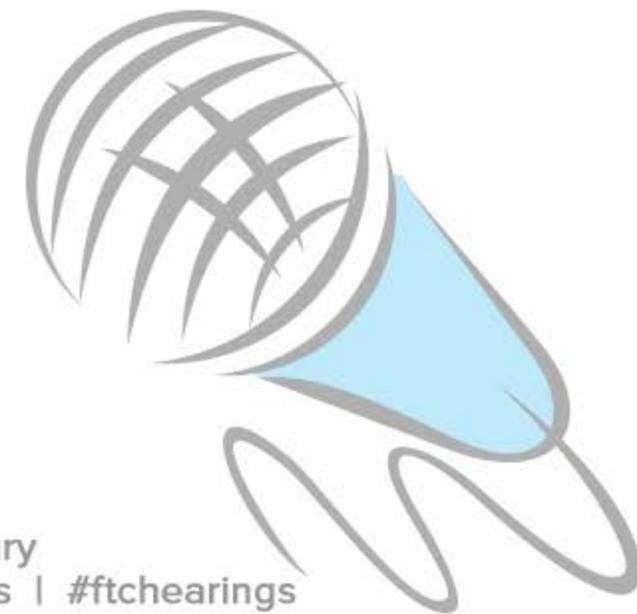


Hearing #3 on Competition and Consumer Protection in the 21st Century

George Mason University
Antonin Scalia Law School
October 17, 2018



Welcome

Derek W. Moore

Federal Trade Commission
Office of Policy Planning



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFNs

Session moderated by:

Ian R. Conner
Federal Trade Commission
Bureau of Competition



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFNs

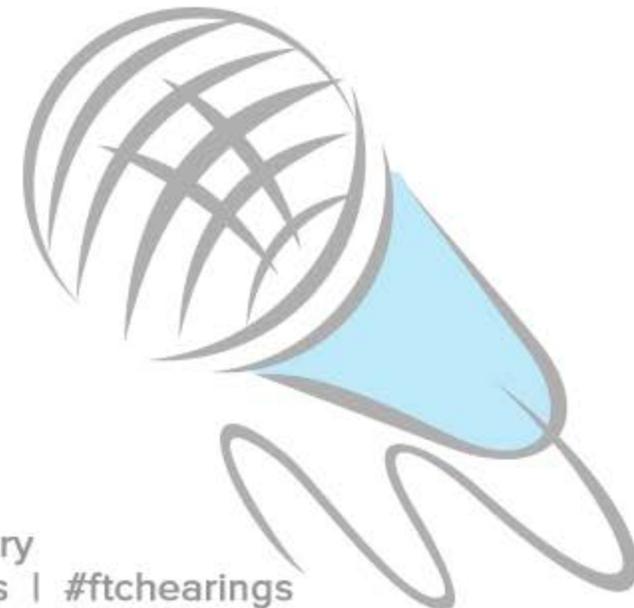
Richard L. Schmalensee

Massachusetts Institute of Technology
Sloan School of Management



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFNs

Thomas P. Brown
Paul Hastings LLP



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFNs

Susan Athey

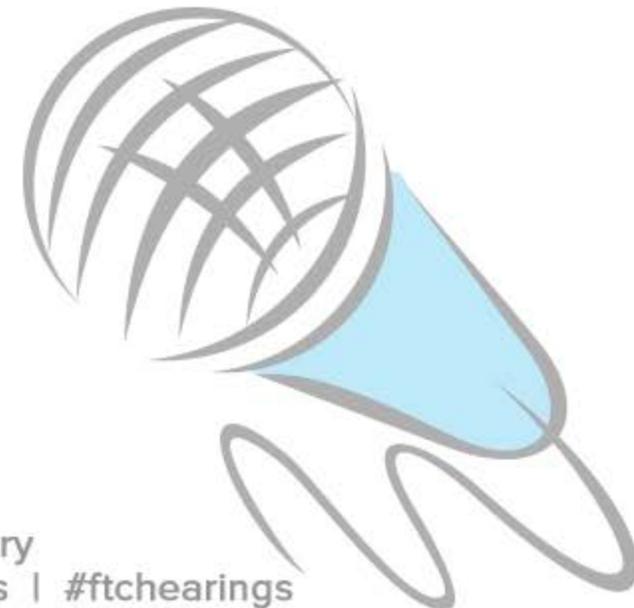
Stanford University

Graduate School of Business



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFNs

Judith A. Chevalier
Yale University
School of Management



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFNs

Pinar Akman

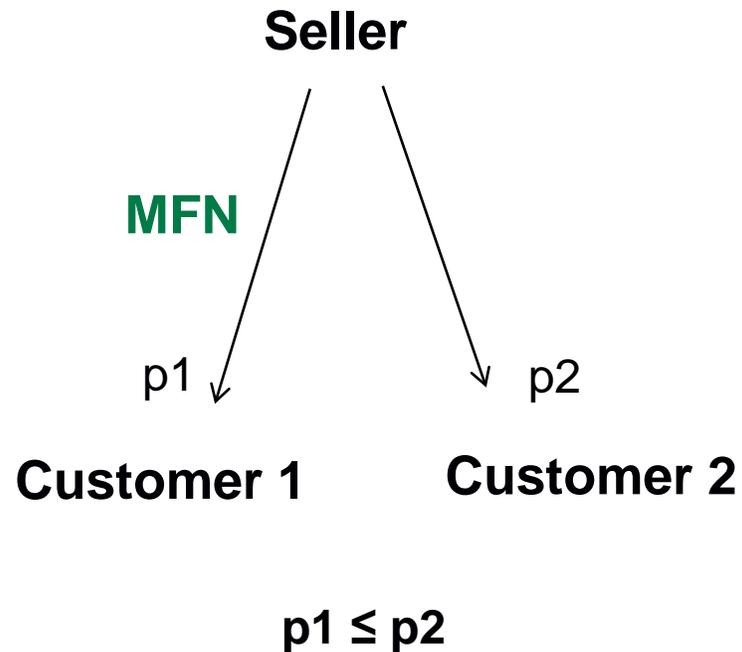
University of Leeds

School of Law



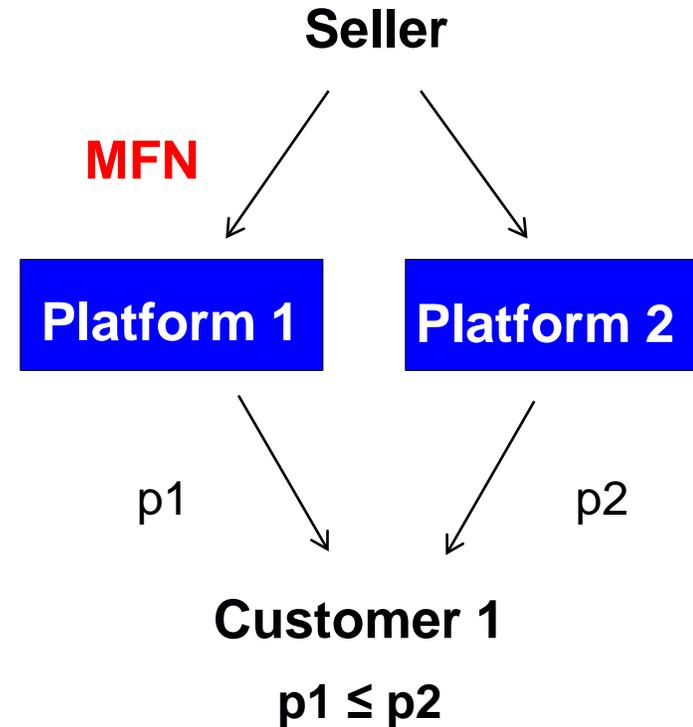
MFNs on multi-sided markets are closer to Price-Matching-Guarantees.

Regular MFN



Links prices between different customers of the same seller.

Platform MFN



Links prices for the same customer buying from different (competing) outlets.



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFNs

Panel Discussion

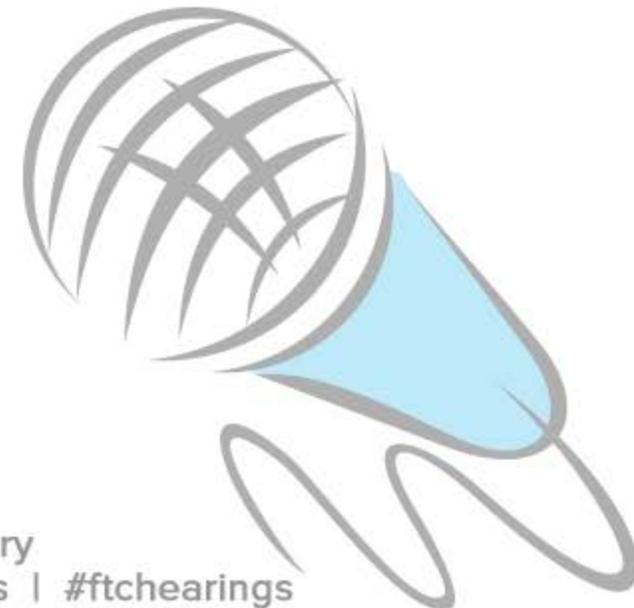
Pinar Akman, Susan Athey,
Thomas P. Brown, Judith A. Chevalier,
Richard L. Schmalensee

Moderator: Ian R. Conner



Break

10:45-10:55 am



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Issues Related to Vertically Integrated Platforms

Barbara Blank

Federal Trade Commission

Bureau of Competition



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Issues Related to Vertically Integrated Platforms

Amy Ray

Orrick, Herrington & Sutcliffe LLP



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Issues Related to Vertically Integrated Platforms

Hal Singer

Econ One Research



Vertical Integration and Exclusivity in Platform & Multi-Sided Markets

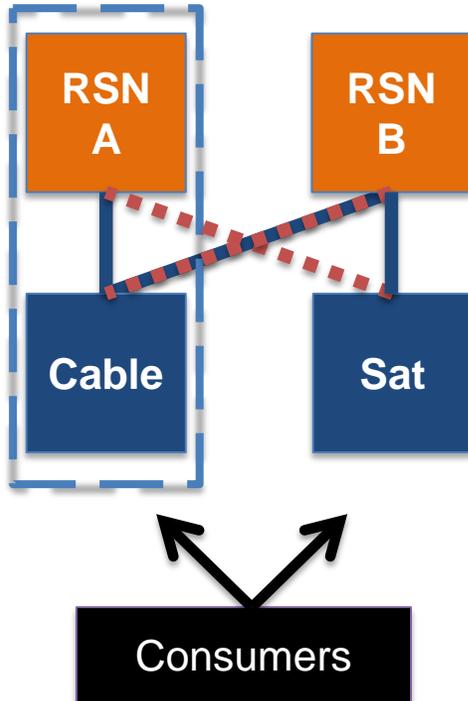
Robin S. Lee

Harvard University

Department of Economics



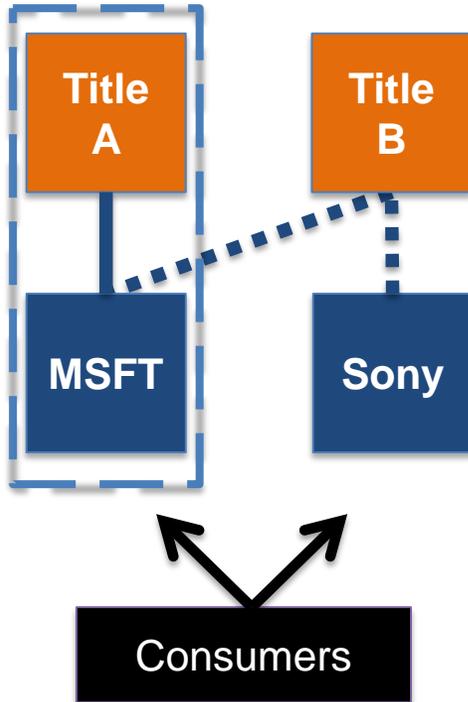
Welfare Effects of VI in Multichannel TV



- **Efficiencies:**
 - ~Dbl Marginalization, Alignment of Investment Incentives
- **Foreclosure:**
 - Downstream (exclusion, RRC), Upstream (Non-Carriage)
- Simulates Divestitures/Mergers of ~30 RSNs (2007)
 - When exclusion occurs, total/consumer welfare harmed
 - Even so, predicted efficiencies outweigh foreclosure effects *on average across channels*

G. Crawford, R. S. Lee, M. D. Whinston, A. Yurukoglu, "The Welfare Effects of Vertical Integration in Multichannel Television Markets," *Econometrica*, May 2018. <http://dx.doi.org/10.3982/ECTA14031>

VI/Exclusivity in Dynamic HW/SW Markets



- Finding: Exclusivity assisted “Entrant” HW platforms, fostering *platform* competition
 - Entrants needed to outbid/out-develop incumbent to obtain competitive advantage
 - (May have had adverse effects on *upstream* competition)
- Additional Considerations:
 - Consumer “multi-homing”
 - Strength of Network Effects

R. S. Lee, “Vertical Integration and Exclusivity in Platform and Two-Sided Markets,” *American Economic Review*, December 2013. <http://dx.doi.org/10.1257/aer.103.7.2960>

Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Issues Related to Vertically Integrated Platforms

Lesley Chiou

Occidental College

Department of Economics



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Issues Related to Vertically Integrated Platforms

Nicolas Petit

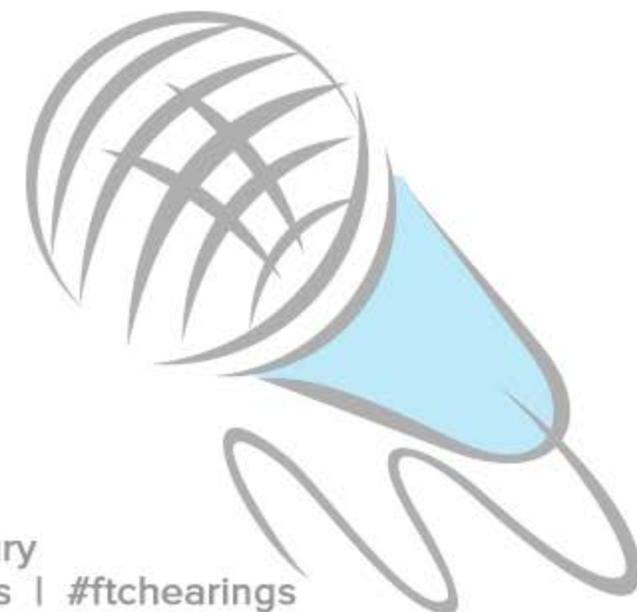
University of Liège School of Law



Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Issues Related to Vertically Integrated Platforms

Susan Creighton

Wilson Sonsini Goodrich & Rosati

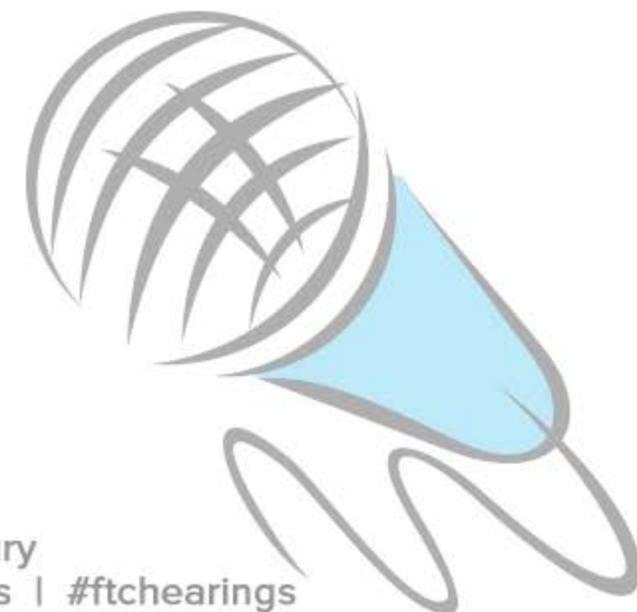


Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Issues Related to Vertically Integrated Platforms

Panel Discussion

Lesley Chiou, Susan Creighton,
Robin Lee, Nicolas Petit,
Amy Ray, Hal Singer

Moderator: Barbara Blank



Lunch Break

12:45-1:30 pm



Nascent Competition

Bilal Sayyed

Federal Trade Commission
Office of Policy Planning



Nascent Competition: Platforms and Market Structure

Susan Athey

Stanford University

Graduate School of Business



Questions and Concepts

- Do platforms tend towards monopoly?
- When are platforms profitable?
- Is it possible to enter and succeed against established incumbents?

- Platform economics
- Economies of scale
- Market structure & Profitability
 - Getting started
 - Scaling and growth
 - Horizontal v. vertical expansion
- Entry: the startup v. the incumbent
- Regulation and impact on society





How push-buttons-to-computers speed air travel reservations:



1. Passenger requests seat reservation by telephone as an operator at key computer from one of nearly 1,000 American Airlines agent positions serving more than 50 cities.

2. Agent places card listing all flights to AA destination specified by customer on display rack of desk size console, keys in number of seats and date requested, and presses "read" button...



3. Which is run over long-distance lines to SABRE computing center at Bristoll, N.Y., 30 miles south of New York City, for a seat on a specific flight.

American Airlines Defends Computer System

By Douglas B. Feaver
June 3, 1982

...the Justice Department was one month into a preliminary antitrust investigation to determine if "computerized scheduling and reservation services might have been manipulated" as to give a crucial advantage to the system operators, a Justice spokesman said.



• sends teletype messages to other airlines reporting space; follows up if no reply is received, and requests requests for space from other airlines.

• 11,000 requests for flight arrival and departure information.

• American's main offices, travel agents and key accounts.



1. Passenger requests seat reservation by telephone or in person at ticket counter from one of nearly 1,000 American Airlines agent positions serving more than 50 cities.
2. Agent places card listing all flights in AS (American Airlines) reservation specified by customer on display rack at desk size console, keys in number of seats and date requested and presses "read" button.

American Airlines Defends Computer System

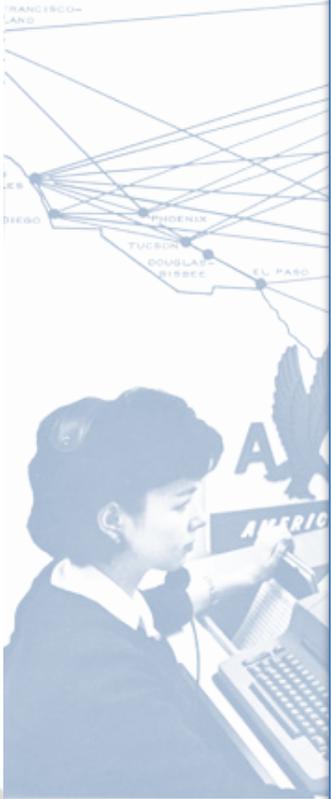
By Douglas B. Feaver
June 3, 1982

...

Crandall said that the best guarantee that the Sabre system does not unfairly favor American Airlines is the fact that travel agents buy the system, "so it must accurately represent what is available" on all airlines.

However, American builds what Crandall calls a "bias" into the computer program. For example, he said, if a potential customer wants to go to Chicago at 9 a.m., the travel agent asks Sabre for the flights. The first list on the terminal will include the best service, regardless of airline, but if American has a flight within 30 minutes of the desired time, and another airline is closer, American's flight is listed first.

American, he said, had invested \$110 million in Sabre and spends \$25 million annually to run it. It was built, he said, "with our dollars, at great risk."



Issues in Sabre Case

- Manipulation softened price competition and misled consumers, but was not sufficient to induce travel agents to switch systems.
- Manipulation probably led to exit of some low-cost airlines by making it less profitable to enter and compete against American.
- Counterfactual: Airlines must compete on price; low-cost airline is able to get a toe-hold and grow into a competitor.
- Vertical integration helped American airlines maintain profits.



Platforms, the supply side, and welfare

- Supermarkets sell generics at lower prices than branded products.
- Walmart ensures suppliers are competitive, low-margin.
- AirBnb ranks more highly hosts who respond quickly, maintain calendar availability.
- eBay rewards sellers with good feedback and who ship quickly.
- Price comparison engines facilitate consumer search, penalize obfuscation.
- Search engines demote irrelevant ads.
- Integration of security software into OS.



Threats to a Dominant Platform

- A more focused platform rival solves chicken and egg problem in a narrow category, steals share, and expands breadth.
- A service provider becomes so relevant to consumers that they connect directly with the provider and grows from there.
 - Amazon & Google search
 - YouTube & search
- Another intermediary aggregates a large set of consumers, can move them to another platform, shifting scale dynamics.
 - Large intermediary can extract rents
 - Google search & mobile OS, browser, etc.



Platforms and Disintermediation

Referring Service	Dependent Service	Examples
PC OS	Browser, Media Player, Search Engine, Apps	<ul style="list-style-type: none"> • Windows → IE v. Chrome • Apple → Safari
Mobile OS	Browser, Entertainment, Search Engine, Mapping, Key Apps	<ul style="list-style-type: none"> • Android → Search, Maps • All → Amazon shop, Kindle
App Store	Apps	
Browser	Search Engine, Other Services	<ul style="list-style-type: none"> • Chrome → Google Search
Search Engine	Vertical search, websites	<ul style="list-style-type: none"> • Google → Shopping, Maps, Finance...
Mobile Carrier	Mobile platform, pre-installed services/apps, search defaults	<ul style="list-style-type: none"> • AT&T → Apple v. Android; Navigation Services; TV
Social Network	Internet news media, social apps	<ul style="list-style-type: none"> • Facebook → News, Zynga
Ad Exchange	Publisher ad selling tools, Advertiser ad buying tools	<ul style="list-style-type: none"> • Google Ad Exchange → Google Ad Manager



Platform Responses to Existential Threat from Vertical Service

↑ WELFARE-ENHANCING RESPONSES

- Create a superior vertical service to compete with threat
- Create a better platform to ensure that:
 - Consumers don't bypass platform
 - Vertical service can't grow into full-fledged platform competitor

↓ WELFARE-HARMING RESPONSES

- Make or buy an adequate vertical service
 - Promote/advantage it to take away customers from competing vertical services
- When is this particularly harmful?
 - Innovative services
 - Scale-driven services
 - Services with network effects

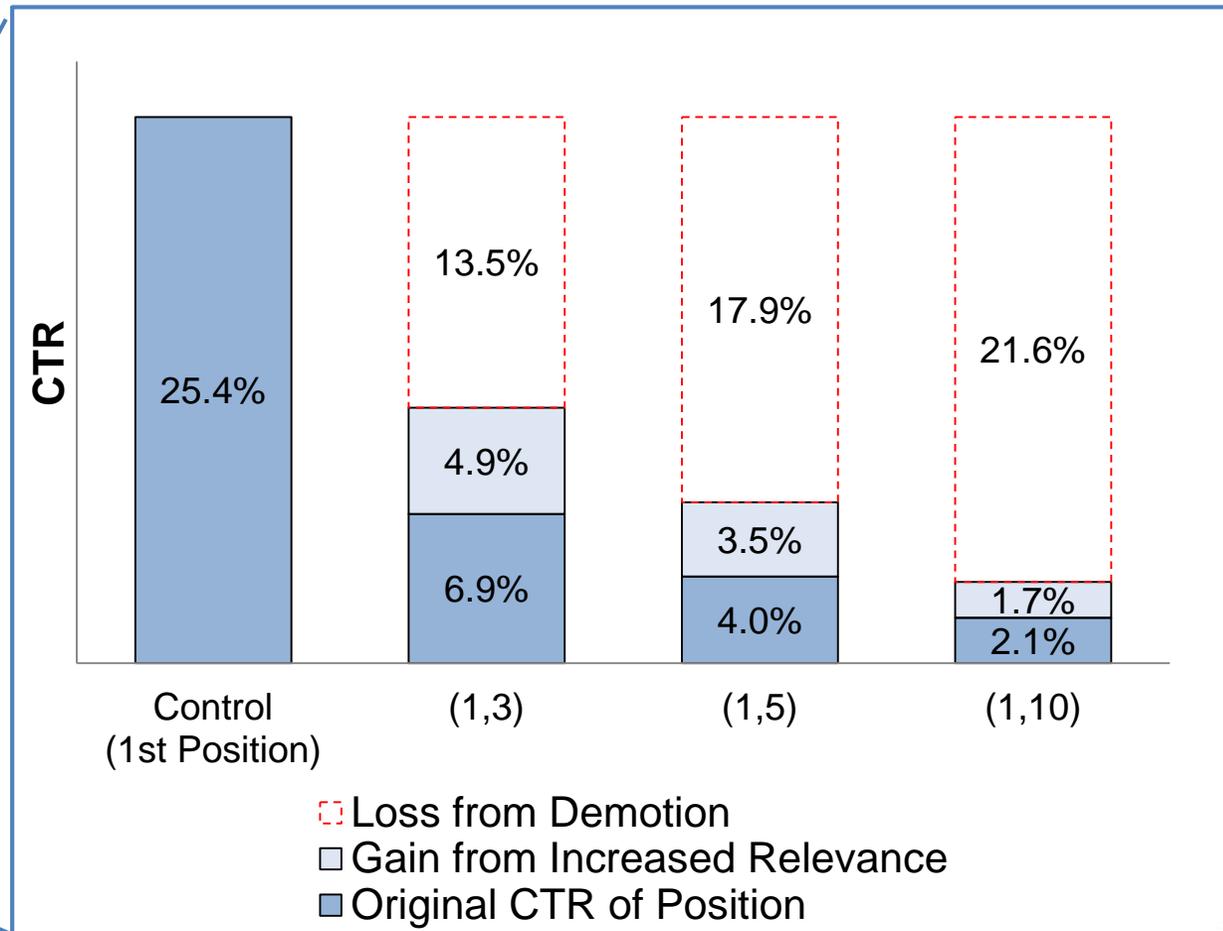


Dependence on Platforms

- Platforms get in between a firm and its consumers
- Consumers are very sensitive to the ranking and prominence of results

Randomized experiment at Bing shows firms **lose half their traffic when demoted from first to third position** in algorithmic search

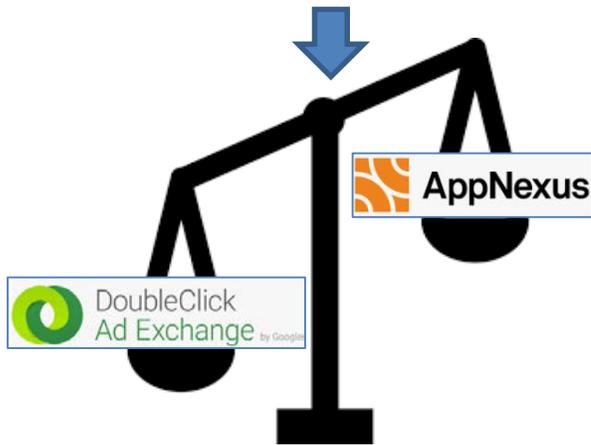
Platform dependence illustrated by the loss in CTR from page position demotion



Vertical Manipulation in Ad Tech

Google

DoubleClick
for Publishers



Google Removes Its 'Last-Look' Auction Advantage

by Sarah Sluis / Friday, March 31st, 2017 – 12:34 pm



...

Previously, AdX would wait for all those other exchanges to submit their bids, and then give itself a chance to outbid the winner. So if Google's exchange had two bids of \$1 and \$5, it would be able to beat a \$4 bid from an outside exchange. Under the new auction rules, it would submit a bid of \$1 (the second price) and lose the auction.

And Google will retain one additional advantage in the auction: [It knows more about the user than it passes on to the other exchanges.](#)

Example Threats by Platform Type

E-Commerce

- If consumers need to compare on search engines, ecommerce firms must yield most of profit back to search engines
- With sufficient competition, strong incentive to provide value proposition

Ridesharing

- Competitor rides the coattails of first mover's supply acquisition, takes advantage of user and supplier multi-homing
- Incumbent advantages in customer acquisition

OS

- New hardware format breaks consumer habits
- Niche general player solves chicken & egg, grows
- Consumers access services directly, don't care about OS

Search Engine

- OS, device, service sends searches to competing provider
- Combination of verticals have consumers bypass search
- Vertical competitor grows into horizontal one
- General competitor grows advertiser base sufficiently to compete for business deals
- General competitor gets enough scale to make high enough quality service to threaten consumer base

Social Network

- Consumers lose interest
- Alternative social network becomes popular
- Less threat from advertising side



Profitability, Success, & Market Structure

- **How important are cross-side network effects?**
 - How differentiated are buyer needs/seller products in space, time, and product?
- **Is there room for platform differentiation on either or both sides?**
 - Network effects within niches
- **Multi-home on one or both sides of market**
 - Switching costs
- **How important is crowding?**
- **Other sources of scale economies**
 - ML in search & matching
 - Other R&D
- **Vertical v. Horizontal**
 - Easiest to grow/enter new market in a vertical
 - Horizontal vulnerable to competition from vertical players
 - Expand horizontally on buy side
- **Will the platform get cut out?**
 - Can someone aggregate buy or sell side, or can a single buyer or seller grow enough, to take their customers/suppliers and leave?
 - Do buyers and sellers develop relationship with one another, not platform?
 - Is the reputational information/matchmaking provided by platform valuable?
 - Is matching hard and time-sensitive?
 - Do sellers need platform's business, and thus respond to incentives to transact on platform?



Nascent and Potential Competition: The Current Analytical Framework

Paul T. Denis
Dechert LLP



Overview

- Definitional issues
- Nascent and potential competition concepts pervade the framework for U.S. antitrust merger analysis
- Filling out the framework



Definitional Issues

- Nascent competition
 - No formal legal definition
 - Suggests that competition is felt presently, but not yet fully realized; acquisition of nascent competitor extinguishes both current competition and the prospect for greater competition in the future
- Potential competition
 - Bifurcated concept as articulated by the courts
 - Perceived potential competition – present competitive effect based on prospect of future entry; acquisition of potential entrant leads to *reduction in current competition*
 - Actual potential competition – future competitive effect that likely would be felt from future entry; acquisition of potential entrants *prevents increase in competition* that otherwise would result



Nascent and Potential Competition Concepts Pervade Merger Analysis

- Determining the benchmark price in market definition/measurement
- Identification of market participants
- Assignment of market shares
- Measurement of market concentration
- Defining the competitive effect of concern
- Alternatives to traditional product market definition
- Entry

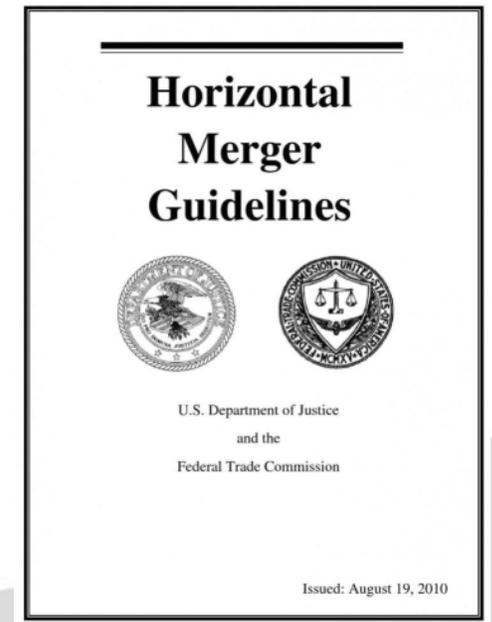
But asymmetric treatment persists – nascent and potential competition more readily recognized as a force to be protected than a force that protects against noncompetitive performance



Determining the Benchmark Price

- “If prices are likely to change absent the merger, e.g., because of innovation or entry, the Agencies may use anticipated future prices as the benchmark for the test.”

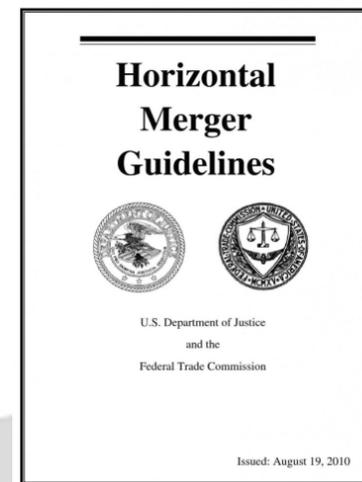
Horizontal Merger Guidelines (2010), Section 4.1.2



Identification of Market Participants

- New entrants – “Firms not currently earning revenues in the relevant market, but that have committed to entering the market in the near future, are also considered market participants.”
- Rapid entrants (a.k.a. uncommitted entrants) – “Firms that are not current producers in a relevant market, but that would very likely provide rapid supply responses with direct competitive impact in the event of a SSNIP, without incurring significant sunk costs, are also considered market participants.”

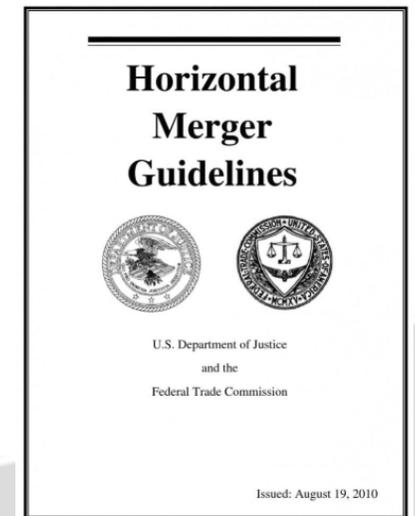
Horizontal Merger Guidelines (2010), Section 5.1



Assignment of Market Shares

- Incumbent shares may be adjusted based on market change – “The Agencies consider reasonably predictable effects of recent or ongoing changes in market conditions when calculating and interpreting market share data.”
- Shares of other market participants assigned based on future competitive significance – “The Agencies . . . calculate market shares for [firms that do not currently produce products in the relevant market] . . . if this can be done to reliably reflect their competitive significance.”

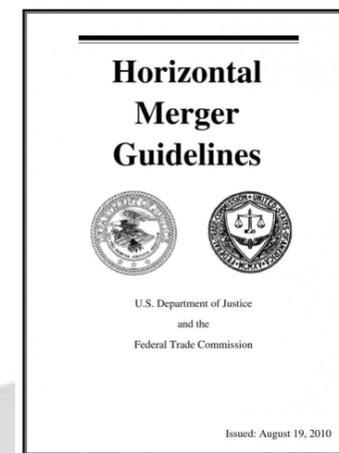
Horizontal Merger Guidelines (2010), Section 5.2



Measurement of Market Concentration

- Use of projected shares – “In analyzing mergers between an incumbent and a recent or potential entrant, to the extent the Agencies use the change in concentration to evaluate competitive effects, they will do so using projected market shares.”
- “A merger between an incumbent and a potential entrant can raise significant competitive concerns. The lessening of competition resulting from such a merger is more likely to be substantial, the larger is the market share of the incumbent, the greater is the competitive significance of the potential entrant, and the greater is the competitive threat posed by this potential entrant relative to others.”

Horizontal Merger Guidelines (2010), Section 5.3



Defining the Competitive Effect of Concern

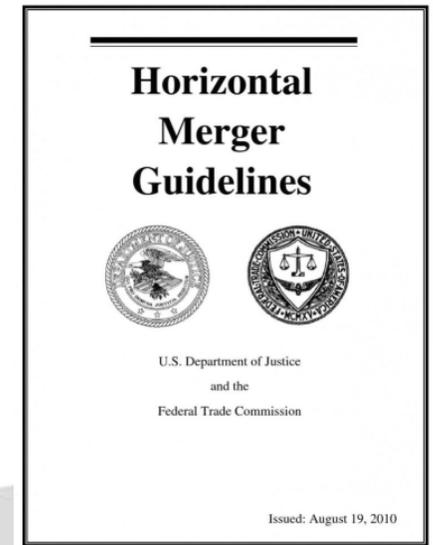
- Horizontal
- Potential competition
- Vertical



Competitive Effect of Concern - Horizontal

- Price effects
- Output effects - “enhanced market power also can be manifested in . . . reduced product quality, reduced product variety, reduced service or diminished innovation.”
- Innovation effects - a merger that “is likely to encourage one or more firms to . . . diminish innovation” is said to enhance market power

Horizontal Merger Guidelines (2010), Sections 1, 2.2.1

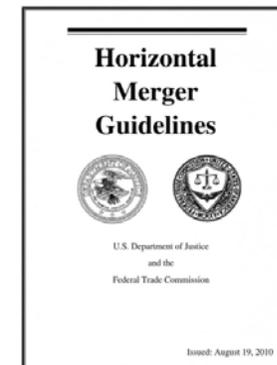


Competitive Effect of Concern – Horizontal – Innovation Effects

- Reduced incentive to continue with an existing product-development effort
- Reduced incentive to initiate development of new products
- Efficiencies analysis also considers “whether the merger is likely to enable innovation that would not otherwise take place, by bringing together complementary capabilities that cannot be otherwise combined or for some other merger-specific reason.”

Horizontal Merger Guidelines (2010), Section 6.4

- But there is yet no generalized theory of the link between innovation and either mergers or market structure more generally



Competitive Effect of Concern Potential Competition Doctrine

- Perceived potential competition – present competitive effect based on prospect of future entry
 - Accepted by the Supreme Court in *United States v. Marine Bancorporation*, 418 U.S. 602 (1974)
- Actual potential competition – future competitive effect that likely would be felt from future entry
 - Supreme Court has twice reserved on whether this states a claim in *United States v. Marine Bancorporation*, 418 U.S. 602 (1974) and *United States v. Falstaff Brewing Corp.*, 410 U.S. 526 (1973)



Competitive Effect of Concern – Perceived Potential Competition Doctrine

- Market structure – concentration or other structural evidence that entry likely would have procompetitive effect
- Uniqueness - acquired company is one of few comparable potential entrants
- Effect - perception of entry altered incumbent behavior



Competitive Effect of Concern – Actual Potential Competition Doctrine

- Market structure – concentration and other structural evidence that entry likely would have procompetitive effect
- Uniqueness -acquired company is one of few comparable potential entrants
- Plan - subjective intent to enter/objective evidence of capacity to enter
- Likelihood - substantial likelihood of procompetitive effect from entry
 - Elevated standard of proof – See, e.g., *In re BAT Industries*, 104 F.T.C. 852, 926-28 (1984) (“clear proof”)



Alternatives to Traditional Product Market Definition

- Innovation markets
- Technology markets
- R&D markets



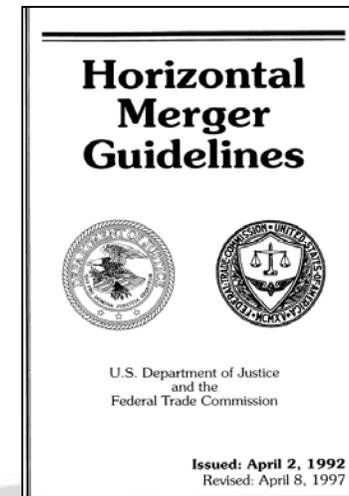
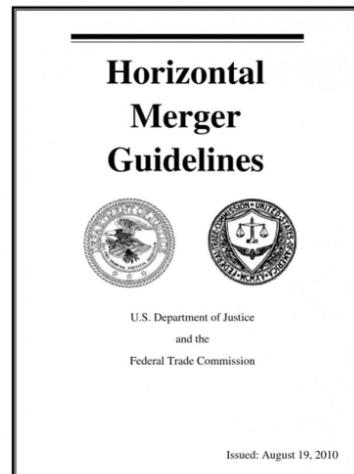
Filling Out the Framework

- Empirical foundation - limited empirically grounded economic analysis of the effects of nascent competition or its elimination
- Retrospective analysis – need for retrospective analysis of predictive tools
- Probability - no generally accepted threshold of what probability of success warrants consideration of nascent competition
- Temporal dimension
 - Absence of clear guidance on threshold applied by the agencies
 - How far out in time can we credibly project the success of nascent competitors?



Temporal Dimension of Effect from Nascent or Potential Competition

Category	2010 Guidelines	1992 Guidelines
Market Participants	“Committed to entering” in the “near future” or “rapid supply responses”	Supply responses likely to occur “within one year;” SSNIP assumed to last one year
Entry	Timely is “rapid enough to make unprofitable overall the actions causing [the competitive effect of concern]”	Timely is “two years from initial planning to significant market impact”



Nascent Competition: Is the Current Analytical Framework Sufficient?

Session moderated by:

Bilal Sayyed

Federal Trade Commission
Office of Policy Planning



Nascent Competition: Is the Current Analytical Framework Sufficient?

Lina M. Khan

Columbia University Law School



Nascent Competition: Is the Current Analytical Framework Sufficient?

John M. Newman

University of Memphis

Cecil C. Humphreys School of Law



Nascent Competition: Is the Current Analytical Framework Sufficient?

William P. Rogerson
Northwestern University
Department of Economics



Nascent Competition: Is the Current Analytical Framework Sufficient?

Steven Tadelis

University of California, Berkeley

Haas School of Business



Nascent Competition: Is the Current Analytical Framework Sufficient?

Willard K. Tom

Morgan, Lewis & Bockius LLP



Nascent Competition: Is the Current Analytical Framework Sufficient?

Susan Athey

Stanford University

Graduate School of Business



Nascent Competition: Is the Current Analytical Framework Sufficient?

Paul T. Denis
Dechert LLP



Nascent Competition: Is the Current Analytical Framework Sufficient?

Panel Discussion

Susan Athey, Paul T. Denis,
Lina M. Khan, John M. Newman,
William P. Rogerson, Steven Tadelis,
Willard K. Tom

Moderator: Bilal Sayyed



Break

3:20-3:30 pm



Nascent Competition: Are Current Levels of Enforcement Appropriate?

Session moderated by:

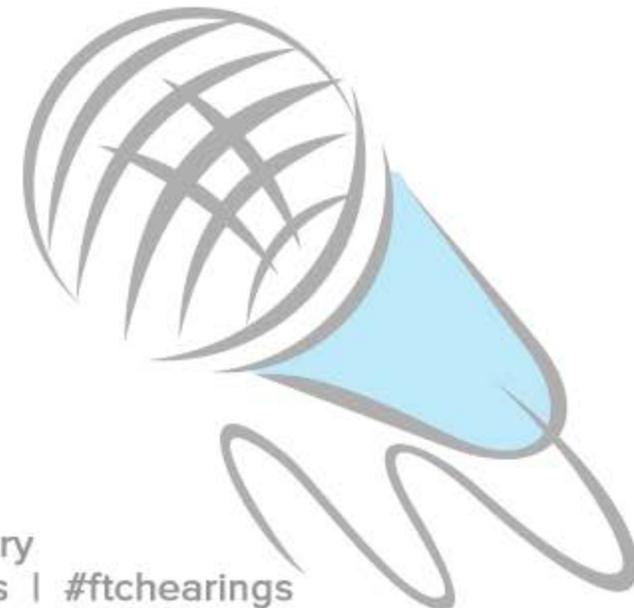
Stephanie Wilkinson

Federal Trade Commission
Office of Policy Planning



Nascent Competition: Are Current Levels of Enforcement Appropriate?

D. Daniel Sokol
University of Florida
Levin College of Law



Background

- Nascent competitors
 - Nascent competitors (e.g., Facebook/Instagram)
 - Nascent markets (e.g., Google/AdMob)
- Does the current legal framework for mergers work
 - Yes
 - Proof - Empirical studies



Understanding the Entrepreneurial Ecosystem

- Nature of Venture Capital Funds and how they are different from other investment
 - High risk
 - Portfolio of companies
 - Issues of management team, scalability, markets
 - Entrepreneurial exit
 - Changing VC ecosystem (rise of Chinese VC and Chinese online platforms)
- Corporate Venture Capital



Understanding Tech at the FTC

- Importance of a tech group at the FTC
 - Cannot model or do proper empirics without understanding technology
 - Institutional design matters
 - Placement as a unit within BE
 - Different tech specialization and experts needed (e.g., software different than medical devices!)
 - Revolving door with the tech community
 - Additional Model: President's Council of Advisors on Science and Technology
 - See also the CMA Data Unit



Nascent Competition: Are Current Levels of Enforcement Appropriate?

Diana Moss

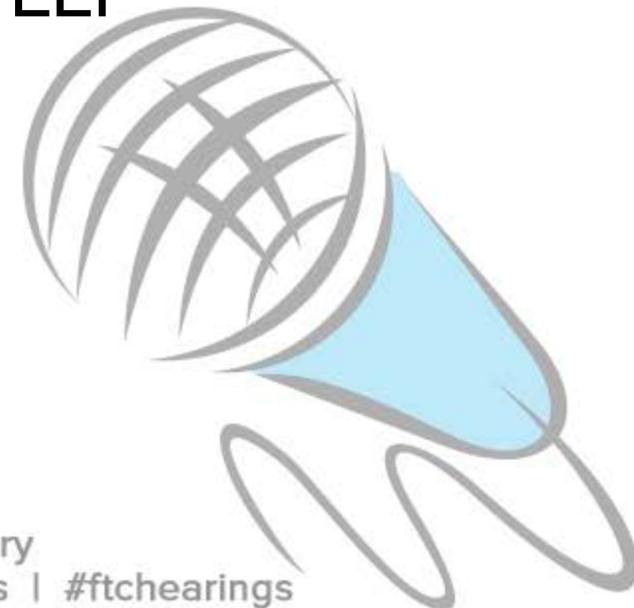
American Antitrust Institute



Nascent Competition: Are Current Levels of Enforcement Appropriate?

Jonathan Kanter

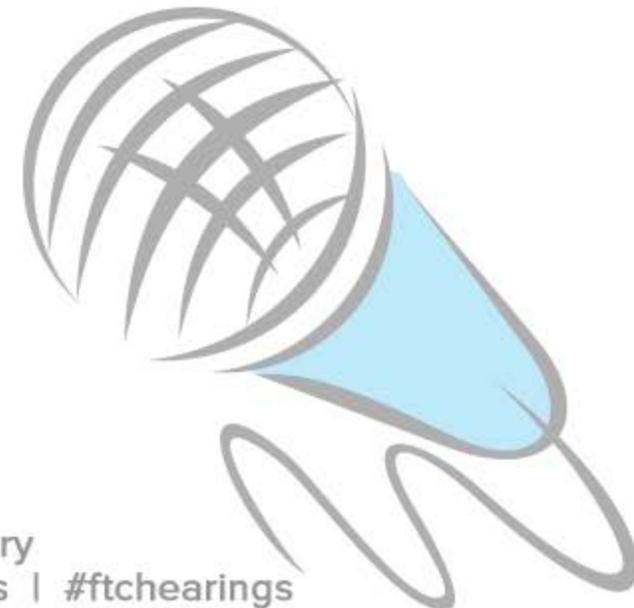
Paul, Weiss, Rifkind, Wharton & Garrison LLP



Nascent Competition: Are Current Levels of Enforcement Appropriate?

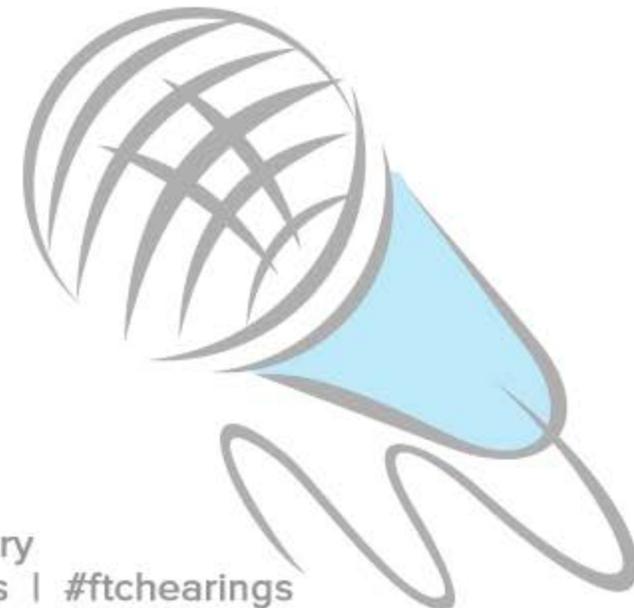
John Yun

George Mason University
Antonin Scalia Law School



Nascent Competition: Are Current Levels of Enforcement Appropriate?

Sally Hubbard
The Capitol Forum

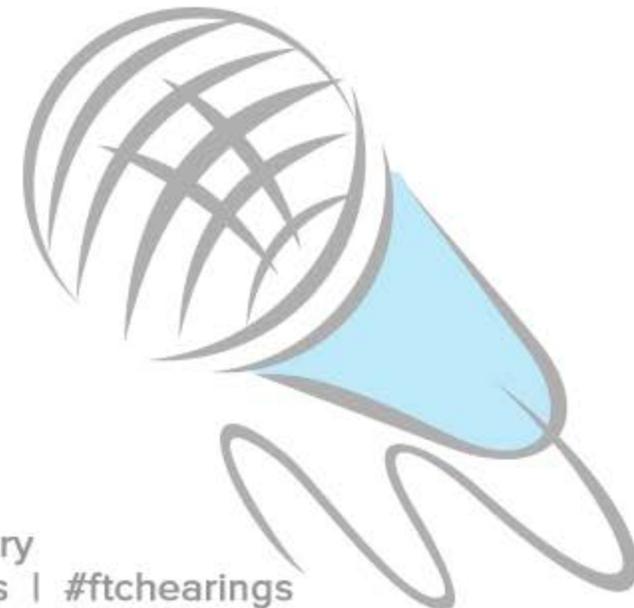


Nascent Competition: Are Current Levels of Enforcement Appropriate?

Panel Discussion

Sally Hubbard, Jonathan S. Kanter,
Diana L. Moss, D. Daniel Sokol,
John M. Yun

Moderator: Stephanie A. Wilkinson



Break
4:50-5:00 pm



Nascent Competition: Investigation and Litigation Considerations

Session moderated by:

Michael Moiseyev
Federal Trade Commission
Bureau of Competition



Nascent Competition: Investigation and Litigation Considerations

Panel Discussion

Deborah Feinstein, David I. Gelfand,
Raymond A. Jacobsen, Jr.,
Andrea Agathoklis Murino,
Scott A. Sher, Richard G. Parker

Moderator: Michael Moiseyev



Closing Remarks

Douglas H. Ginsburg

U.S. Court of Appeals for the D.C. Circuit

George Mason University

Antonin Scalia Law School



Thank You

Hearing #4: Oct. 23-24

