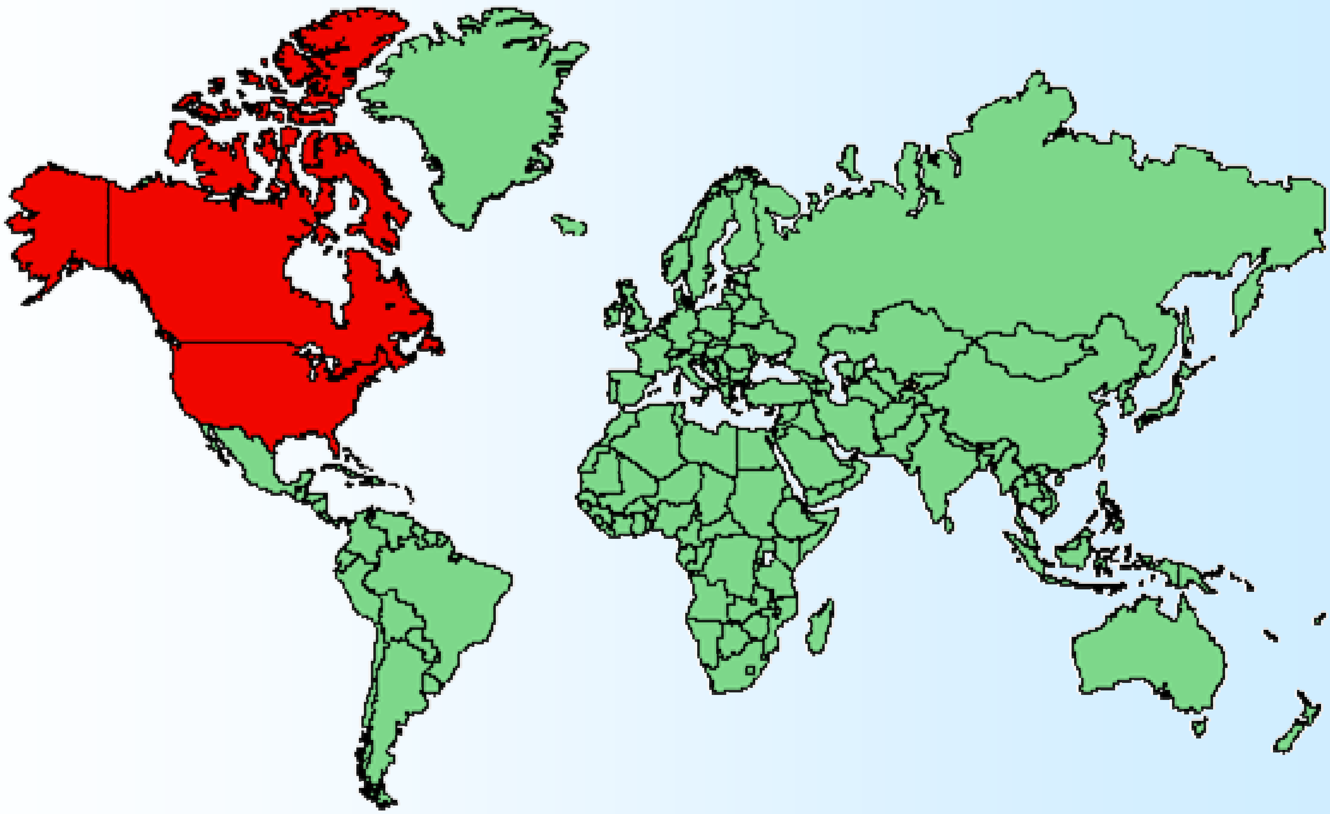
Outline

- I. Policy motivation
- II. Mergers
- III. Vertical Restraints

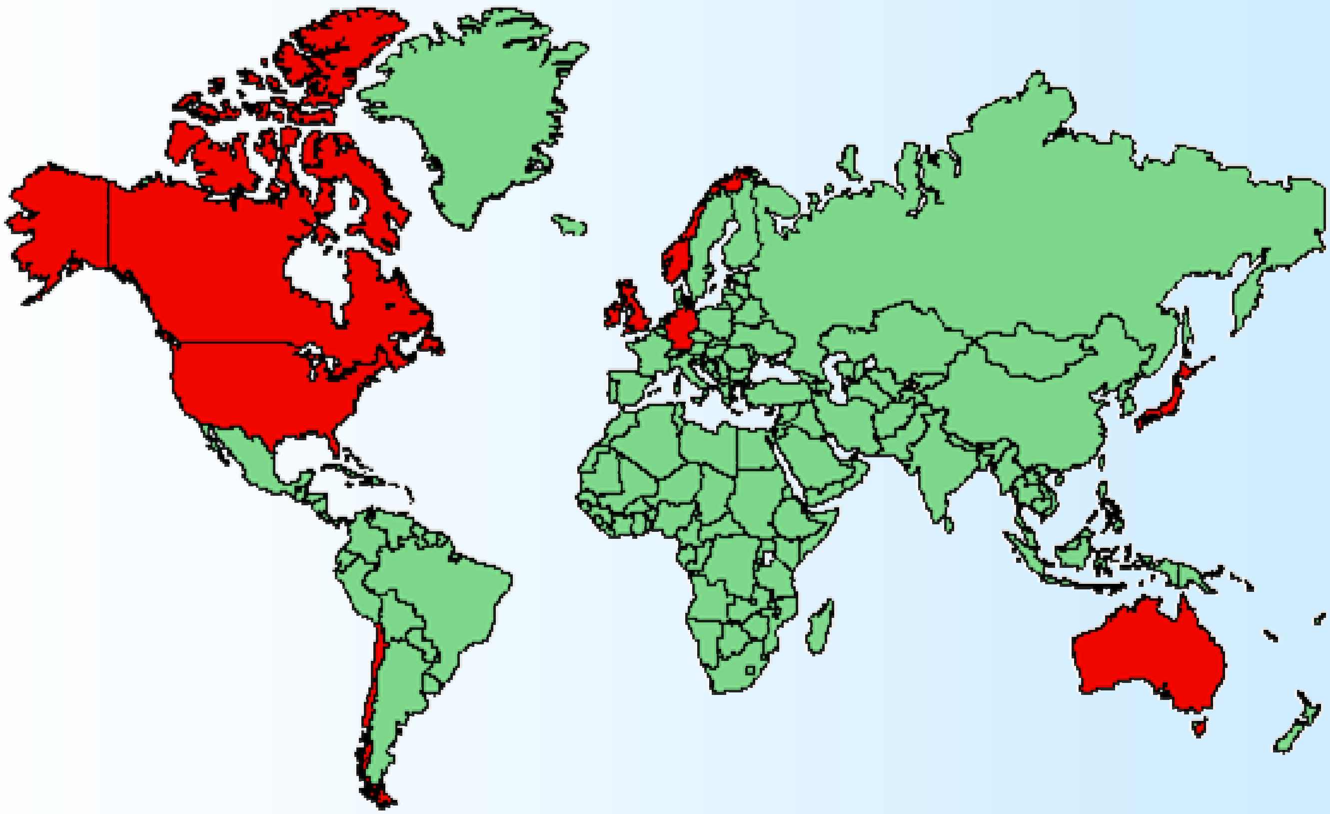
Global Proliferation of Competition Laws

1900



Laws enacted in 1900 or before

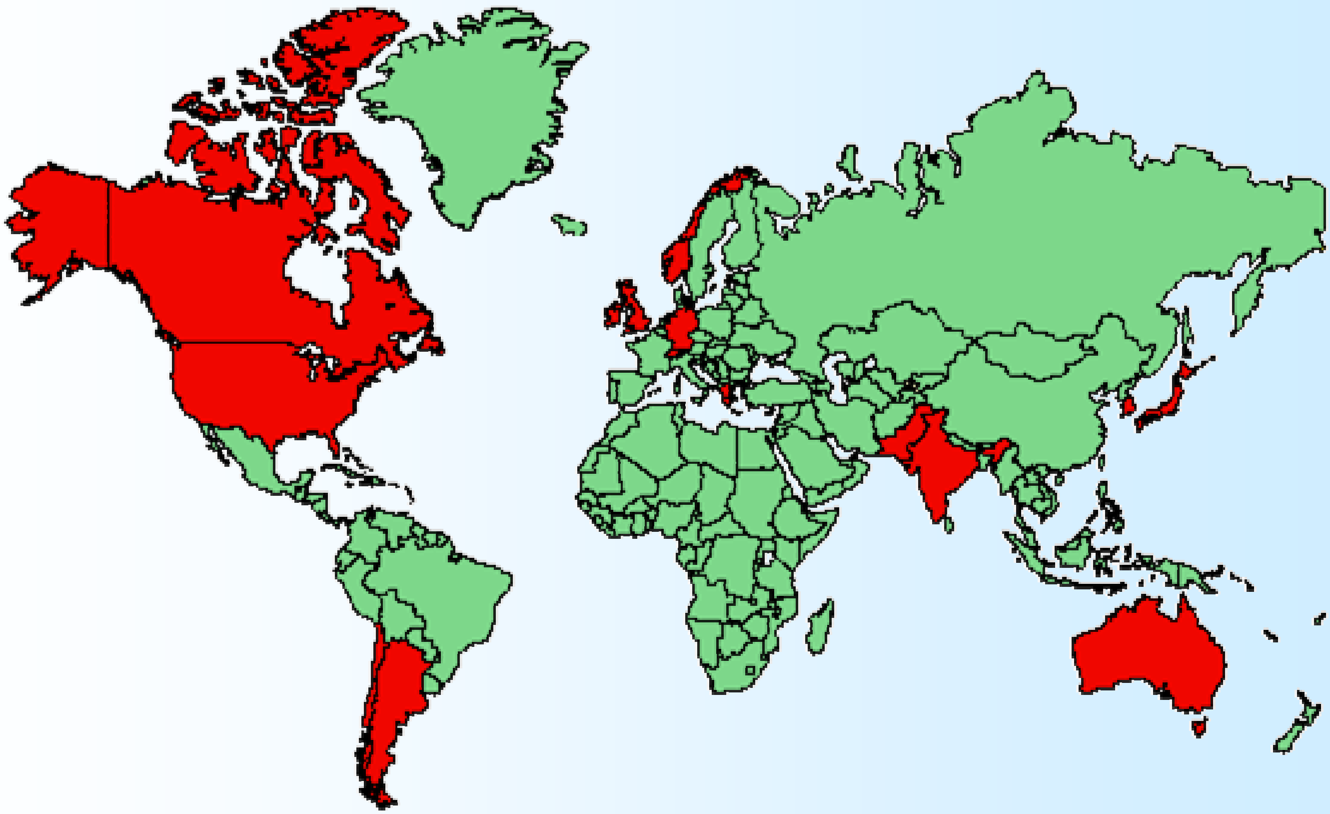
1960



Laws enacted in 1960 or before

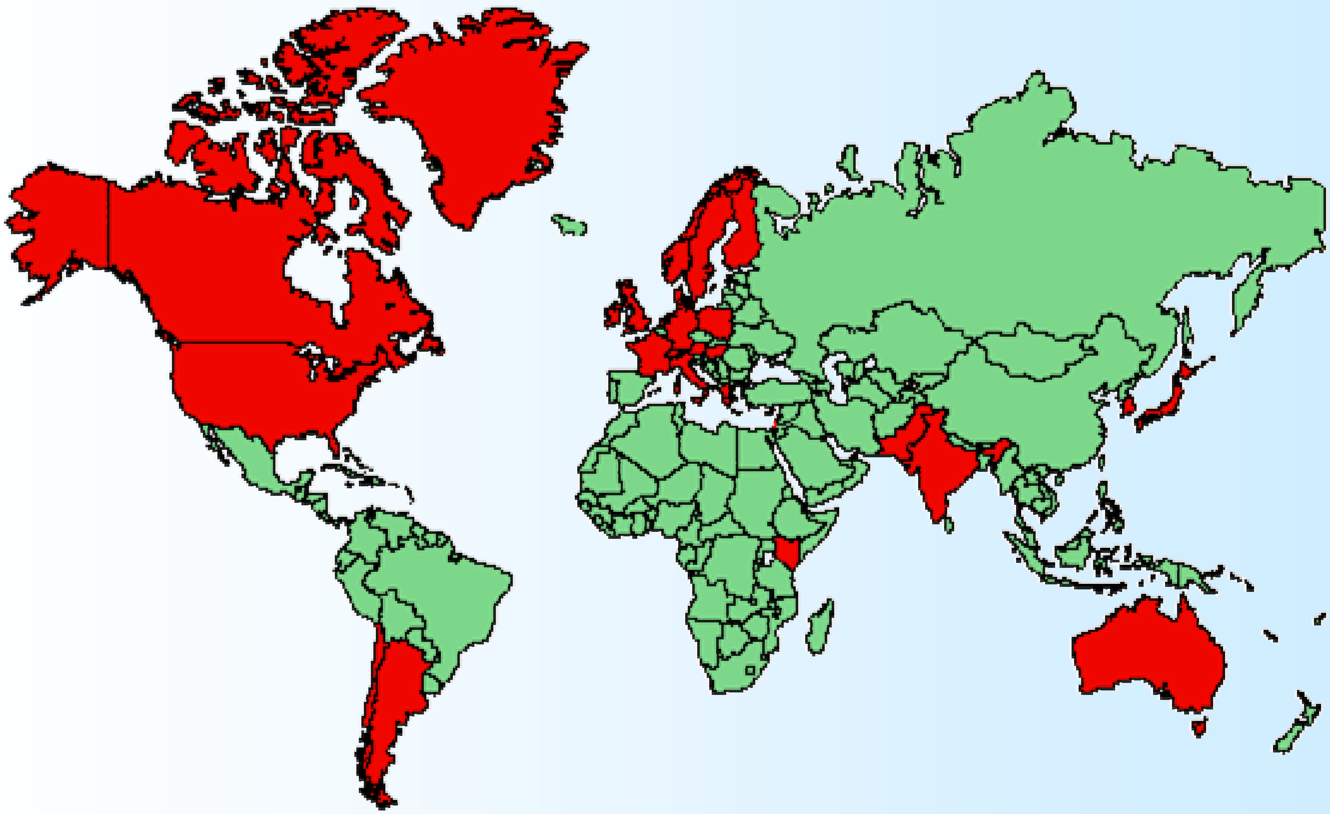
Note: EU introduced antitrust law in 1957

1980



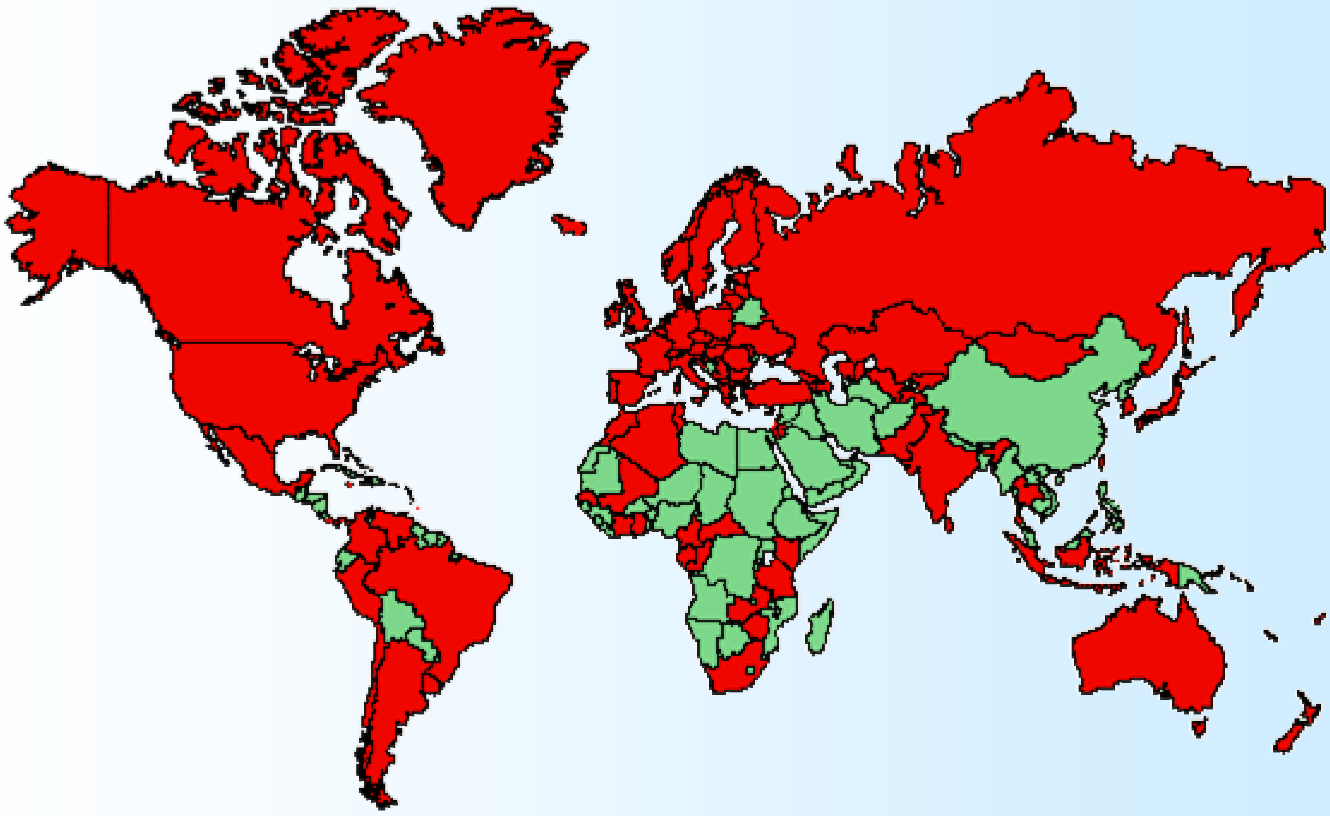
Laws enacted in 1980 or before

1990



Laws enacted in 1990 or before

Today

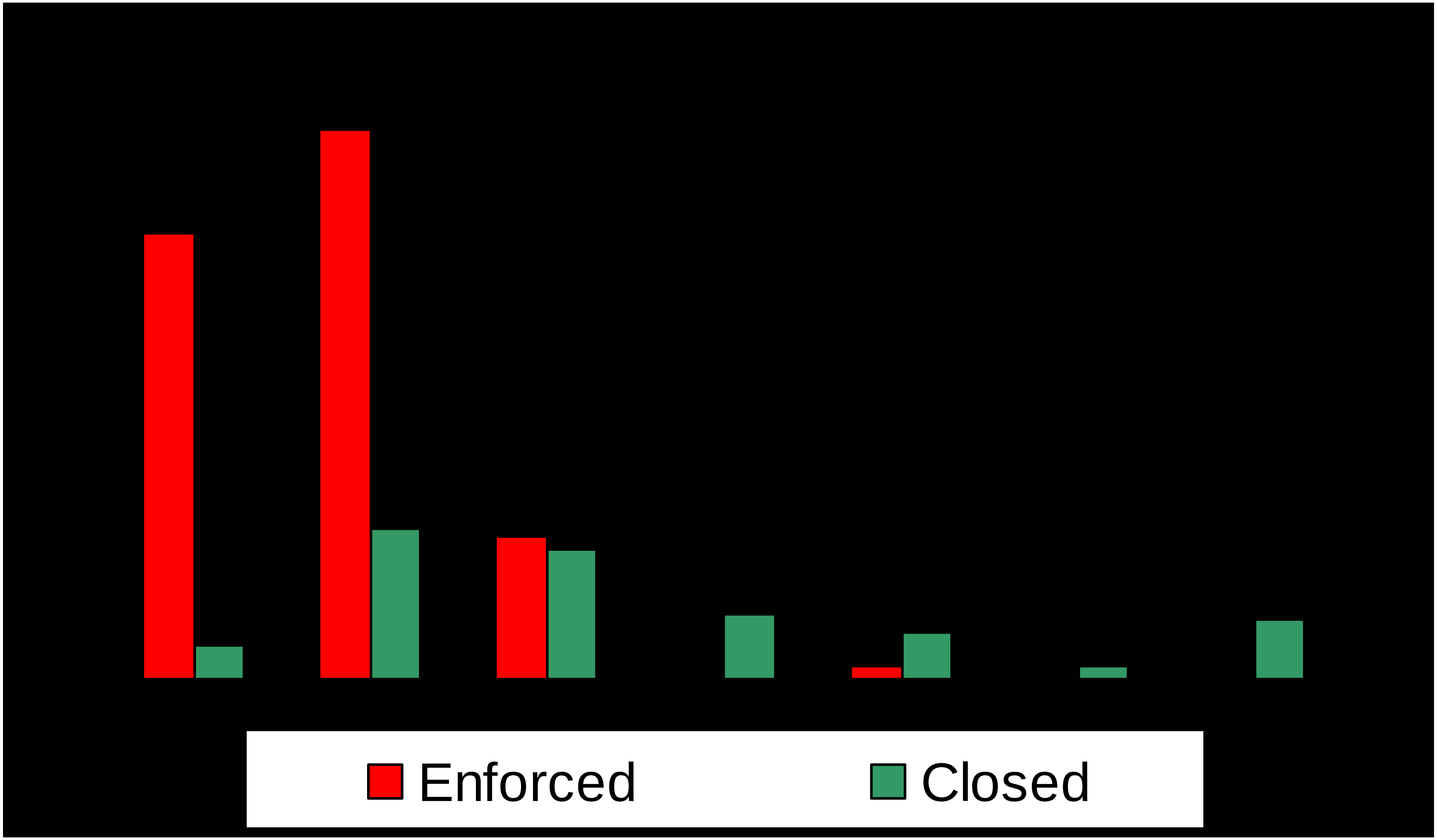


Laws enacted in 2004 or before

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?

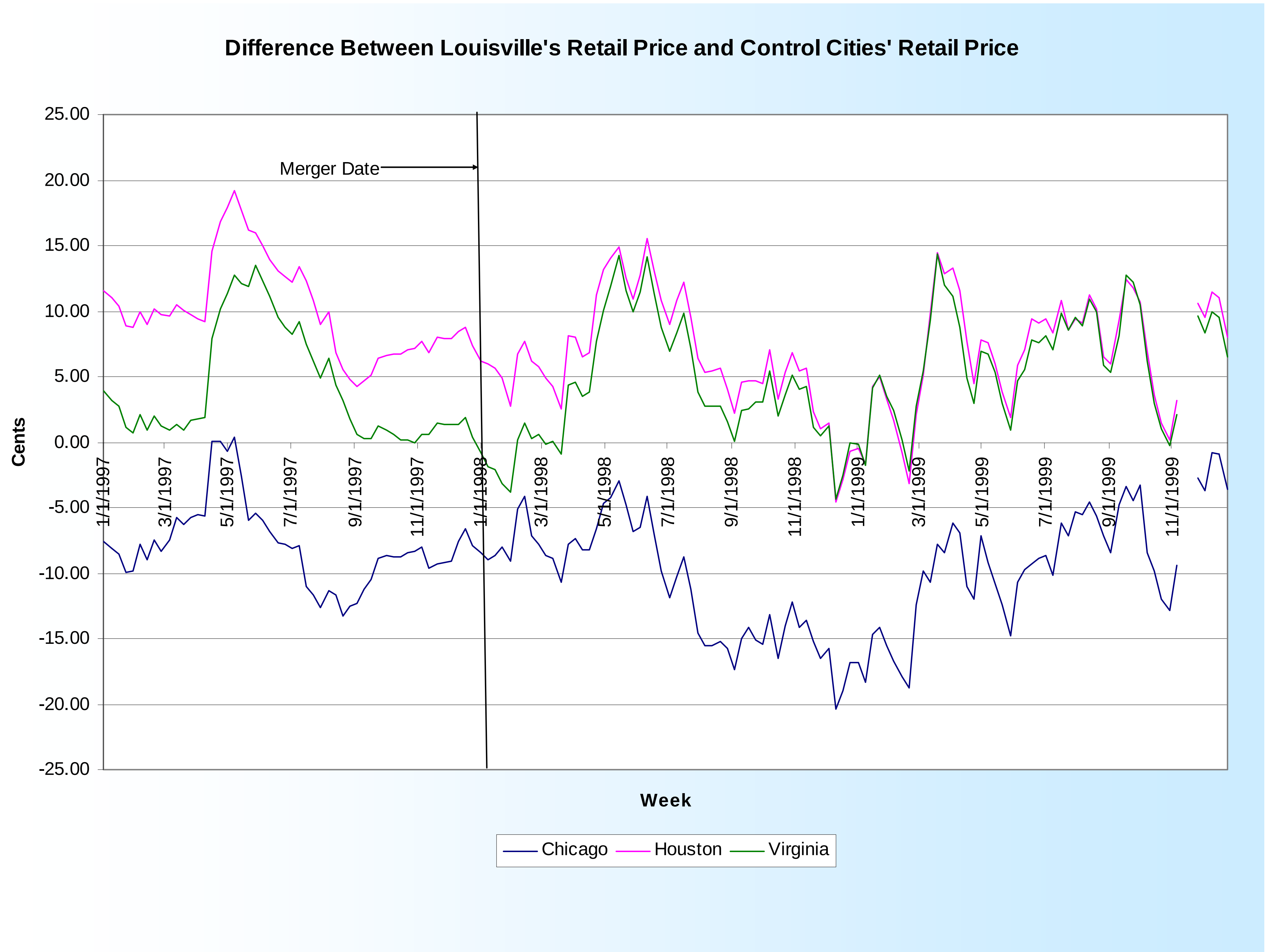
- BIG question: "Compared to what?"
  - Compared to "control" cities hit by the same demand and cost shocks
  - Economic Jargon: "Differences in Differences Estimation"
    - First difference: pre- vs. post-merger
    - Second difference: target vs. control cities

(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



Difference Between Louisville's Retail Price and Control Cities' Retail Price
Merger Date
Cents
25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
1/1/1997
3/1/1997
5/1/1997
7/1/1997
9/1/1997
11/1/1997
1/1/1998
3/1/1998
5/1/1998
7/1/1998
9/1/1998
11/1/1998
1/1/1999
3/1/1999
5/1/1999
7/1/1999
9/1/1999
11/1/1999
Week
Chicago
Houston
Virginia

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

- 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

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)

- Econometric Evidence:
  - Slade estimated reduced form retail price equations using panel data on beer types (e.g., bitter, mild, lager, stout). Prices computed for tied houses and free houses. Data span pre- and post-divestiture period.
  - Basic result: retail prices rose post-divestiture
- Non-econometric evidence
  - Foreclosure theory: Regional & local brewers lost share between 1989 & 1993 (Slade, 573). Their share should have increased if beer orders procompetitive
  - Note that small independent brewers opposed Beer Orders (Slade, 577). If foreclosure explained vertical integration, independents should have supported orders.

Beer Orders (cont'd)

- OFT (2000, p. 48) claim that retail prices and margins have increased since imposition of beer orders. This is consistent with Slade's econometric analysis.
- OFT did not attempt econometric analysis of the impact of pub divestitures