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Implications of E-commerce for Competition Policy - Note by the United States

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More documents related to this discussion can be found at www.oecd.org/daf/competition/e-commerce-implications-for-competition-policy.htm

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United States

1. Introduction

1. The Committee last squarely examined competition issues in the e-commerce sector in October 2000 with a roundtable addressing "*Competition Issues in Electronic Commerce"*.[1] At that time, "[p]rice dispersion across B2Cs cast[…] doubt on the utility of Internet search engines, and on the current ability of entrepreneurs and governments to remove some of the … obstacles to the development of e-commerce."[2]

2. At the same time, however, the Committee presciently recognized that "[i]n e-commerce cases, competition authorities will frequently be faced with the difficult problem of determining whether on-line and traditional commerce are in the same or different product markets."[3] It also recognized that e-commerce likely would expand geographic markets. Because of the length of time that has passed since the Committee's direct consideration of e-commerce and competition policy, now is an appropriate time to revisit some of the antitrust issues that may arise in this area.

3. Despite the length of time that has passed since the last consideration of e-commerce, the Committee has examined many topics in adjacent areas since 2000. For example, the Committee has held recent roundtables and hearings discussing: The Digital Economy[4]; Vertical Restraints for Online Sales[5]; Disruptive Innovations and their Effect on Competition[6]; Competition and Cross Platform Parity Agreements[7]; Big Data[8]; Algorithms and Collusion[9]; Price Discrimination;[10] and Multi-Sided Markets.[11] Though beyond the scope of this paper, the United States Federal Trade Commission and the Antitrust Division of the U.S Department of Justice have considered a variety of topics related to and involving e-commerce.[12]

4. E-commerce continues to expand distribution mechanisms, increase growth in retail markets, improve consumer choice, and spur innovation, among other things. Today, advances in technology routinely reform the way competition occurs in online environments, in offline environments, and in environments that exist at the confluence of the two. Antitrust agencies must navigate these quickly moving areas by monitoring developments and evaluating conduct as it occurs.

5. The U.S. Federal Trade Commission ("FTC") and the Antitrust Division of the U.S. Department of Justice ("DOJ") (together, "Agencies" or "Antitrust Agencies") submit this paper as part of the Committee's ongoing consideration of the growth of e-commerce and its implications for competition law and policy within the OECD and as an update to the Agencies' previous submissions in the area of competition policy in the digital age.

6. This remainder of this paper is organized as follows. Section 2 describes some examples of the prevalence of online marketplaces and the increasing interaction of online and offline marketplaces. Section 3 explains that U.S. antitrust laws provide the framework and tools to analyze activity in these spheres that may violate the antitrust laws by describing illustrative examples of cases brought by the Agencies. Section 4 concludes.

2. The Increasing Interaction of Online and Offline Marketplaces

7. Online, or e-commerce, sales are on the rise.[13] The United States Census Bureau reports on quarterly online sales, including their size compared to total quarterly retail sales.[14] Online sales have increased steadily since 2008 and currently measure about 9% of total quarterly retail sales.[15] There is no indication the trend will slow or reverse anytime soon.

8. Moreover, online and offline marketplaces increasingly interact and compete with each other. This development has required the Agencies to consider the effects of these sales and the interaction between the marketplaces when considering the competitive effects of conduct or transactions. For example, the existence, or the potential existence, of both online and offline competitors can, but does not necessarily, impact market definition and analysis of a transaction or conduct. Every case depends on the facts and circumstances existing at the time of the merger or conduct in question. Although online sales are increasingly relevant to antitrust analysis, they are not always a significant factor, and the US agencies consider the relevant facts in each case.[16] A significant question is always which product markets likely are or would be affected and the competitive landscape in those markets.

9. The increasingly blurred lines between online and offline sales and distribution has led to companies engaging in myriad distribution methods to compete. This multi-channel approach allows companies to match supply-side output with demand-side requirements. These supply-side responses to demand-side shifts in consumer behavior may be an indication that competition is working rather than being a sign of trouble.

10. For example, Amazon, a company that began and previously existed only online, opened a brick-and-mortar store in Washington, D.C. This was its 15th location and continued its expansion into the offline space.[17] Its recent purchase of Whole Foods Market, discussed further below, furthered the blurring of the line between offline and online sales. Nordstrom, a traditional offline store, in 2011 purchased HauteLook, a flash sales site that existed entirely online.[18] This has given consumers expanded shopping options such as the ability to return items to Nordstrom Rack stores items purchased online at Hautelook.

11. Importantly, antitrust law needs to be aware of more than just online/e-commerce versus offline/bricks and mortar competition. Antitrust law must be cognizant of the integration of technology into traditional items like durable goods, whether sold online or offline. Competition to manufacture so-called smart-home devices is robust and creating an ever-growing sector of commerce and in areas not traditionally centered on technology, such as smart ovens, refrigerators, and even mirrors.[19] Consumers' ever-increasing demand for innovative devices fuels competition in this area. The Federal Trade Commission in 2013 hosted a day-long "Internet of Things" workshop, at which it considered the benefits and risks associated with the Internet of Things, largely in the areas of consumer privacy and security.[20] Although the Antitrust Agencies understand it is not within the purview of all competition agencies globally to address consumer protection issues, this FTC staff report is relevant to the growing consumer demand for interconnected items.

12. The Antitrust Agencies have considered the increasingly blurred lines between online and offline competition in recent cases, which serve as exemplars of the increasingly indistinct boundary between the online and offline spheres and which

demonstrate that the Agencies' traditional antitrust tools are flexible enough to accommodate these new methods of competing.

13. First, the FTC considered the competitive implications of the merger of a primarily-online seller of books and consumer products (Amazon) with an offline seller of groceries (Whole Foods). It considered whether the acquisition substantially lessened competition under Section 7 of the Clayton Act or constituted an unfair method of competition under Section 5 of the FTC Act, determining that it did neither of those things.[21] In employing its traditional merger-investigation tools, the FTC analyzed the facts of competition both online and offline and determined that the merger of the two companies would not substantially lessen competition.

14. Second, the FTC considered online competition—ultimately determining that it did not tip the balance—in its analysis of the 2014 Men's Wearhouse/Jos. A. Bank transaction. In its analysis, the FTC determined that online sales are not a significant factor in every market, even though when the FTC looks at competition today, "it typically considers the significance of online sales."[22] Although it considered online competition, the FTC determined that competitive dynamics between bricks-and-mortar stores, which rested on factors like promotional strategies and tailoring service, were not affected to a significant degree by competition online.[23] Despite limited competition from online sources, the merging companies faced significant competition from other bricks-and-mortar stores such that the transaction was unlikely to harm consumers.

15. Third, the Antitrust Division also has considered these issues. In 2013, a federal district judge ruled that Apple had violated section 1 of the Sherman Act by conspiring to raise the prices of e-books. The court found that Apple had participated with publishers in a per se unlawful horizontal price-fixing conspiracy. Ultimately, the court determined that Apple's illegal conduct deprived consumers of the benefits of competition on e-books and forced them to pay higher prices.

16. The Division filed its suit against Apple and five publishers in 2012 and reached settlements with the publishers. The court's order required Apple to modify its existing agreements with the publisher defendants to allow retail price competition on e-books and eliminate the "most-favoured-nation" clauses that facilitated raising e-book prices. The order also prohibited Apple from serving as an information conduit among e-book publishers and from retaliating against publishers for refusing to sell e-books on agency terms (under which the publisher set the retail price and paid Apple a commission). Further, the order barred Apple from entering into agreements with e-book publishers that are likely to increase, fix, or set the price at which other e-book retailers may sell content. Finally, the court ordered the appointment of an external compliance monitor to ensure the adequacy of Apple's antitrust compliance policies.[24] In 2015, the U.S. Court of Appeals for the Second Circuit upheld the judgment and injunction against Apple.[25] The court rejected Apple's argument that the rule of reason should apply because Apple had a vertical relationship to the publishers. The court explained that the relevant agreement in restraint of trade was not Apple's vertical contracts with the publishers, but rather the horizontal agreement that Apple orchestrated among the publishers to raise e-book prices. Such a horizontal price-fixing conspiracy is the "archetypal example" of a *per se* unlawful restraint on trade, and each of the conspiracy's members is liable for the *per se* violation even if one has a vertical relationship to the others.

3. The U.S. Antitrust Laws are Flexible Enough to Address New Forms of Competition

17. As described above, business and competition are evolving quickly and are moving beyond simply selling in a bricks-and-mortar store or selling on a single website. The U.S. antitrust laws, though in existence for more than a century, can address new methods of competition and remediate potential harms that occur in this rapidly changing environment. In the end, the Antitrust Agencies rely on the facts of each case and use their tools to determine whether the transaction or conduct at issue is likely to reduce consumer welfare by reducing output, raising prices or stifling innovation. Whether in the sphere of e-commerce or outside it, '"antitrust demands evidence of harm or likely harm to competition."[26]

18. The hypothetical potential for collusion between algorithms is a frequent topic for discussion and writing, but it is not currently known or understood whether it is possible or likely for algorithms to collude without human involvement. The Antitrust Agencies noted in their submission to the Competition Committee in June 2017 that firms have long employed rules—whether explicit or implicit—to set prices. Such formulas historically have been implemented by individuals. Increasingly, price setting is being conducted by computers using algorithms, and "[many firms use algorithms to set pricing on the internet because there are vast pricing data to sort through and changing prices is relatively inexpensive."[27] Pricing algorithms react more quickly to pricing decisions by competitors, operating in a dynamic way that allows prices to respond quickly to changes in market circumstances, but it is unclear whether, in any given situation, an algorithm will spur competition, incentivize collusion, or prompt cheating.[28] Nevertheless, there is little to suggest that, absent evidence of a collusive agreement among competitors, the U.S. antitrust laws, which guard the competitive process and are not price-control statutes, have a role to play in this area.[29]

19. To provide an actual example, the DOJ has charged two executives and an ecommerce retailer in a price-fixing conspiracy in which the conspirators utilized pricing algorithms to fix the prices of posters sold on the Amazon Marketplace. On this platform, a retailer priced its own products, and Amazon determined the order in which to display products in response to a customer query. While this determination was based on a number of factors, the retailer offering the lowest price for the product that is most responsive to the search query typically appeared first in Amazon's search results, which was the most desirable spot for generating sales. To date, one executive and the e-commerce retailer have pleaded guilty for subverting competition for poster sales on the Amazon Marketplace by agreeing to match prices for specific posters sold on the Amazon marketplace.[30]

20. The conspirators used commercially available algorithm-based pricing software, which continually collects competitor pricing information and prices a product based on a set of rules implemented by the seller. In order to match prices, one conspirator, with the agreement of the other, programmed its algorithm to find the lowest-price offered by a non-conspiring competitor for a particular poster, and then set its poster price just below that, and another conspirator set its algorithm to match the first conspirator's price. By agreeing to fix prices for certain posters, the conspirators eliminated competition among themselves for these sales. Such competition likely would have driven the poster prices down further. The conspirators monitored the effectiveness of their pricing algorithms by spot checking prices and enforced their price-fixing agreement. Once the pricing algorithms were in place, however, the conspiracy was, to a large extent, self-executing.

21. In another e-commerce case, two companies and the top executive of each pleaded guilty in 2017 to criminal charges related to a price-fixing conspiracy for customized promotional products sold online to U.S. customers. The companies, Zaappaaz Inc. and Custom Wristbands Inc., agreed to pay criminal fines of $1.9 million and $0.4 million, respectively. According to the charges, the conspirators attended meetings and communicated in person and online. The investigation revealed that the conspirators used social media platforms and encrypted messaging applications, such as Facebook, Skype and WhatsApp, to reach and implement their illegal agreements. Specifically, the defendants agreed, from as early as 2014 until June 2016, to fix the prices of customized promotional products sold online, including wristbands and lanyards.[31]

22. Under the U.S. antitrust laws, e-commerce firms with market power are prohibited from engaging in conduct that anticompetitively excludes rivals. Unilateral conduct of this sort could be viewed by some as an undue risk in technology markets where firms may have a technological advantage that gives them a large market share. Importantly, however, large market share alone is not a violation of the U.S. antitrust laws.

23. A firm with market power may violate U.S. law through anticompetitive vertical restraints such as exclusive dealing. As the Agencies noted in their 2013 submission to the Competition Committee on Vertical Restraints for Online Sales, "[t]he presence, absence or extent of online sales in a market is a fact that is considered as part of any analysis, but in and of itself is not a fact that would require changing the analytic process."[32] First, the procompetitive or anticompetitive nature of a vertical restraint depends on the facts of the case and does not rest on the online nature of the companies involved. The importance and relevance of factors such as network effects, free-riding and other relevant factors likely varies from case to case. Second, even if future cases or empirical research were to demonstrate a relationship between online sales and an increase or decrease in competitive harm, vertical restraints will be analyzed using the rule of reason under U.S. antitrust law.[33]

24. A perceived absence of cases brought in relation to a particular factual setting does not mean that the U.S. Antitrust Authorities cannot or will not bring them in the right circumstances. One example of this is *U.S. v. Microsoft*.[34] Consistent with long-standing U.S. precedent, DOJ indicated that if "Microsoft had confined itself to improving and promoting its products on their merits, it would have faced no antitrust liability."[35] The Court of Appeals determined that this is the right framework for antitrust scrutiny of unilateral conduct by a firm that harms competition by excluding competitors. It is a standard that the Antitrust Agencies apply today regardless of whether conduct occurs in the e-commerce sector or outside it.

25. Antitrust analysis of mergers in the United States often is concerned with mergers of horizontal competitors. The FTC has reviewed a number of mergers between companies that compete partially or completely through e-commerce; in some cases, the FTC has found no basis to challenge the transaction, but in others it has. For example, in 2015, the FTC challenged the acquisition of Office Depot, Inc. by Staples, Inc. After conducting an investigation for nearly a year, the FTC filed a lawsuit in the U.S. District Court for the District of Columbia and an administrative action to block the merger.[36]

26. The two parties had attempted to merge in 1997; the U.S. District Court for the District of Columbia granted the FTC's motion for an injunction to block the merger.[37] Notably, online sales were not a relevant consideration in 1997—the relevant product

market included only "retail sale of office supplies … through office supply superstores."[38] Between 1997 and 2017, however, Office Depot had acquired Office Max in 2013, and the FTC cleared that transaction without remedies.[39] In deciding to close its seven-month investigation into that transaction, the FTC noted that the market for the sale of consumable office supplies had changed materially in the interim. Specifically, the "explosive growth of online commerce" significantly changed the Commission's analysis of the relevant product market and led to the determination that Office Depot and Office Max would not be able to raise prices in the relevant product market.[40]

27. In the 2015 Staples/Office Depot transaction, the FTC found that the market for office supplies had been reshaped since 1997 by the growth of mass merchants like Wal-Mart, club stores like Costco, and online retailers. The FTC's analysis of the 2015 transaction focused on a different product market than the previous transactions, however. Specifically, it focused on business-to-business (B-to-B) customers that "require a single vendor with a broad geographic footprint", a market segment that was not adequately served by online competitors like Amazon.[41] The district court's decision to grant an injunction rested on the key issue of market definition and, in particular, the question of whether online competitors would adequately constrain the merged entity's sales offline. The court found that they would not, accepting the FTC's narrow "price discrimination" market whose anticompetitive effects would vary significantly for different customers purchasing similar products.[42] Because the merging parties were the only suppliers that offered a national footprint and services like next-day delivery that customers purchasing nationally demand, the merging parties would not be constrained by competition from online competitors.

28. The FTC also has considered the competitive implications of other transactions in the online space. For example, the FTC used its traditional competition tools, including an analysis of likely switching, to determine that Zillow, Inc.'s acquisition of Trulia, Inc.[43] did not violate Section 7 of the Clayton Act or Section 5 of the FTC Act. Despite close competition between the two web portals for home buying, the agency's investigation revealed that real estate agents use varied methods, aside from the merging parties' platforms, to attract customers. The Commission also examined the competitive dynamics on the consumer-facing side of the platform and concluded that the combined entity would continue to "have strong incentives to develop new features in order to grow its consumer audience and thereby increase its advertising revenue."[44] Thus, there was insufficient evidence that the parties would be able to raise prices or would fail to continue to innovate after the transaction.[45]

29. The FTC also brings enforcement proceedings, using its consumer protection authority, against companies for violations of Section 5 of the FTC Act. Section 5 prohibits, among other things, unfair or deceptive acts or practices in the marketplace. Under this authority, the FTC's Bureau of Consumer Protection brings enforcement actions to stop law violations and require companies to take affirmative steps to remediate unlawful behavior. Nonetheless, the consideration of privacy as a consumer protection concern is different from treating it as a potential competition concern.[46] Legitimate concerns about privacy have different solutions—firms must protect consumer data in line with consumer protection standards, including disclosure.

30. For example, in 2014, the FTC's Bureau of Consumer Protection notified Facebook and WhatsApp about their obligations to protect the privacy of users in light of Facebook's proposed acquisition of WhatsApp.[47] The FTC did not challenge Facebook's acquisition on competition grounds. And, although the FTC has not challenged a merger

on the basis of a reduction in non-price competition over privacy protections, the FTC has explicitly recognized that privacy can be a non-price dimension of competition.[48] Nevertheless, enforcers should be very careful about any assumptions that privacy can be measured and valued in a manner equivalent to price or quality in mergers or conduct matters. Privacy is not a proxy for price and should not be treated as such, because it is unclear that reduced privacy is uniformly disfavored by consumers or that a competition enforcer should analyze it in the same way as a reduction in quality or an increase in price.

4. Conclusion

31. As illustrated by the discussion above, the presence or absence of online competitors can affect the Antitrust Agencies' analysis of mergers and conduct, but it does not, in itself, require a novel approach to the analysis. Each case is evaluated on the facts at hand, including any competitive constraints imposed by the presence of online sales. E-commerce can increase (or decrease) competition at retail, it can enhance (or diminish) consumer choice particularly; it can spur (or chill) innovation in distribution and other areas. The Antitrust Agencies will continue to apply their competition tools to the facts of each situation to address harms to competition and consumers when they occur.

[1] Note by the United States, *Competition Issues in Electronic Commerce*, Jan. 23, 2001, DAFFE/CLP(2000)32 , *available at* http://www.oecd.org/regreform/sectors/1920373.pdf.

[2] *Id*. at 9.

[3] *Id*. at 8.

[4] *See The Digital Economy*, Feb. 7, 2013, DAF/COMP(2012)22, *available at* http://www.oecd.org/daf/competition/The-Digital-Economy-2012.pdf.

[5] *See* Note by the United States, *Vertical Restraints for On-Line Sales*, Sept. 12, 2013, at 151-62, DAF/COMP(2013)13, *available at* http://www.oecd.org/daf/competition/VerticalRestraintsForOnlineSales2013.pdf; *see also id*. at 151, 152 (noting that "[t]he presence, absence, or extent of online sales in a market is a fact that is considered as part of any analysis, but in and of itself is not a fact that would require changing the analytic process").

[6] *See Key Points of the Hearing on Disruptive Innovation*, May 11, 2017, DAF/COMP/M(2015)1/ANN8/FINAL, *available at* https://one.oecd.org/document/DAF/COMP/M(2015)1/ANN8/FINAL/en/pdf; *see also* Note by the United States, *Hearing on Disruptive Innovation*, Jun. 19, 2015, DAF/COMP/WD(2015)54, *available at* http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/wd(2015)54&docLanguage=En, at 2 ("Historically, disruptive innovation … has posed little concern for competition enforcement agencies in the United States, because it tends to spur greater competition.").

[7] *See Summary of Discussion of the Hearing on Across-Platforms Parity Agreements*, Mar. 30, 2016, DAF/COMP/M(2015)2/ANN2/FINAL, *available at* http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/M(2015)2/ANN2/FINAL&doclanguage=en; *see also* Note by United States, *Hearing on Across Platform Parity Agreements*, Oct. 17, 2015, DAF/COMP/WD(2015)72, *available at* http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WD(2015)72&doclanguage=en (noting that parity agreements may be procompetitive or anticompetitive, depending on the facts and circumstances at issue).

[8] *See Summary of Discussion of the Hearing on Big Data*, Apr. 26, 2017, DAF/COMP/M(2016) 2/ANN2/FINAL, *available at* https://one.oecd.org/document/DAF/COMP/M(2016)2/ANN2/FINAL/en/pdf.

[9] *See Algorithms and Collusion: Competition Policy in the Digital Age*, 2017, *available at* http://www.oecd.org/daf/competition/Algorithms-and-colllusion-competition-policy-in-the-digital-age.pdf*; see also* Note by the United States, *Algorithms and Collusion*, May 26, 2017, DAF/COMP/WD(2017)41, at 3, *available at* https://one.oecd.org/document/DAF/COMP/WD(2017)41/en/pdf (noting that U.S. antitrust laws safeguard the competitive process and do not provide any basis for price control or regulation).

[10] *See* Note by United States, Roundtable on "Price Discrimination", Nov. 21, 2016, DAF/COMP/WD(2016)69, *available at* https://www.ftc.gov/system/files/attachments/us-submissions-oecd-other-international-competition-fora/price_discrimination_united_states.pdf.

[11] *See* Note by United States, *Roundtable on Two-Sided Markets*, Jun. 4, 2009, DAF/COMP/WD(2009)68, *available at* https://www.ftc.gov/sites/defalt/files/attachments/us-submissions-oecd-and-other-international-competition-fora/roundtabletwosided.pdf, *see also Hearing on Rethinking the Use of Traditional Antitrust Enforcement Tools in Multi-sided Markets*, Feb, 14, 2018, DAF/COMP/WD(2017)55, *available at* https://one.oecd.org/document/DAF/COMP/WD(2017)55/en/pdf.

[12] *See* U.S. Fed. Tr. Com'n, *FTC Big Data Report*, Jan. 2016, *available at* https://www.ftc.gov/system/files/documents/reports/big-data-tool-inclusion-or-exclusion-understanding-issues/160106big-data-rpt.pdf; U.S. Fed. Tr. Com'n, *FTC Sharing Economy Report*, Nov. 2016, *available at* https://www.ftc.gov/system/files/documents/reports/sharing-economy-issues-facing-platforms-participants-regulators-federal-trade-commission-staff/p151200_ftc_staff_report_on_the_sharing_economy.pdf. *See also* Asst. Atty. Gen. Makan Delrahim, *Don't Stop Believin': Antitrust in the Digital Era,* Apr. 19, 2018, *available at* https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-keynote-address-university-chicagos; Bruce Hoffman, U.S. Fed. Tr. Com'n, *Competition Policy and the Tech Industry—What's at Stake?*, Apr. 12, 2018, *available at* https://www.ftc.gov/system/files/documents/public_statements/1375444/ccia_speech_final_april30.pdf; Deborah Feinstein, U.S. Fed. Tr. Com'n, *Big Data in a Competition Environment*, May 2015, *available at* **Error! Hyperlink reference not valid.**.

[13] The U.S. Census Bureau defines e-commerce sales as "sales of goods and services where the buyer places an order, or the price and terms of the sale are negotiated over an Internet, mobile device…extranet, Electronic Data Interchange (EDI) network, electronic mail, or other comparable online system. Payment may or may not be made online." *See* Press Release, U.S. Dep't of Commerce, *Quarterly Retail E-Commerce Sales*, Feb. 16, 2018 at 2 n.1, *available at* https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf. The OECD briefing paper for this Roundtable discussion encompasses a slightly broader concept e-commerce and includes the important segment of online advertising services. *See* OECD Briefing Paper, *Roundtable on "Implications of E-commerce for Competition Policy",* Mar. 2, 2018 at 2, *available at* http://www.oecd.org/daf/competition/e-commerce-implications-for-competition-policy.htm.

[14] *See* Press Release, U.S. Dep't of Commerce, *supra* n.13. The Census Bureau presents this information according to four major sectors: manufacturing, wholesale, retail, and a select set of services.

[15] This report has been criticized for underrepresenting the relative amount of e-commerce sales, because it undercounts online sales by retailers that operate bricks-and-mortar stores, such as Walmart. *See* David S. Evans, Scott Murray, and Richard Schmalensee, *Why Online Retail Sales are Much Larger than US Census Data Report*, Feb. 7, 2016, *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2716266.

[16] *See* Blog, *Sometimes brick & mortar competition is enough*, Deborah Feinstein, Alexis Gilman, and Melissa Davenport, U.S. Fed. Tr. Com'n, May 30, 2014, *available at* **Error! Hyperlink reference not valid.**.

[17] *See Welcome to Amazon Books*, https://www.amazon.com/b?ie=UTF8&node=13270229011 (listing locations); *see also* Abha Bhattarai *Amazon's first Washington-area bookstore opens March 13*, https://www.washingtonpost.com/news/business/wp/2018/03/12/amazons-first-washington-area-bookstore-opens-tuesday/?utm_term=.82b2c8a91a87.

[18] *See* Press Release, *Nordstrom to Acquire HauteLook*, Feb. 17, 2011, *available at* http://press.nordstrom.com/phoenix.zhtml?c=211996&p=irol-newsarticle&ID=1530280.

[19] *See* Steve Koenig, *Smart Home Competition Fuels Innovation and Creativity*, Apr. 2, 2018, *available at* https://techpinions.com/smart-home-competition-fuels-innovation-and-creativity/52614.

[20] *See* U.S. Fed. Tr. Com'n, *Internet of Things: Privacy and Security in a Connected World*, Jan. 2015, *available at* https://www.ftc.gov/system/files/documents/reports/federal-trade-commission-staff-report-november-2013-workshop-entitled-internet-things-privacy/150127iotrpt.pdf.

[21] *See* Statement of Fed. Tr. Com'n's Acting Director of the Bureau of Competition on the Agency's Review of Amazon.com, Inc.'s Acquisition of Whole Foods Market Inc., *available at* https://www.ftc.gov/news-events/press-releases/2017/08/statement-federal-trade-commissions-acting-director-bureau.

[22] *See supra* n.16.

[23] *See* https://www.ftc.gov/enforcement/cases-proceedings/closing-letters/mens-wearhousejos-bank-clothiers (closing letters to counsel for The Men's Wearhouse, Inc. and Jos A. Bank Clothiers, Inc.).

[24] *See* http://www.justice.gov/atr/public/press_releases/2013/299776.htm and **Error! Hyperlink reference not valid.**.

[25] *United States v. Apple, Inc.*, 791 F.3d 290 (2d Cir. 2015).

[26] Makan Delrahim, *supra* n.12.

[27] *See* Note by the United States, *Algorithms and Collusion*, Jun. 21-23, 2017, DAF/COMP/WD(2017)41, at 2, *available at* https://one.oecd.org/document/DAF/COMP/WD(2017)41/en/pdf.

[28] *See id*.

[29] The position of the United States was described more thoroughly in its 2017 paper submitted to the OECD. *See generally Algorithms and Collusion*, *supra* n.27.

[30] *See* https://www.justice.gov/atr/case/us-v-daniel-william-aston-and-trod-limited; **Error! Hyperlink reference not valid.**.

[31] *See* https://www.justice.gov/opa/pr/e-commerce-company-and-top-executive-agree-plead-guilty-price-fixing-conspiracy-customized and https://www.justice.gov/opa/pr/second-e-commerce-company-and-its-top-executive-agree-plead-guilty-price-fixing-conspiracy.

[32] Note by the United States, *Vertical Restraints for Online Sales*, Sept. 12, 2013, DAF/COMP(2013)13, *available at* http://www.oecd.org/competition/VerticalRestraintsForOnlineSales2013.pdf.

[33] This is consistent with the evolution under U.S. antitrust law of the treatment of vertical restraints from *per se* liability to rule of reason analysis. *See Leegin Creative Leather Prods., Inc. v. PSKS, Inc*., 551 U.S. 877 (2007) (holding that all vertical restraints, price and non-price, should be evaluated under the rule of reason).

[34] *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001).

[35] Br. for Appellees, *United States v. Microsoft Corp.*, No. 00-5212, 00-5213 (D.C. Cir. Feb. 9, 2001).

[36] *Fed. Tr. Com'n et al. v. Staples, Inc.*, 15-cv-02115 (D.D.C. Dec. 9, 2015), *available at* https://www.ftc.gov/system/files/documents/cases/151209staplescomplaint.pdf.

[37] *See* Complaint, *Fed. Tr. Com'n v. Staples, Inc. and Office Depot, Inc*., 1:97CV00701, Apr. 10, 1997, *available at* https://www.ftc.gov/sites/default/files/documents/cases/1997/04/staples2.pdf.

[38] *Id*. at 4.

[39] *See Statement of the Federal Trade Commission Concerning the Proposed Merger of Office Depot, Inc. and OfficeMax, Inc.*, *available at* https://www.ftc.gov/sites/default/files/documents/closing_letters/office-depot-inc./officemax-inc./131101officedepotofficemaxstatement.pdf.

[40] *Id*.

[41] *Supra* n.36 at 13.

[42] *See* U.S. Dep't of Justice and the Fed. Tr. Com'n *Horizontal Merger Guidelines* (Aug. 19, 2010), at 6-7, *available at* https://www.justice.gov/atr/horizontal-merger-guidelines-08192010.

[43] *See Statement of Commissioner Ohlhausen, Commissioner Wright, and Commissioner McSweeny Concerning Zillow, Inc./Trulia, Inc.*, Feb. 19, 2015, *available at* https://www.ftc.gov/system/files/documents/public_statements/625671/150219zillowmko-jdw-tmstmt.pdf.

[44] *Id*.

[45] *See id.*

[46] The Antitrust Agencies routinely analyse non-price considerations if there is evidence that these factors are important to competition. Although the U.S. has yet to challenge a merger based specifically on the likelihood that it would lead to diminished privacy protections, the FTC has recognized that consumer privacy can be a non-price dimension of competition. *See* Note by the United States, *Non-Price Effects of Mergers*, Jun. 6, 2018, DAF/COMP/WD(2018)11; Blog, "The not-so-big news about Big Data," Debbie Feinstein, U.S. Fed. Tr. Com'n, Jun. 16, 2015, *available* at https://www.ftc.gov/news-events/blogs/competition-matters/2015/06/not-so-big-news-about-big-data. *See also* Delrahim, *Don't Stop Believin': Antitrust in the Digital Era* and Hoffman, *Competition Policy and the Tech Industry—What's at Stake?, supra* n.12.

[47] *See* Letter from Jessica Rich, Fed. Tr. Com'n, Apr. 10, 2014, *available at* https://www.ftc.gov/system/files/documents/public_statements/297701/140410facebookwhatappltr.pdf.

[48] *See, e.g., Statement of the Federal Trade Commission Concerning Google/DoubleClick*, *available at* https://www.ftc.gov/system/files/documents/public_statements/418081/071220googledc-commstmt.pdf; *see also supra* n.47.