# The Influence of Economic Research on Antitrust Analysis

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<sup>\*</sup>The views expressed here are those of the author alone and do not necessarily represent the views of the Federal Trade Commission or any of the Commissioners.

### The Federal Trade Commission

- Established in 1914
- Mission: protect American consumers
  - Harm to competition
  - Deceptive or unfair practices
- Tools
  - Law enforcement (antitrust, consumer protection)
  - Policy advocacy
  - Research

# At the Beginning – early 1900s

- Recognition of need for a government agency to obtain and publicize information regarding the structure of our economy
  - 1903 creation of the Bureau of Corporations (in the Department of Commerce), the predecessor agency to the FTC
    - Had report-writing functions from its inception
  - FTC was originally conceived by President Woodrow Wilson to be a research body comprised of experts conducting economic reporting
    - Additional law enforcement and quasi-judicial roles of FTC were incorporated in what ultimately emerged from Congress as the Federal Trade Commission Act of 1914

#### FTC Act

- FTC Act of 1914
  - Included statutory provisions granting broad investigatory powers (Section 6 of the Act)
  - Imposed duties to conduct investigations for the President and the Congress
- These provisions still operate today
  - We continue to conduct 6(b) studies
  - Most studies are generated internally by the Commission or Commission staff
    - E.g., Patent Assertion Entities study (<a href="http://www.ftc.gov/sites/default/files/documents/federal register notices/2">http://www.ftc.gov/sites/default/files/documents/federal register notices/2</a> 013/10/131003paereportsfrn.pdf)
    - Hospital merger retrospectives
  - Congress continues to mandate that the FTC conduct certain studies
    - Pharmacy Benefit Managers: Ownership of Mail-Order Pharmacies (2005 report)
    - Authorized Generic Drugs: Short-Term Effects and Long-Term Impact (2011 report)
  - General mandate to conduct research

## **Early Reports**

- Were very detailed descriptions of the structure and business practices of a firm or industry
  - Fact intensive case studies
  - Akin to scholarship of the time but not of today
  - No stating of a hypothesis and empirically testing it
  - No analytical evaluation of some economic phenomenon common to several industries
- Often provided the basis for legislation aimed at resolving problems with business activity
  - The 1916 Report on Cooperation in American Export Trade
    - Concluded that individual U.S. exporters were forced to compete with foreign cartels in many foreign countries and that many of these cartels were financed by foreign governments
    - Was important to the passage of the "Webb-Pomerene Export Trade Act" in 1918
      which provided that associations conforming to the provisions of the Act would be
      exempt from prosecution under the antitrust laws
  - The 1918 Meat Packing Industry report
    - Focused on the alleged collusive or predatory actions of the "five great packers"
    - Eventually led to the Packers and Stockyards Act of 1921

## Early Reports – More Examples

- The *Utility Corporations* report
  - Contained 95 (!) volumes and was compiled between 1927 and 1935
  - Contributed to the passage of:
    - Public Utility Holding Company Act of 1935
    - Natural Gas Act of 1935
    - Securities and Exchange Act of 1934
    - Federal Power Act of 1935
- The Chain Stores report
  - Contained 33 volumes and took 4 years (1931-1934)
  - Lead to the passage of the Robinson-Patman Anti-Price Discrimination Act

### Research Mission and Activities

- Builds on and continues the FTC's long and illustrious history
- Goal is to advance knowledge so that we can do the best job possible at enforcement and advocacy
- We do this through:
  - Internal research where we have a very active program of both sponsored research and providing economists time to conduct their own self-directed research
    - Often published first in Bureau of Economics Working Paper Series
    - Published in academic journals
    - Data warehouse; cutting edge computing facility
  - Research seminar series weekly seminars where current academic research that is relevant to the antitrust or consumer protection missions is presented
  - Annual Microeconomics Conference
    - brings together researchers from universities and other government agencies to discuss antitrust, consumer protection, and policy issues that the economists in the FTC's Bureau of Economics encounter in their work.
    - provides an opportunity for scholars outside the FTC to gain a better understanding of the work of the FTC and the economic analysis conducted within the FTC's Bureau of Economics

### Research Mission and Activities, cont'd

#### Periodic Conferences

- Behavioral Economics and Consumer Policy
- Pharmaceutical Industry Roundtable
- Empirical IO Roundtable
- Home Mortgage Roundtable
- Merger Roundtable
- Internet Auctions Roundtable
- Lecture series on advances in economics
  - Econometric Techniques Aviv Nevo
  - Economic Insights from Internet Auctions: A Survey- Pat Bajari
  - Applied Dynamic Methods in Industrial Organization Pat Bajari
  - What's New in Econometrics Guido Imbens, Jeffrey Wooldridge
  - Berry-Levinsohn-Pakes model of demand Ariel Pakes and Steven Olley
  - Survey of Exclusive Contracts Dan O'Brien
- Cross-fertilization via personnel
  - Director
  - Visitors
  - Staff visits: CEA, Indiana U., UK Competition Commission,...

# Impacts of Research

- Interactions Between FTC and Academics
- Impacts of FTC Research

## Line of Business Program

- Detailed, highly disaggregated accounting data collected 1974-1977
- Several academic consulting economists worked with the data
  - F.M. Scherer studied R&D issues
  - Anita Benvignati studied international trade
  - Leonard Weiss studied market concentration

### Concentration-Profits Relationship

- Line-of-Business program collected detailed, highly disaggregated accounting data collected 1974-1977
- Allowed economists to examine the relationship between concentration and profits in more detail than had been possible previously
- The traditional positive relationship between concentration and profits that had seemed so robust in previous studies, did not appear robust when the better line-of-business data were analyzed.
- New analysis showed that if any relationship existed between profit and concentration it was not due to an enhanced probability of collusion but rather some other market feature such as large firm efficiency or market dominance.
- John Kwoka and David Ravenscraft, "Cooperation Versus Rivalry: Price-Cost Margins by Line of Business" BE working Paper #127 June 1985.

### Vertical Restraints Evaluation Project

- Sylvania decision (1977)
  - Rule of reason for non-price vertical restraints
- Debate over whether per se treatment should remain for vertical price restraints, i.e. resale price maintenance
- Beginning in 1978, the FTC undertook the Vertical Restraints Evaluation Project
  - To supplement the existing empirical literature
  - To provide a clearer understanding of the precise mechanisms by which vertical restraints can enhance or impede consumer welfare
  - To contribute to the larger debate over the appropriate legal treatment of vertical restraints
  - To improve the FTC's enforcement policy towards vertical restraints
- Hired Professors Richard Caves and Benjamin Klein to prepare protocols to assist in selection of both
  - the kinds of vertical restraints studies to be performed and
  - the cases that should be evaluated in impact evaluations
- The impact evaluations were conducted by academic economists
  - Involved considerable interaction between the economic consultants and the FTC staff
- Published in 1984 volume "Impact Evaluations of the Federal Trade Commission Vertical Restraints Cases"

#### Resale Price Maintenance

- Resale price maintenance treated as per se illegal.
- BE staff conducted empirical research on RPM throughout the 1980s and into the 1990s
  - Thomas Overstreet "Resale Price Maintenance: Economic Theories and Empirical Evidence," November , 1983
  - Pauline Ippolito "Resale Price Maintenance: Economic Evidence from Litigation" April, 1988
  - Pauline Ippolito and Thomas Overstreet, "Resale Price Maintenance: An Economic Study of the FTC's Case against Corning Glass Works," January, 1994.
- FTC research cited by Supreme Court, as well as the parties in the 2007 *Leegin* decision that overturned the per se treatment of RPM that had been in place since 1911.

### **Health Care Markets**

- "Competition in the Health Care Sector: Past, Present, and Future
  - Conference and papers, 1977
  - Some of first research/thinking on competition in health care
  - Classic papers: Pauly, "Is Medical Care Different?"

### FTC Research Affects Antitrust Analysis: Raising Rivals' Costs

- FTC research developed the theory and provided a useful way to think about problems of unilateral market power
  - 1981 conference on predation and exclusivity restraints
  - led to Salop and Scheffman's 1983 BE Working Paper #83,
     "Raising Rivals' Costs" (as well as 2 other related BE working papers)

# Academic Research Influences Antitrust: Horizontal Merger Guidelines

- Are based on modern understanding of industrial organization
  - Movement from focus on structure (SCP paradigm) to focus on competitive effects (NEIO and beyond)
- Are revised periodically to incorporate advances in thinking
  - -1968
  - 1980 (modified in 1987 to incorporate efficiencies analysis specifically)
  - 2010 (reflects focus on competitive effects; diminished focus on market definition, structural presumptions)

# Industries with Long History of FTC Research: Pharmaceuticals

- 1958 report on Antibiotics Manufacture
- "Sales, Promotion, and Product Differentiation in Two Prescription Drug Markets: (1977) contained one of the initial descriptions of the "first-mover" advantage in the economic literature
- "Generic Substitution and Prescription Drug Prices: Economic Effects of State Drug Product Selection Laws" (1985)
- "The Pharmaceutical Industry: A Discussion of Competitive and Antitrust Issues in an Environment of Change" (1999)
- "Generic Drug Industry Dynamics" BE Working Paper 2002
- "Pharmacy Benefit Managers: Ownership of Mail-Order Pharmacies: A Federal Trade Commission Report (2005)
- "Emerging Health Care Issues: Follow-On Biologic Drug Competition: A Federal Trade Commission Report" (2009)
- "Pay-For-Delay: How Drug Company Pay-Offs Cost Consumers Billions: A Federal Trade Commission Staff Study" (January 2010)
- "Entry Threats and Pricing in the Generic Drug Industry" BE Working Paper 2010
- "Authorized Generic Drugs: Short-Term Effects and Long-Term Impact: A Federal Trade Commission Report" (2011)
- "Estimating the Effect of Entry on Generic Drug Prices Using Hatch-Waxman Exclusivity" BE Working Paper 2013

# Industries with Long History of FTC Research: Petroleum

- More than 20 reports from 1906-2007
  - 1952 report International Petroleum Cartel Study
  - 1970s and 1980s era reports on
    - California crude oil markets
    - · Offshore oil leasing
    - Alaskan oil export bans
    - Oil import tariffs as a source of government revenue
    - Petroleum Mergers

#### More recent research includes

- The Petroleum Industry: Mergers, Structural Change, And Antitrust Enforcement: A Report of the Staff of the Federal Trade Commission Bureau of Economics (2004)
- "The Economics of Price Zones and Territorial Restrictions in Gasoline Marketing" BE Working Paper 2004
- Gasoline Price Changes: The Dynamic of Supply, Demand, and Competition: A Federal Trade Commission Report (2005)
- FTC Investigation of Gasoline Price Manipulation and Post-Katrina Gasoline Price Increases: A Commission Report to Congress (Spring, 2006)
- Federal Trade Commission Report On Spring/Summer 2006 Nationwide Gasoline Price Increases (2007)
- "Vertical Relationships and Competition in Retail Gasoline Markets: Comment" BE Working Paper 2007
- "Retail Gasoline Pricing: What Do We Know?" BE Working Paper 2007
- "Edgeworth Price Cycles in Gasoline: Evidence from the U.S" BE Working Paper 2010
- "Asymmetric Pass-Through in U.S. Gasoline Prices" BE Working Paper 2010
- Federal Trade Commission Bureau of Economics: Gasoline Price Changes and the Petroleum Industry: An Update (September 2011)
- Merger Retrospectives
  - "The Economic Effects of the Marathon Ashland Joint Venture: The Importance of Industry Supply Shocks and Vertical Market Structure" BE Working Paper 2004
  - "Michigan Gasoline Pricing and the Marathon Ashland and Ultramar Diamond Shamrock Transaction" BE Working Paper 2005
  - "Petroleum Mergers and Competition in the Northeast United States" BE Working Paper 2010
  - "Merger Policy at the Margin: Western Refining's Acquisition of Giant Industries" BE Working Paper 2013

# Industries with Long History of FTC Research: Health Care

- Health care conference, 1977
- "Physician Control of Blue Shield Plans" 1978
- "Effects of Restrictions on Advertising and Commercial Practice in the Professions: The Case of Optometry" 1980
- "Competition Among Hospitals" 1987
- "The Effect of State Certificate of Need Laws on Hospital Costs" 1988
- "The Costs and Benefits of Professional Regulation" 1990
- "Economic Analysis in Health Care Antitrust" 1991
- "Hospital Market Structure, Hospital Competition, and Consumer Welfare: What Can the Evidence Tell Us?" 1994
- "Regulatory Restrictions on Selective Contracting: An Empirical Analysis of Any Willing Provider Regulations" 2001
- Commissioned papers by academics
- "For-Profit Status & Industry Evolution in Health Care Markets: Evidence from the Dialysis Industry" 2014
- "Market Structure as a Determinant of Patient Care Quality" 2014
- Multiple Merger Retrospectives ( next slide)

# Academic Research Influences Antitrust: Hospital Mergers

- Academic research provided the foundation for the FTC's current hospital merger enforcement program
  - Generally evidence built that mergers lead to price increases without corresponding efficiencies, even for not-forprofits
  - Specific modeling approaches
    - Robert Town and Gregory Vistnes "Hospital Competition in Networks," Journal of Health Economics, 2001
    - Capps C, Dranove D, Satterthwaite M. Competition and Market Power in Option Demand Markets. RAND Journal of Economics. 2003

#### FTC research on hospital mergers

- Michael Vita and Seth Sacher, "The Competitive Effects of Not-for-Profit Hospital Mergers: A Case Study," May 1999 BE Working Paper #226 (later published in Journal of Industrial Economics, 2001)
- Aileen Thompson, The Effect of Hospital Mergers on Inpatient Prices: A Case Study of the New Hanover-Cape Fear Transaction," January 2009, BE Working Paper #295 (later published, International Journal of the Economics of Business, 2011).
- Deborah Haas-Wilson and Christopher Garmon, "Two Hospital Mergers on Chicago's North Shore: A
  Retrospective Study" January 2009, BE Working Paper #294 (later published, International Journal of
  the Economics of Business, 2011).
- Steven Tenn, "The Price Effects of Hospital Mergers: A Case Study of the Sutter-Summit Transaction," November 2008, BE Working Paper #293 (later published, International Journal of the Economics of Business, 2011).
- David Balan and Patrick Romano, "A Retrospective Analysis of the Clinical Quality Effects of the Acquisition of Highland Park Hospital by Evanston Northwestern Healthcare," November 2010, BE Working Paper #307 (later published, International Journal of the Economics of Business, 2011).

### Conclusion

- The FTC has research as part of its core mission
- Antitrust practice has, and continues, to actively draw on advances in research
- The Bureau of Economics is an active contributor to advances in knowledge as well as an active consumer
- Economic thinking has become inextricably embedded in antitrust
  - Advances in economic thinking get incorporated, albeit with a lag
  - Ideas need to be proven and practical
- Antitrust is a real success story for the impact of economic research on real world practice
  - Not just an isolated one-time event, but ongoing receptiveness to advances
- Challenges
  - Vertical
  - Multilateral bargaining
  - Non-overlapping markets
  - Continuing to improve modeling of competitive effects, efficiencies