

Economics and Antitrust: Enforcement R&D

EARIE, Berlin, September 2, 2005

Luke Froeb

**Federal Trade Commission &
Vanderbilt University**

Acknowledgements

James Cooper, FTC

Russ Damtoft, FTC

Amit Gandhi, University of Chicago

Dan Hosken, FTC

Pauline Ippolito, FTC

Dan O'brien, FTC

Joe Mulholland, FTC

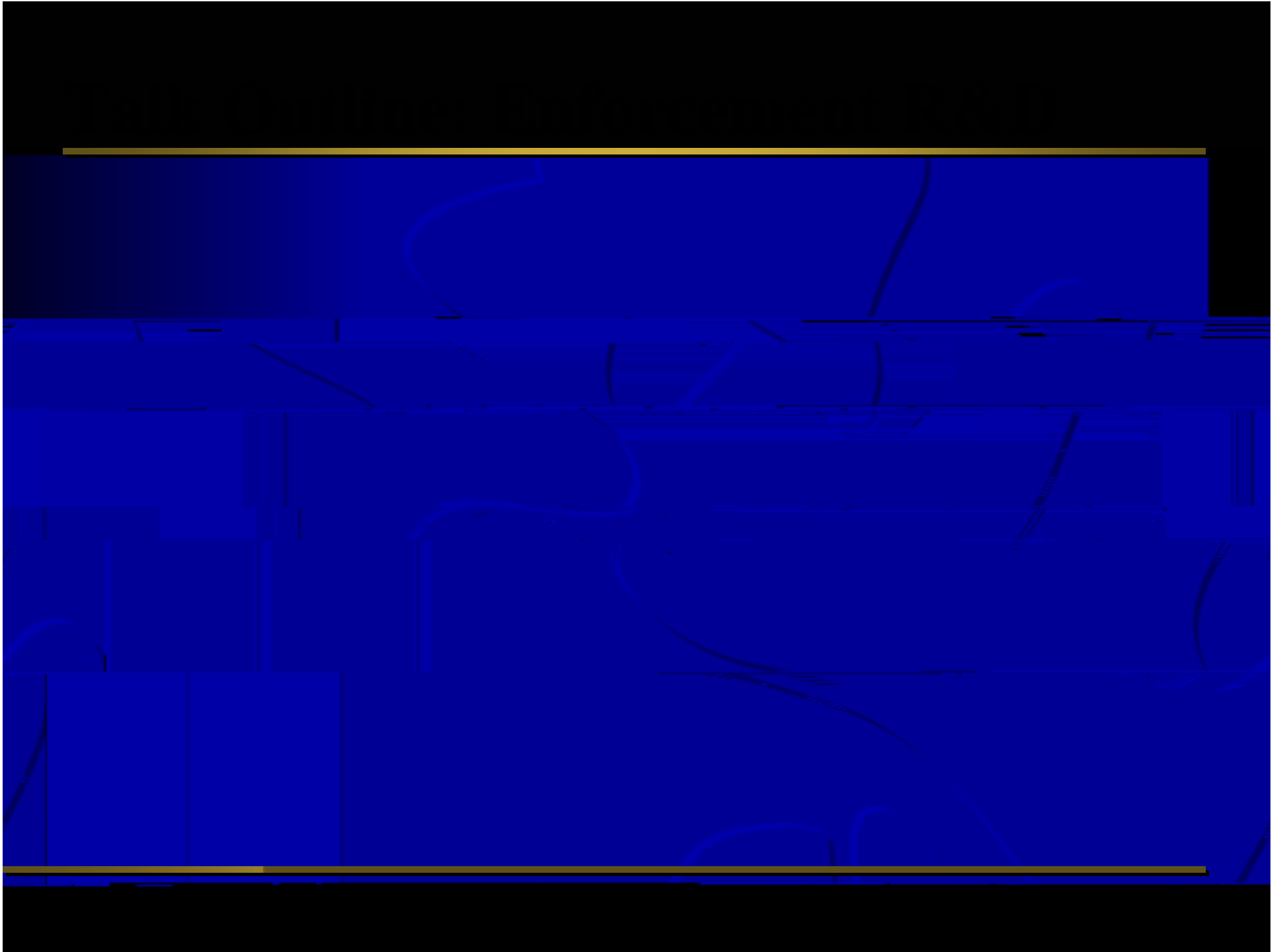
John Parisi, FTC

Jan Pappalardo, FTC

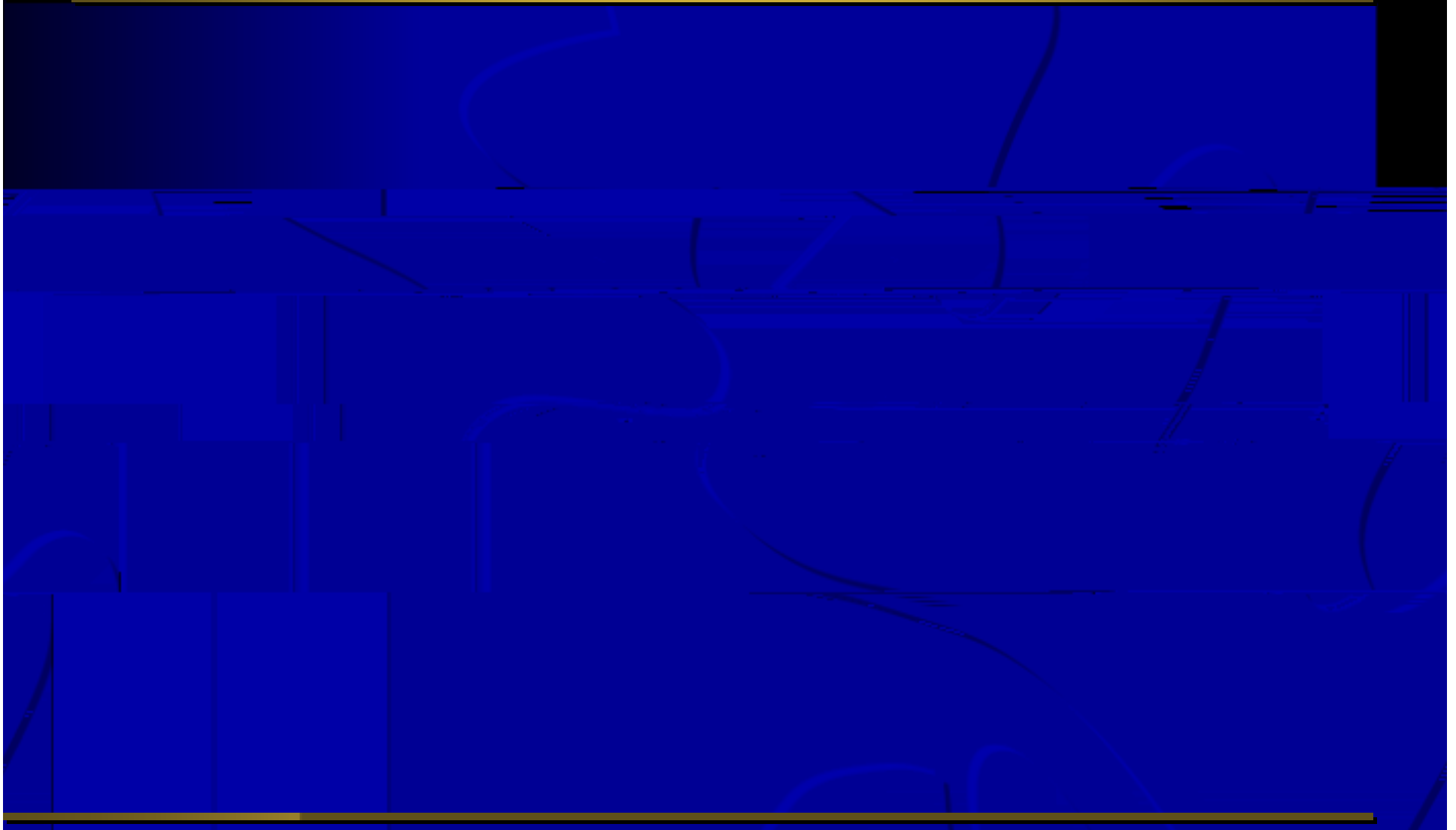
Chris Taylor, FTC

Mike Vita, FTC

Gregory Werden, US Department of Justice



Historic Opportunity for Economists





Horizontal Merger Questions

Backlash against structural models: “Do they fit the evidence?”

Bertrand, auctions, bargaining

Rise in reduced-form estimation

Staples-Office Depot (FTC)

Oracle-PeopleSoft (Justice)

How do we estimate consummated mergers?

Difference-in-difference estimators

Cons. Goods Merger Questions

What is effect of TPR's?

Hoarding by consumers elasticity bias

Aggregation bias across stores and time

What is role of promotion, seasonality?

What causes price variation?

Price discrimination?

Mixed strategy equilibrium?

How is equilibrium affected by merger?

Where is Academic Research Going?

Ever more precise methods for estimating demand, but...

What about supply?

BLP, now two-step estimation (auction, demand, dynamic) avoids computing equilibrium, but...

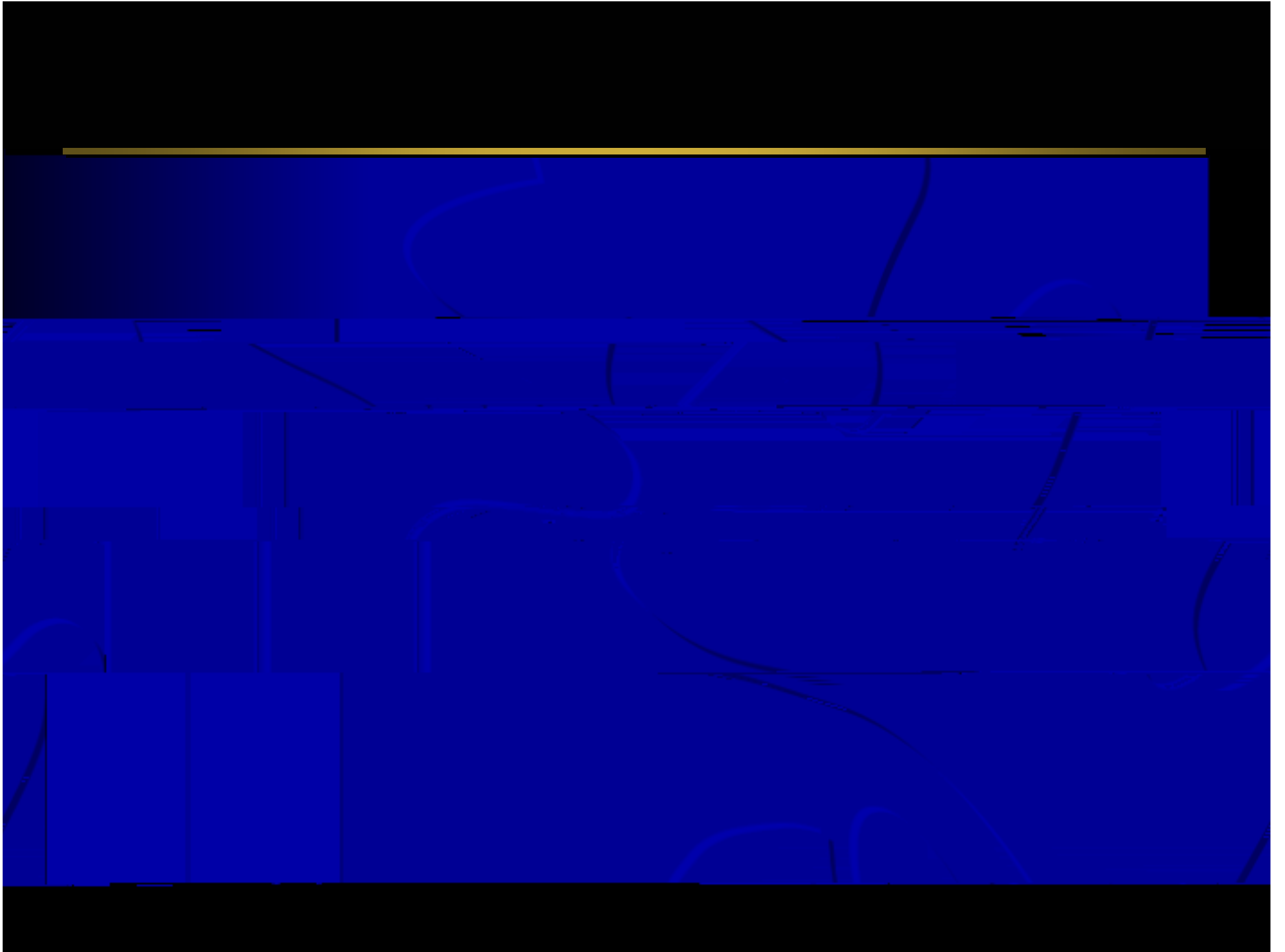
Equilibrium required for policy effects

Existence and uniqueness?

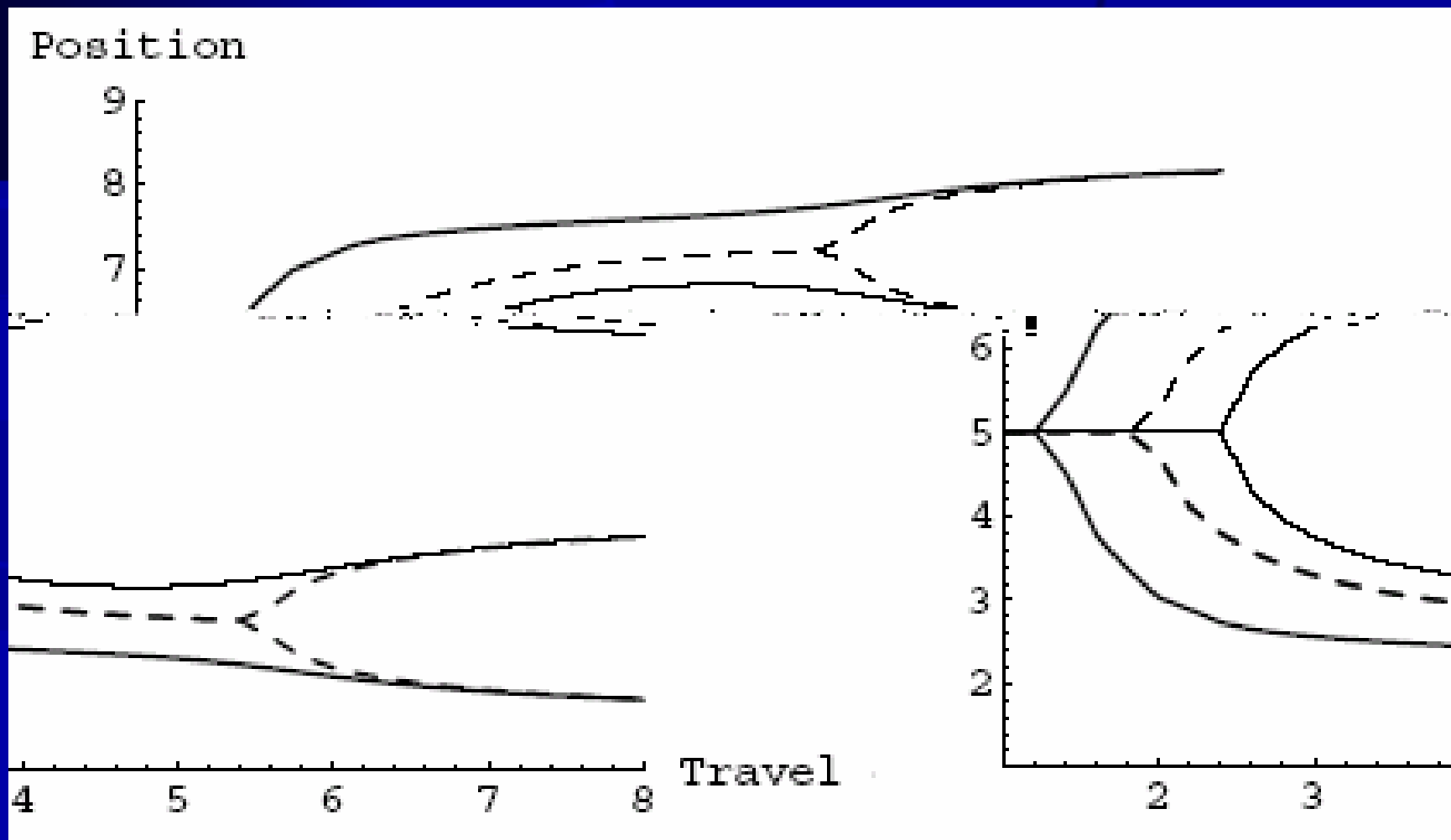
How do we model...

Advertising & Promotion?

Post-merger product repositioning?



Results: Merging Firms Move Apart



Results: Repositioning Lower Prices



Summary: Post Merger Repositioning

Merging firms move apart to avoid cannibalization, so less competition lost by merger.

Increased product “variety” increases welfare

Non merging firms are squeezed towards the middle of line

**Non merging firms do not gain as much,
Can even lose as a result of merger**

Bargaining

Theory: Nash axiomatic bargaining solution

Agreement “z” maximizes $(S1(z)-D1)*(S2(z)-D2)$

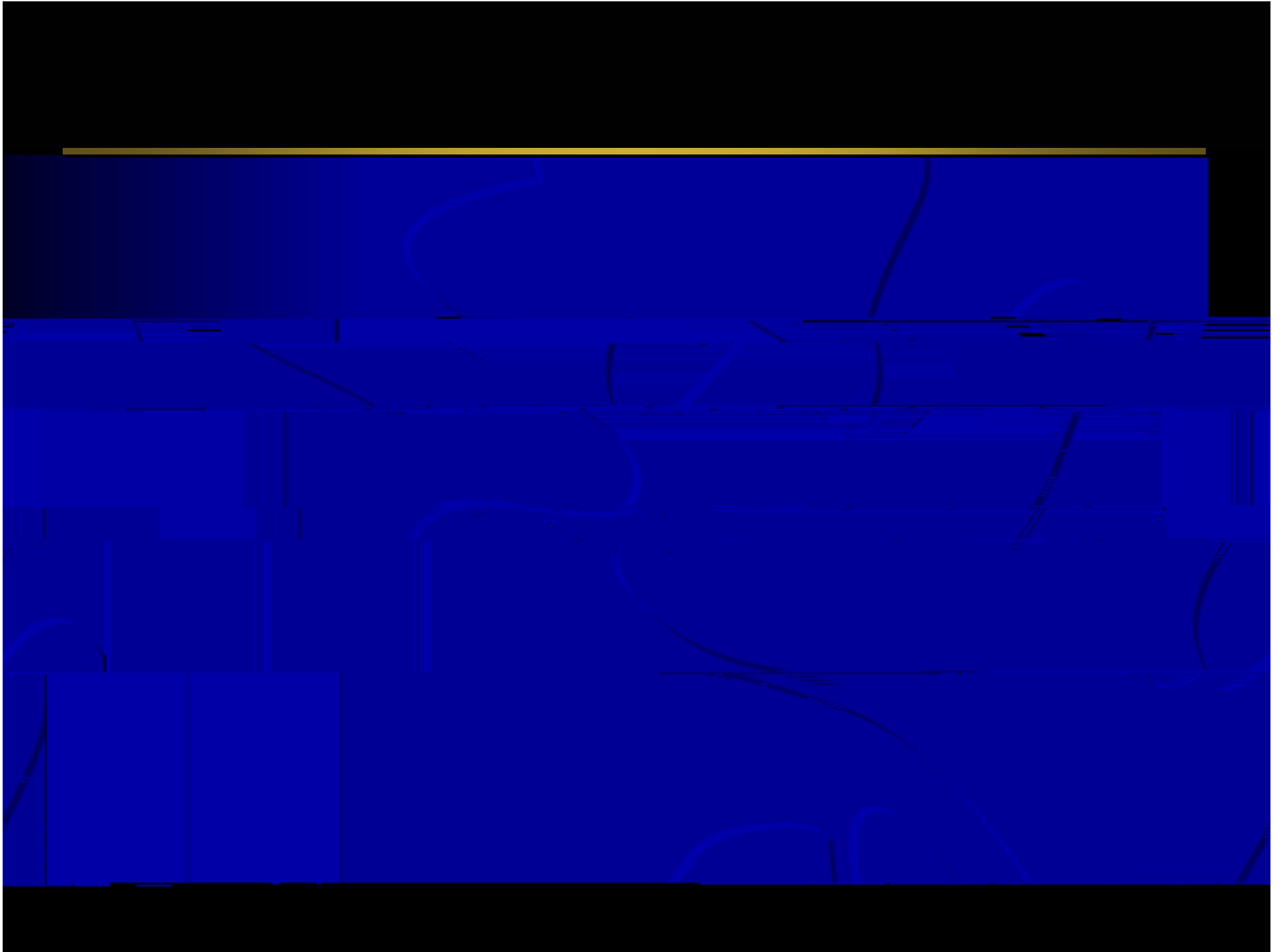
Anything that increases my opponents surplus, or reduces mine, increases my bargaining “power.”

Nash research program antitrust policy program

Competition Advocacy: “Any-willing-provider” (AWP) laws compel managed care plans to include any health care provider willing to accept the plan’s terms and conditions.

Reduces bargaining position of managed care plans, i.e., no threat to exclude them from network.

Threat of exclusion from network induces aggressive bidding by providers to be included.



Consummated Merger Estimation

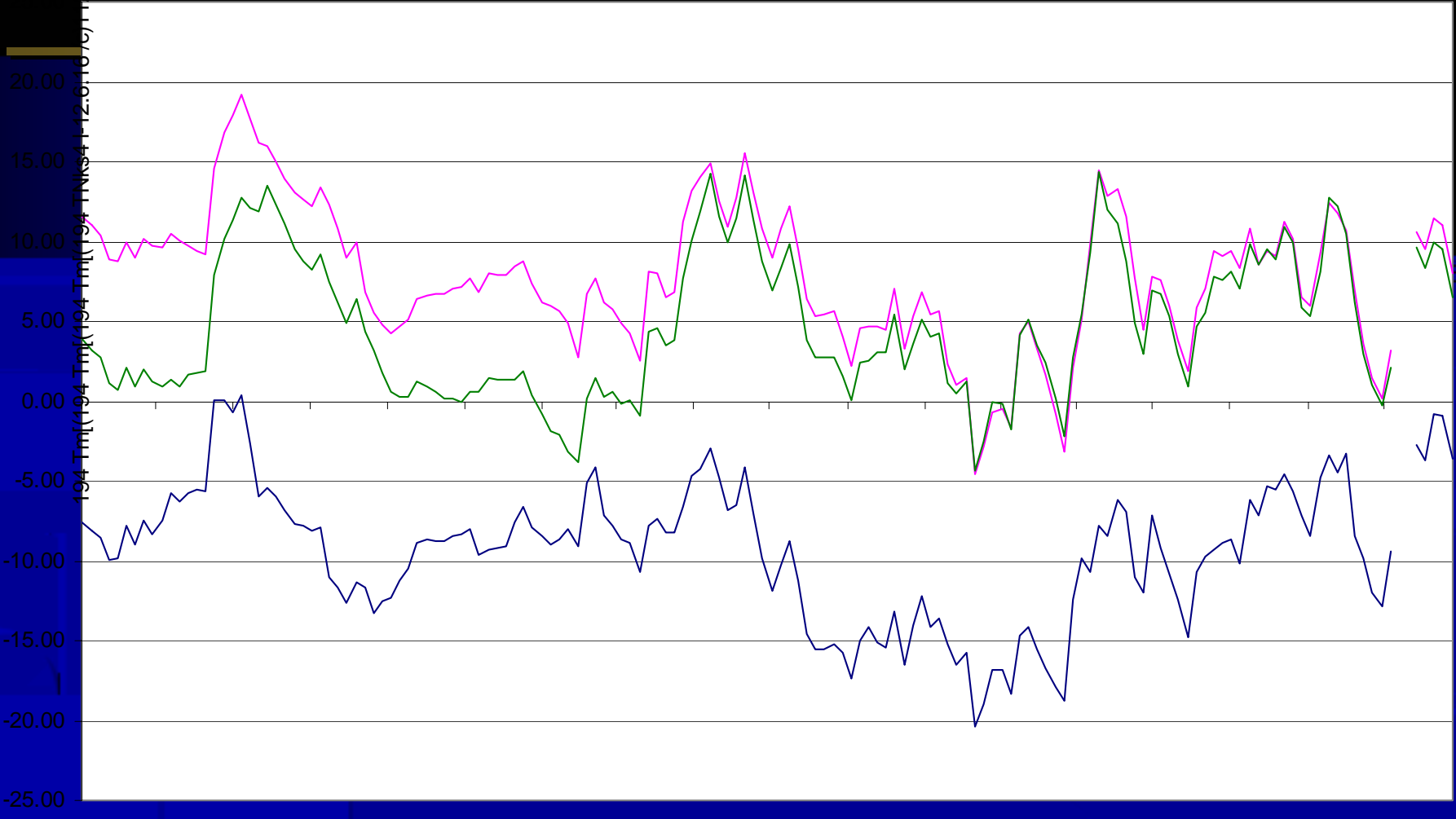
Marathon/Ashland oil refinery joint venture
change in HHI of about 800, to 2260

Isolated region

uses Reformulated Gas

Difficulty of arbitrage makes price effect possible

But prices did **NOT** increase relative to other
regions using similar type of gasoline



Monopolization Cases

“Cheap” exclusion vs. more traditional monopolization cases.

(1) cheap, (2) effective, and (3) inherently unlikely to generate plausible, cognizable efficiencies.

Orange book listings

Restrictions on others’ output by agreement (as in *South Carolina Board of Dentistry*¹)

Unilateral conduct (as in *Rambus* and *Unocal*).

Unocal, by deceiving CARB and the other refiners into adopting Unocal’s patented technology into a binding standard, acquired monopoly power

Why the Focus on “Cheap Exclusion”?

Economic theory:

Combining substitutes is bad

Combining complements is good

“Post Chicago” economists constructed theoretical examples of harm caused by

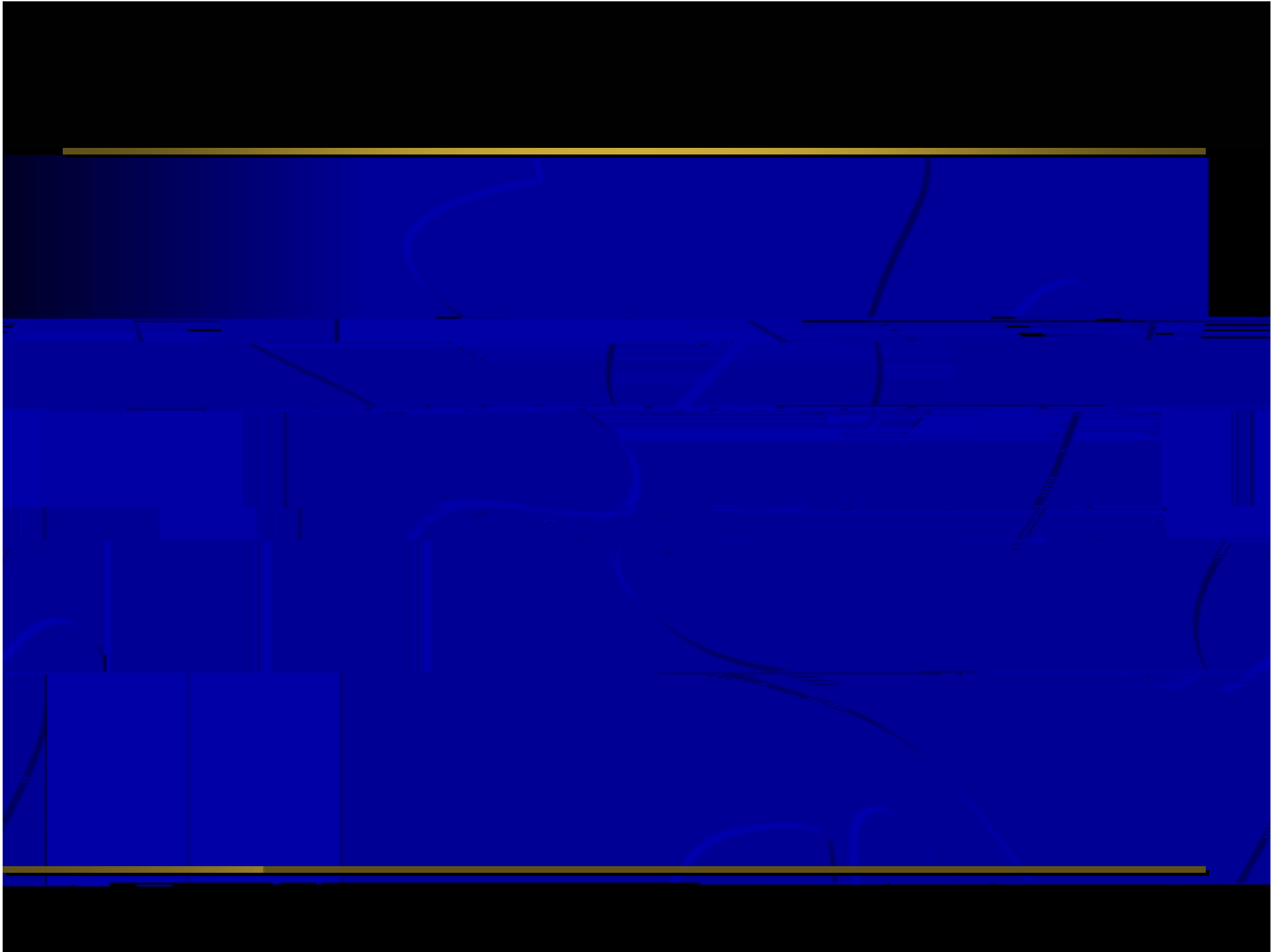
Raising Rivals’ Costs

Softening Competition

Multilateral Competition

Agency Theory

But what does the empirical evidence say?



Vertical Restraints Induce Provision of Demand-increasing services

Ippolito (1991) and Ippolito & Overstreet (1996)

Evidence of Anticompetitive Vertical Theories?

Various: Gilligan (1986) finds negative abnormal returns upstream when RPM contracts challenged.

Consistent with efficiency and manufacturer cartel.

Cable TV: Ford and Jackson (1997) find vertical integration small losses in consumer welfare (\$0.60 per subscriber per year).

Cable TV: Waterman and Weiss (1996) found that cable systems that owned pay movie channels were less likely to carry rival pay channels .
consistent both with pro- and anticompetitive behavior.

Gasoline: Hastings (2004) found rivals of acquired gas stations raised prices post-acquisition, but that the tendency to raise prices did *not* depend on the vertical structure of the rival station.

Price increase attributed to “branding” formerly “unbranded” retailers

Summary of Vertical Evidence

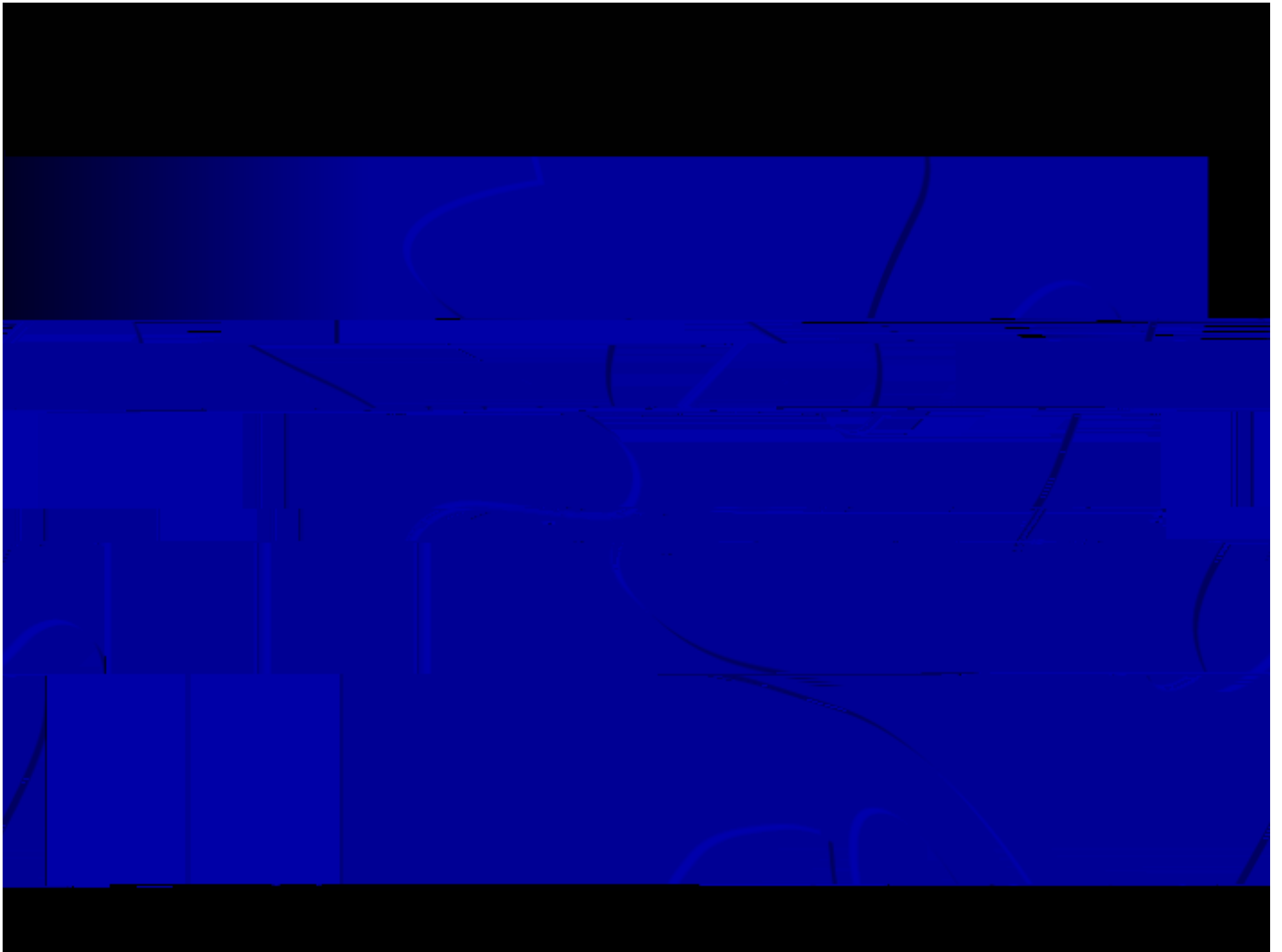
Most studies find evidence that vertical restraints or integration pro-competitive

This efficiency often attributable to elimination of double-markups

Studies also find evidence consistent with “dealer services” efficiencies

Evidence of anticompetitive uses of vertical controls generally ambiguous

Overall, difficult to find evidence that vertical controls reduce welfare



Property Rights & Rule of Law

Top twenty percent of countries...

per capita Income of \$23,450,

Growth 2.6 percent a year

Bottom twenty percent of countries...

per capita Income of \$2,560,

Negative growth: -0.9 percent a year