Vertical Restraints in a Digital World

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Two Topics

What's new and different about digital that matters for antitrust analysis of vertical restraints.

Antitrust analysis of vertical practices for digital platforms with applications to platform governance systems, exclusive contracts, and MFNs.

Overview of Today’s Digital World

WHAT’S NEW AND DIFFERENT ABOUT DIGITAL

Significant Digital Businesses Often Software-Based Multisided Platforms

Digital results in more platforms as intermediaries

- Multisided platforms facilitate beneficial interactions between distinct types of participants for whom there are usually indirect network effects with other participants.
- Digital platforms make those connections using the Internet.
- E.g. ride-sharing platforms connect drivers and passengers using mobile Internet.

Software based services, rely on Internet, and on commodity IT products

- Core services based on software.
- Rely on Internet to connect participants often through Cloud.
- E.g. ride-haring platform have thin apps that connect drivers and passengers to cloud-based software services.

Platforms can become very large, and global, very quickly

- Indirect network effects, scale economies, propel growth.
- Prove concept, easy to expand leveraging Internet connectivity and software.
- Start local, expand global, and quickly.
- E.g. Uber starts in San Francisco, expands globally, in few years.

Digital retailers (Amazon Classic) don’t facilitate direct interactions but have many similar features to platforms (Amazon Marketplace).

Some of the Most Valuable Businesses Operate Digital Platforms

Rank	Company	Key Platform
1	Apple	iOS/App Store
2	Amazon	Marketplace
3	Alphabet	Search, YouTube
4	Microsoft	Windows
5	Berkshire	NA
6	Facebook	Facebook, Instagram, WhatsApp
7	Alibaba	Taobao, Tmall
8	Tencent	WeChat, QQ
9	JPMorgan	NA
10	Johnson & Johnson	NA

Recent IPO and Pre-IPO Startups

Airbnb
Ant Financial
Didi Chuxing
Grab
Line
Slack
Spotify
Stripe
SoFi
Telegraph
Uber

7/10 most highly valued firms as of Sept 2018 are digital multisided platforms. Rank of top 7 changes often but have been in top 10 for some time.

Digital Platforms Cover Most of Economy, Displacing Traditional Intermediaries

Sector	Digital Platform	Traditional Intermediary
Retail	Amazon	Shopping malls
Communications	WhatsApp	Telephone networks
Media/Advertising	Google Search	Yellow pages
Transportation	Uber	Taxis
Services	TaskRabbit	Various temporary help services

In US for 2019, online media accounts for 45% of time people spend using all media; e-commerce about 10% of retail sales and growing quickly.

Key Features Relevant for Analyzing Vertical Restraints

WHAT'S NEW AND DIFFERENT ABOUT DIGITAL

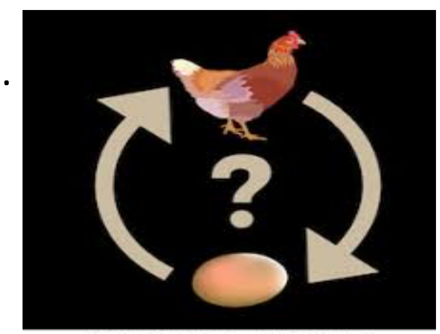
Platforms Need to Reach “Critical Mass” to Ignite and Grow

Platforms can create value for a participant on one side only if there are enough participants on the other side to interact with. And vice versa.

- The platform has to get “enough” of both sides on board to provide a valuable service to either.
- Critical mass = minimum set of members of both sides necessary for platform to provide a viable service that attracts more members through indirect network effects ***and*** that can enter a period of self-reinforcing growth.

Platforms can try to use various strategies to solve chicken-and-egg problem

- Contingent contracts—members on side A agree to sign on contingent on members of side B having done so and vice versa.
- Anchor tenants to create enough users on one side (e.g. Drake/Apple Music).
- Efforts to create expectations that other side will sign on (e.g. video games).
- Subsidies to one or both sides to join (e.g. ride-sharing services).



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Getting to critical mass is extremely hard, most platforms fail to do so quickly enough and shrivel and die.

Consumer Ability to Use Multiple Platforms and Switch Between Them Key

Sometimes easy for consumers to use several platforms (“multihoming”)

- Easy to use/try several, switching costs low.
- “Competition is just a click away” (Hal Varian, Google).
- E.g.: online newspapers, messaging apps, search.

Sometimes not (“single homing”)

- Sunk cost, learning costs, other switching costs.
- Consumers standardize on one platform.
- E.g.: PC operating system and apps are device specific, lots of learning.

Single homing could lead to a bottleneck to access group

- May be easy to dump and switch, or not—porting contacts, apps, history.
- Whether or not determines strength of bottleneck.
- Along with portion of potential participants who single home.

Ease of Entry Influenced by Critical Mass and Extent of Multihoming

Entrant has to secure critical mass to ignite and grow

- Large pool of unaffiliated participants for nascent market, although they need to be convinced there is value in the platform service.
- Diminishing pool when there is a dominant platform, although at least the value of the service is known.

With multihoming possible on both sides, entry is easier

- Entrant may be able to get participants on one platform to try, while entrant perfects and builds critical mass.
- Participants don’t have to make a commitment, incur any sunk costs, or switching costs until they know they want to mainly use the other platform.

With single-homing on both sides, entry is harder

- Entrant has to convince participants on dominant platform to switch, which is very hard before it has built critical mass and may still be hard given indirect network effects.
- Or tap into participants who haven’t committed, have exited from failed platforms—question is how big this pool is.

Vertical restraints can transform multihoming case into single-homing case,
and reasons and consequence of that key to antitrust analysis.

Platforms Have to Deter Participants From Behaving Badly

As in any community some participants may behave badly

- Deception, fraud, violence, bullying, posting porn, gross stuff, contract breaches, and the list goes on.
- Participants impose negative externalities on same and other side participants and thereby reduce the value of the platform (and platform ability to charge for platform).

Platforms, particularly digital ones, typically have "governance regimes"

- Platform rules that prohibit certain kinds of conduct.
- Software/staff dedicated to detection of violations.
- Penalties for breaking the rules or keeping bad actors off platform in the first place.

Platforms typically use full or partial exclusion of participants to regulate platform

- Platform has "bouncer's right" which enables them to keep or kick bad actors out but lack nuanced flexible penalties governments have to deal with similar bad behavior.
- OpenTable bans diners if they miss 4 reservations over 12 months—no ban for <4, permanent ban for 4+.
- US law passed in 1996 gave digital platforms protections from liability for excluding participants from platforms based on reasonable application of rules.

Platform Rules Reign on Digital Platforms

eHarmony: dating site has 17 prohibited activities including being "annoying" as well as providing misleading info.

Amazon: marketplace has seller code of conduct that prohibits trying to damage other sellers or influencing consumer ratings.

Google: search engine prohibits websites from many efforts to influence rankings unfairly.

Much controversy now on whether private rules result in underenforcement of bad behavior on digital platforms, particularly those involving social media. See Evans, *Deterring Bad Behavior on Digital Platforms, September 2019,* https://ssrn.com/abstract=3455384

Digital Platforms Use Data-Driven Algorithms to Determine What Users See

Digital platforms help connect users by

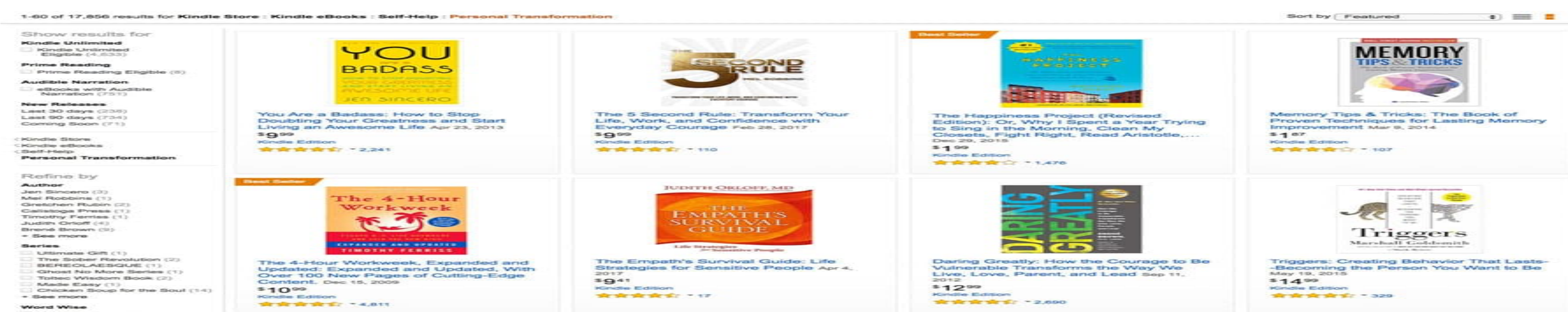
- Showing possible connections on their own, sometimes hoping for serendipitous interactions.
- Provide users with search and discovery tools to valuable interactions.
- Provider users with targeting methods to present themselves to users.

Devices for connecting users based on data-driven algorithms

- Predictive algorithms to determine what users would like to see.
- Algorithms rely on data and various learning technologies.

Platforms rely on other techniques for helping users find good matches

- Reviews or users and products.
- Tools for displaying information.
- Targeted advertising.



Digital Platforms Are Different, But It Is Matter of Degree, Not Kind

Many physical platforms and intermediaries have similar issues

- All platforms must get critical mass; long-standing problem.
- Single vs. multi-homing always key.
- Platform rules and regulations are common.
- Helping with search, discovery, and predicting consumers wants common as well.

Software + Internet + IT makes these features more important

- Dramatic drop in cost of starting/scaling platform.
- Dramatic increase in matching capabilities.
- So lots of digital platforms, better platforms, new platforms, and displacement of traditional platforms and other intermediaries.

General Principles

ANTITRUST ANALYSIS OF VERTICAL PRACTICES FOR DIGITAL PLATFORMS

Claims Could Involve Horizontal or Vertical Foreclosure

Platforms compete

- Horizontally with other platforms (iOS vs. Android), and possibly:
- Vertically with platform participants (Chrome vs. Firefox).

Horizontal antitrust claim that platform imposes vertical restraints on participants on one side to deter competition by *rival platforms*

- Amazon's MFNs for book publishers.
- Alibaba Tmall exclusives for sellers.

Vertical antitrust claim that platforms impose vertical restraints on participants on one side to advantage *platform-sponsored participant*

- Google Android contracts with OEMs.
- Microsoft bundling of Windows Media Player.

Antitrust Claims Face Usual Issues of Incentive and Ability to Foreclose Competition

Does the platform have market power?

- Is it a gatekeeper for substantial segment of market?
- Do participants single home on one or both sides?
- Are switching costs to other platform high?

Does platform have the ability for foreclose substantial competition?

- Does it have substantial market power over a substantial segment?
- Does it have tools that enhance its ability to foreclose?

Does platform have the incentive to foreclose competition

- Do the standard single-monopoly profit conditions fail?
- Does vertical arithmetic taking two-sided economics into account show profitable foreclosure?
- Can it recoup sacrificed profits?

What do restraints apply to?

- Are there restraints for one or for both sides?
- Do restraints cover all participants or selected ones like anchor tenants?
- How long to restraints last?
- What portion of sales contestable—but accounting for two-sided economics?

Digital + Platform Implies Efficiencies—But Also Possibly Increase Incentive and Ability to Foreclose

Digital + Platform may result in efficiencies from engaging in challenged practices

- Larger platforms generate more value to each side at given prices when there are indirect network effects.
- Governance systems essential for maintaining platform value by ferreting out bad behavior; better governance results in greater value for users.
- Of course, there are all the usual efficiency rationales for engaging in vertical practices including dealing with principal-agent and free-riding issues.

Digital + Platform may enhance ability and incentive to engage in profitable anticompetitive foreclosure

- Gatekeeper for access to large set of customers provides control.
- Critical mass necessary for competitive entry and growth provides opportunity to foreclose rivals (similar to scale economies in usual cases).
- Algorithmic methods can be used for dynamic foreclosure and coercion and make exclusion harder to trace.
- Platforms could engage in sham use of governance structures for exclusion.

Digital + Platform Requires Two-Sided Analysis of Competitive Effects

Standard platform result that business practices can have opposing effects on welfare on the two sides

- Practice that harms one side could benefit the other side, so that overall welfare increases or at least doesn't change.
- Also possible that restraints that aren't significant when viewed from the perspective of one side can cause harm to other side and that restraints on both sides could magnify each other.
- Market power at the platform level needs to account for indirect network effects and ability to raise overall cost of using the platform.

Measurement of price and output needs to account for two-sided features

- Estimating impact of practices on price, output, choice, innovation needs to account for both sides, including indirect network effects and negative externalities from bad behavior.
- Online attention platforms often provide content that is free, but which is highly valuable to consumers.
- High-court cases to keep in mind include *American Express* (US), *Cartes Bancaires (EU*), and *Qihoo 360* (China). Note *American Express* involved vertical restraints in payment card networks. *Qihoo 360* important digital economy case.

Governance Systems

ANTITRUST ANALYSIS OF VERTICAL PRACTICES FOR DIGITAL PLATFORMS

Claimed Abuses Involving Governance Systems Involve Testing Between Efficiency and Exclusionary Theories

Claimed abuses arise when platform has competing app

- Platform offers app that competes with one or more third-party apps.
- Rival app claims that platform applies governance rules in a discriminatory manner to raise rivals' costs.
- Rival app claims that platform uses governance rules to exclude platform from the platform.

Testing abuse theory requires usual vertical analysis

- Rival apps increase value of platform and may provide direct revenue stream so exclusionary behavior not costless.
- Need to establish whether an exclusionary strategy would be profitable.

Testing abuse theory also should consider application of governance rules

- Was governance system developed to deal negative externalities generally and not just to actual or potential rules?
- Did the platform engage in a sham use of the governance rules and in particular in a way that would not have been applied to a non-rival?
- Or is the claimed abuse simply a neutral application of the governance system?

Apple's App Development Platform Has Extensive Rules for Developers

Rules for developers:

- Open ended list including we just don't like what you're doing.
- Rules for getting into the store.
- Rules for kicking out of store.
- 12k word guidelines,

App Store acts as gatekeeper for installed base of users

- Developers and users can only, practically, connect through the app store; no side loading, no other app stores allowed.
- Most users single-home on iOS, so App Store only way to reach them.
- App providers multihome, though, and could shift effort to Android, but lose access to iOS base.

Android ecosystem has fewer restrictions

- Google Android allows competing app stores, side loading; but still Google Play is main source of apps.
- China has many competing Android app stores, but lots of quality issues.

Available on the App Store

Apple App Developer Guidelines: "If you attempt to cheat the system (for example, by trying to trick the review process, steal user data, copy another developer's work, or manipulate ratings) your apps will be removed from the store and you will be expelled from the Developer Program."

Apple vs. Spotify

- Apple had developed dominant position in downloadable music as a result of its successful iPod/iTunes platform introduced in early 2000s. iPhone has iTunes as bundled app on home screen from beginning.

- Spotify and other streaming music services enter in late 2000s. Gradually eroded Apple's dominant position in downloadable music as consumers switched from buying to streaming songs.

- Spotify launches iPhone app in 2008 which includes its free ad-supported service plus premium subscription service.

- Pays Apple's standard commission (eventually 30% first year/15% subsequent) when it sells subscriptions through App Store. But people who get subscription off of App Store (e.g. through website) can use iPhone app and Apple does not charge Spotify a commission for that.

- Apple launches Apple Music as a streaming competitor in 2015. Apple Music also bundled on home screen.

Spotify Complains Inter Alia That Apple Uses Developer Rules to Harm Spotify

- Spotify files complaint with European Commission in March 2019 which says Apple **"introduced rules to the App Store that purposely limit choice and stifle innovation at the expense of the user experience—essentially acting as both a player and referee to deliberately disadvantage other app developers."**

- Spotify Says: "When Apple introduced the Guidelines we thought, 'Yep. Makes total sense to have rules for security, safety, privacy and quality.' But **Apple** has not only unilaterally changed the rules themselves time and again, but also **frequently decides to interpret (and re-interpret) them in ways to disadvantage rivals like us**."

- Spotify Says: "Now that Apple has Apple Music, **rejections of the Spotify app start becoming more and more common and they even go as far as threatening to remove us from the App Store**. Those rejections seem to coincide with our promotional campaign seasons."

- Spotify Says that the **rules apply differently to Apple**: Apple Music sends the very type of promotional push notifications that it forbids its rivals to send.

Apple v. Spotify
Apple Says

- App Store is a safe and secure platform, where users can have faith in the apps they discover and the transactions they make
- Apple contests that it blocks access to Spotify for products and updates
- Spotify wants all the benefits of a free app without being free

"After using the App Stores for years to dramatically grow their business, Spotify seeks to keep all the benefits of the App Store ecosystem … without making any contributions to that ecosystem."

Many of Spotify's complaints concern Apple's commission and rules it imposes to prevent applications from selling subscriptions through App Store without paying the commission rather than the governance system per se. They also involve other practices concerning discriminating against Spotify in access to Siri (Apple's voice service). See Spotify: https://www.timetoplayfair.com/timeline/

Exclusive Contracts

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Platform May Persuade Some Participants to Single Home Through Exclusive Contracts

Platform persuades/requires some participants on one side (or possibly both) to enter include exclusive contracts

- Multihoming is possible or switching fully between platforms not too burdensome.
- Exclusive prevents participant from multihoming during term of contract.
- Exclusive prevents participant from switching to another platform during term of contract.

Digital platform may try to secure an exclusive contract or its equivalent through

- Preferential treatment such as greater exposure for full or partial exclusive.
- Reducing exposure substantially if participant refuses full or partial exclusive.
- Price-related penalties for use of competing platform.

Key considerations, as always, are coverage of exclusive contracts relative to market, duration of contracts, and how much of the market is contestable. But analysis must account for two-sided features including critical mass and indirect network effects.

Exclusive Contracts May Enhance Efficiency and Therefore be Pro-Competitive

Digital platforms may have the usual possibly pro-competitive explanations for exclusive contracts

- Preventing free-riding on platform efforts.
- Preventing loss of valuable competitive information to rival.
- Aligning platform and participant incentives for mutual gain.
- And more…

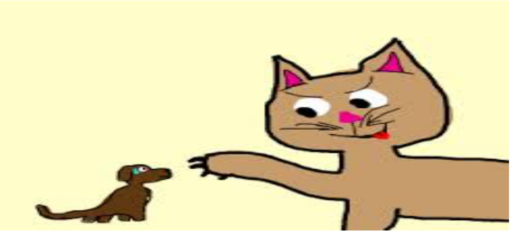
Digital platforms may raise specific issues that could provide possible pro-competitive explanations

- Exclusives help secure and maintain critical mass and thereby value to platform participants.
- Exclusive for one side has externalities in helping get other side on board.
- Preferential treatment based on indirect network effects or other two-sided issues related to generating value.

The Great "Cat-and-Dog War" in China over Exclusive Contracts

Alibaba operates Tmall, a B2C marketplace of buyers and sellers for consumer products, and competes with JD.com

- Tmall has 57% share of B2C online retail commerce in China (2017).
- JD.com has 28% share (2017).
- With remainder going to many smaller ecommerce sites.



Tmall and JD.com compete across same categories but more heavily into some categories than others

Debate in China over Tmall's "Choose One of Two" policy seeking sellers to single-home on Tmall

Tmall Seeks Exclusive Contracts from Growing Number of Sellers

Tmall: “Like may e-commerce platforms, we have exclusive partnerships…. The merchant decides to choose such an arrangement because of the attractive services and value Tmall brings to them.” Says growing number of exclusives.

JD: “This e-commerce platform has frequently abused its monopolistic power to force merchants to only choose it.” Claims to have had exodus of over 100 Chinese brands.

Issue is the extent to which Tmall’s policy is exclusionary given its dominant position

- How much has or will be foreclosed?
- Does foreclosure result in dynamic decline of competitor—fewer sellers, fewer buyers, reverse indirect network effects?
- Does foreclosure risk pushing competitor below critical mass in one or more segments, threatening viability?

Sellers Have Accused Tmall of "Sales Suppression" If They Don't Enter Exclusive

Tmall could simply require sellers to enter into exclusive contracts as a condition of selling on the the site—subject to antitrust and regulatory scrutiny

Some sellers claim that Tmall retaliates when they refused to enter into exclusives: "advertising banners vanished from prominent spots in Tmall sales showrooms, the company was blocked from special sales and products stopped appearing in top search results."

Tactic results in "partial exclusion" from the platform, and could be viewed as:

- part of bargaining game with sellers to reach exclusive agreement; or,
- effective exclusion from platform in way that would attract less scrutiny; or,
- marketing sales services provided conditional on exclusive.

Seller Commissions and MFN Plus

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Commission-Based Sales Contracts May be Subject to MFNs

Commission model for sales by intermediary of seller product

- Commission rate *r* as a percent of sales price *P* to user
- Intermediary gets *r x P*
- Seller keeps *(1-r) x P*

Contract between intermediary and seller

- Commission rate *r* specified
- Contract may also specify *P*
- Contract may impose MFN on commission rate (highest), price (lowest), or both

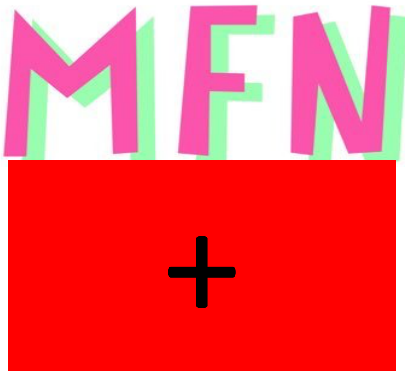
MFN *Plus* could arise because

- There are two interrelated dimensions to the contract (sales price and commission rate) and MFN applies to each dimension separately
- When the MFN is exercised on one term its gives firm a better deal than its rival because it gets the benefit of the better term on one dimension without having to accept a worse term on the other dimension.
- This is called an MFN-Plus because an ordinary MFN ensures equality of terms while and MFN-Plus may mean that the firm gets a better deal

MFN-Plus Can Result in Foreclosure of Smaller Rivals

Rival intermediary agrees to lower commission rate to seller in return for a lower price which helps rival compete for sales with larger rival.

- Seller agrees to lower sales price because with lower commission rate it nets more
- Can lead to competition over price and commissions to benefit on consumer and seller



Dominant intermediary gets the lower price, but receives its regular commission rate

- Seller therefore has to give dominant platform lower price without getting lower commission rate in return—foregone earnings from dominant platform can make deal from rival intermediary unprofitable
- Rival intermediary faces price competition from dominant platform which is guaranteed a higher margin since it hasn't reduced commission rate—so rival may not make offer

CMA's Private Motor Insurance Investigation Concerned MFNs

Price Comparison Websites (PCWs) are marketplaces that match

- consumers looking for car insurance with
- PMI providers looking for customers

Majority (55-65%) of new PMI business comes through PCWs.

PCW marketplace based on agency model

- PMI providers set premium
- PCWs get commission based on premium for policies they place
- PMI price and commissions subject to negotiation between PCWs and PMIs

One issue in the investigation involved MFNs that some PCWs negotiated as part of the contract with PMIs. There were cherry-picking MFNs.

CMA Found Wide MFNs Limited Price Competition

MFNs restricted ability of insurer to charge other PCWs lower premiums

- Claim was that some PCWs because they have single-homing customers had bargaining power over PMIs to impose the MFN
- 70-80% of policies sold by PMIs with MFNs in 2012 but then some PMIs negotiated narrowing of MFNs for some PCWs
- Price MFN applies to agency price but not to other terms of the agreement such as commission rate or features

Harms identified by CMA

- Reduces commission competition where PCW offers lower commission in exchange for lower premium that could help it compete
- Reduces incentive to offer valuable features (such as fraud detection) in return to lower premiums

Anticompetitive effects evidence

- Some evidence the entry deterred for PCW adopting low commission strategy
- Evidence that PCWs couldn't get PMIs to offer lower prices in exchange for lower commissions

Final Thoughts

ANTITRUST ANALYSIS OF VERTICAL PRACTICES FOR DIGITAL PLATFORMS

Final Thoughts on Vertical Restraints in the Digital Economy

Active area for competition authorities and private complainants/litigants because rapid growth in digital economy and cross-market relationships and platform participation by many platforms.

Complex area given opportunities for engaging in anticompetitive behavior, sometimes under the radar screen, but many compelling sources of efficiency as well.

**Fact-based balanced analysis,
informed by sound economics needed, as always.**

Some Relevant Papers

- Evans, David S. and Schmalensee, Richard, The Antitrust Analysis of Multi-Sided Platform Businesses (January 30, 2013). Roger Blair and Daniel Sokol, eds., Oxford Handbook on International Antitrust Economics, Oxford University Press, Forthcoming; University of Chicago Institute for Law & Economics Olin Research Paper No. 623. Available at SSRN: https://ssrn.com/abstract=2185373

- Evans, David S., Economics of Vertical Restraints for Multi-Sided Platforms (January 2, 2013). University of Chicago Institute for Law & Economics Olin Research Paper No. 626. Available at SSRN: https://ssrn.com/abstract=2195778 or http://dx.doi.org/10.2139/ssrn.2195778

- Evans, David S., Governing Bad Behavior by Users of Multi-Sided Platforms (November 5, 2012). Berkeley Technology Law Journal, Vol 2, Issue 27, Fall 2012; University of Chicago Institute for Law & Economics Olin Research Paper No. 582. Available at SSRN: https://ssrn.com/abstract=1950474 or http://dx.doi.org/10.2139/ssrn.1950474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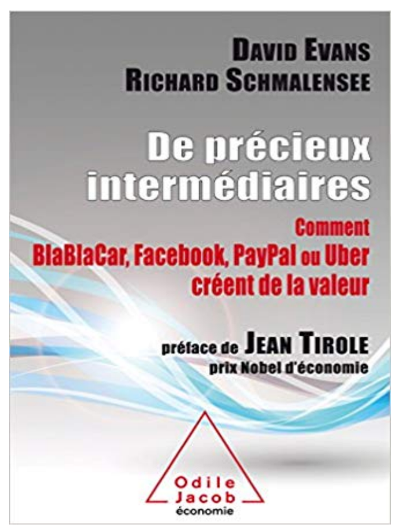
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