A review of cases involving the loss of potential and nascent competition at the FTC, with particular reference to vertical mergers

Alison Oldale, Bilal Sayyed, Andrew Sweeting[1]

Abstract: We describe several stylized facts about cases where Federal Trade Commission (FTC) has challenged horizontal and vertical mergers on the basis that they would eliminate future competition. The number of challenges is larger than might be expected given the recent debate, it is spread over many years and industries, and the challenges have involved a range of theories of harm. Motivated both by the recent publication of the Vertical Merger Guidelines (2020) and the fact that most discussion of potential competition has focused on horizontal questions, we discuss several cases in detail where the alleged elimination of future competition resulted from a vertical transaction or as a result of some type of vertical restriction.

Introduction

Whether antitrust agencies are sufficiently aggressive in identifying and challenging mergers that may eliminate future competition, even if product market competition at the time of the transaction is limited, has generated significant debate. This concern is a frequent topic of discussion, including at the Federal Trade Commission (FTC) Hearings on Competition and Consumer Protection in the 21st Century, the 2020 OECD Competition Meetings, and academic conferences devoted to antitrust issues, such as CRESSE. The academic literature has provided some empirical evidence that some consummated mergers have led to acquirers eliminating potential competition from pharmaceutical drugs that were in clinical trials (Cunningham et al., 2020). Other academic work and commentary has argued that these types of transactions are also common in tech (The Economist, 2018[2]; Hemphill and Wu, 2020).

In this short article, we do two things. First, we discuss some stylized facts about cases, over the last 25 years, where the FTC has challenged either proposed or consummated transactions on the grounds that the transaction will likely reduce future competition. Compared to what one might expect from listening to the policy debate, we believe that the number of cases is large (we identify

---

[1] The Authors are employed at the United States Federal Trade Commission (FTC). The views expressed are our own, and not those of any Commissioner or of the FTC.

[2] https://www.economist.com/business/2018/06/02/american-tech-giants-are-making-life-tough-for-startups

82 during the 25-year period, even though our case count may be incomplete). While the majority of these challenges are in pharmaceuticals and medical devices, the FTC has challenged transactions across the range of industries where the FTC typically reviews mergers on the grounds that future competition might be eliminated. We also discuss some other notable features of these cases, and we hope that the facts we present may inspire further research into what enforcement has achieved and what it may have missed in the past, as well as more informed discussion. We then discuss a subset of cases with a significant vertical component in more detail, motivated, in part, by the very recent publication by the Department of Justice and the FTC of the Vertical Merger Guidelines. We explain how the reasoning behind these past cases, which have a variety of different fact patterns, is consistent with how the new Guidelines describe the agencies' practice.

Our discussion focuses entirely on FTC cases where there is information in the public record (almost all of them in the form of complaints, although in the case of Barnes & Noble/Ingram (1999), which was abandoned before a challenge was issued, we will base our discussion on press reports and speeches). Our article builds on discussions by Feinstein (2014),[3] Hoffman (2019),[4] Moiseyev (2020),[5] and Sweeting, Schrag, and Wilson (2020). We will avoid discussing primarily legal questions, such as when it is, or is not, appropriate to address potential competition cases under Section 2 of the Sherman Act, and focus on the facts and theories that are relevant for thinking about how a transaction may significantly reduce future competition relative to a but-for world where the transaction in question does not take place.

Stylized Facts About FTC Challenges to Mergers Eliminating Future Competition

As part of the FTC's efforts to review the effectiveness of its enforcement mission, a sample of 82 challenges to transactions, from 1995 onwards, was identified where, in each case, one of the primary concerns was that the transaction would eliminate future competition in at least one

[3] https://www.ftc.gov/system/files/documents/public_statements/forward-looking-nature-merger-analysis/140206mergeranalysis-dlf.pdf (accessed July 24, 2020).
[4] https://www.judiciary.senate.gov/imo/media/doc/Hoffman%20Testimony2.pdf (accessed July 24, 2020).
[5] https://www.competitionpolicyinternational.com/potential-and-nascent-competition-in-ftc-merger-enforcement-in-health-care-markets/ .

market.[6] By this, we mean that the FTC alleged that the transaction would affect competition, and likely harm consumers, in the future in some way that was additional to how it might reduce product market competition in the short-run. For example, one of the firms might be expected, absent the merger, to gain a significant number of additional customers or to introduce new products that would make it a much stronger competitor in the future than it is currently.

The set of transactions includes cases where: (1) both parties already offer products, but one or both of them are expected to increase their sales significantly in the but-for world, so that their market shares understate their competitive position; (2) cases where one of the parties is a potential entrant and the other already has a product on the market; (3) cases where both firms have products in development; and (4) cases where the transactions may eliminate future competition by making it much more difficult for firms that are not parties to the transaction to enter or develop products, which is a common pattern in the vertical cases discussed below. The set of cases includes examples where the transaction was ultimately allowed to proceed, either subject to a settlement or as a result of litigation. However, we do not include cases where a merger was abandoned without public discussion of the case by the FTC or cases where the FTC's investigation examined the impact of mergers on future competition but ultimately decided that a challenge was inappropriate (for example, because of offsetting efficiencies). We also do not include cases where potential competition issues were a minor concern. As a result, the sample should not be viewed as a census of challenges, but as a collection of cases where FTC staff, as reflected in the public record, viewed the likely elimination of future competition to be important.

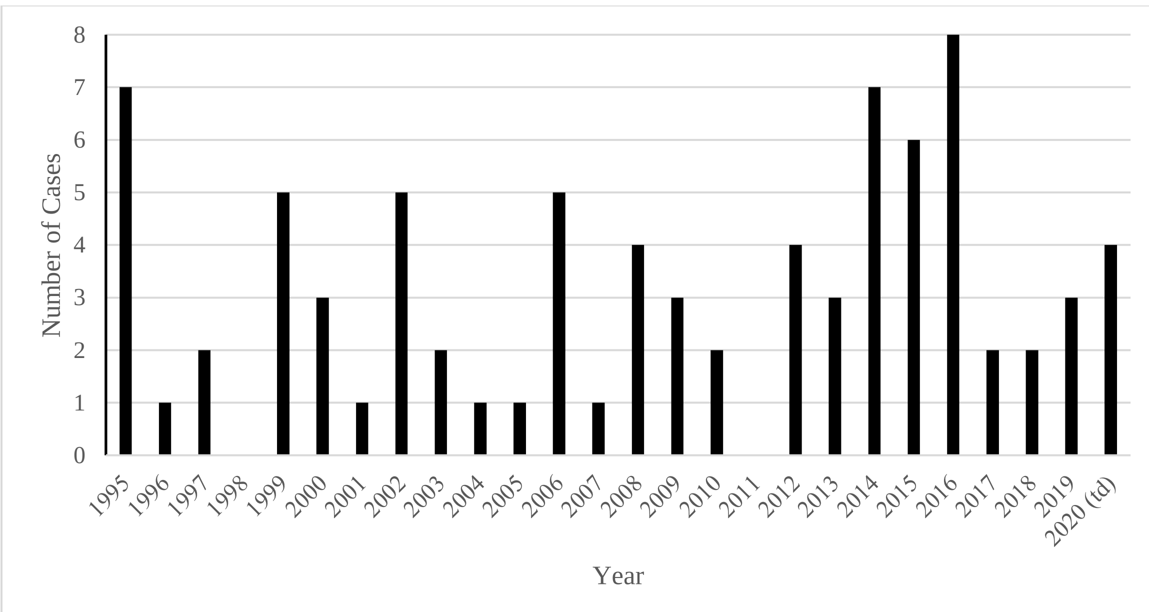
From this sample of challenges, we identify several stylized facts.

1. The FTC Has Been Concerned with the Elimination of Future Competition Throughout the Last 25 Years

[6] For example, the FTC's complaint in the Abbvie/Allergan (2020) merger alleged that the merger would reduce current competition in the market for treatments for EPI and potentially eliminate future competition for treatments for ulcerative colitis and Crohn's disease where the parties had products in development (https://www.ftc.gov/system/files/documents/cases/191_0169_abbvie_and_allergan_-_complaint_0.pdf).

Our first fact comes from examining the years in which complaints were issued. Figure 1 shows the distribution of challenges across the 25-year period from 1995 through the first half of 2020.[7] To provide a benchmark, the FTC has challenged, on average, 21 transactions per year since 2002. While random variation in the case mix will cause the numbers to fluctuate from year to year, the Figure indicates that the FTC has identified concerns with the elimination of future competition in a substantial proportion of challenged transactions throughout the last quarter century. It is clearly not a theory that enforcers have ignored.

Figure 1: Distribution of Potential Competition Challenges Across Years



2. Cases Are Spread Across Sectors Where the FTC Commonly Reviews Mergers

Much of the debate has focused on the pharmaceutical industry, where Cunningham et al. (2020) identify "killer acquisitions," and tech, where commentators have claimed that "kill zones" exist around some of the largest companies.[8] Table 1 shows the distribution of our sample of challenges

[7] In cases with subsequent litigation or orders, we use the year of the initial complaint. We also use the date of the complaint in cases involving consummated mergers that may have been consummated several years previously.

[8] Cunningham et al. (2020) describe an acquisition where the acquirer terminates a development project of the acquired firm as a "killer acquisition". Caffarra et al. (2020) describe "reverse killer acquisitions" where the acquisition results in the acquiring firm terminating one of its development projects. "Kill zones" refer to the idea that major tech companies may copy the ideas, or hire away the staff, of small firms that develop related products,

across different sectors, although classification is not always straightforward. For example, we classified Illumina/PacificBiosciences (2019), where the products were technologies for gene sequencing, under medical devices and equipment, rather than technology.

Table 1: Distribution of Cases Across Sectors

Sector	Number of Cases
Pharmaceuticals (branded or generic)	48
Medical devices, equipment and tests	15
Non-pharma chemicals	3
Energy (including oil and gas pipelines)	4
Industrial	5
Technology & Software	3
Consumer Products	2
Other	2

The large number of cases in pharmaceuticals indicate that the FTC has certainly not ignored potential competition concerns in this area. This result is not inconsistent with Cunningham et al. (2020) finding that many apparent "killer acquisitions" occurred without pre-merger notification to the U.S. antitrust agencies.[9] These cases are spread across generic and branded pharmaceutical products, with the questions sometimes being whether a generic will enter in competition to a branded product. However, concern with future competition has not been confined to pharmaceutical or medical device markets, as examples of challenges can be found in a diverse range of industries, including book retailing and wholesaling (Barnes and Noble/Ingram (1999)), consumer shaving products (Edgewell/Harry's (2020)), software (Verisk/Eagleview (2014); CDK/Auto/Mate (2018)) and media ratings (Nielsen/Arbitron (2014)).

3. The FTC Has Identified Various Theories of Harm for How Competition Would Be Eliminated

preventing potential competitors from developing (for example, Bloomberg (2018), https://www.bloomberg.com/opinion/articles/2018-11-07/big-tech-sets-up-a-kill-zone-for-industry-upstarts).

[9] For example, Cunningham et al. identify that the probability that an acquired product in development that overlaps with the acquirer's portfolio is actually launched is 1.8% for deals just below the HSR threshold and 9.1% for deals just above the threshold. They also find that over 85% of the overlapping acquisitions that are completed occur just below the HSR threshold.

The FTC's complaints identify concerns with the elimination of future competition in a variety of scenarios and using different theories of harm. For example, the theories of harm in pharmaceutical cases are typically either that (1) one party has a product on the market, and the other has a potentially competing product in development (for example, the product is in the later stages of clinical testing for branded products, or it has secured or is in the process of securing an ANDA for generic products), or (2) both firms have products in development, so that the merger may lead only one of them to enter. In these cases, the theory of harm is a horizontal one, even though there may be no current product market competition. On the other hand, cases in other sectors often involve the merger eliminating competition where both parties have products on the market but one of them is gaining customers, so that its current market share understates how strong a competitor that party is likely to become in the future. For example, Verisk/Eagleview (2014) and CDK/Auto/Mate (2018) both involved the acquisition of a firm selling a software product (rooftop measurement software and dealer management system software, respectively) that was rapidly gaining customers, including customers that had switched away from the other party.

While in the above cases the concern was about a loss of future product market competition, the FTC has also alleged a loss of competition in research and development (e.g., Bayer/Aventis (2002)) or in the licensing of technologies that might be required to allow third parties to develop products, so that the transaction would create barriers to entry (e.g., Ciba-Geigy/Sandoz (1997)).[10] The FTC has also alleged that seven vertical mergers may eliminate future competition, and it is to these mergers that we now turn.[11]

Future Competition Cases involving Vertical Elements

Vertical mergers, and mergers of complements, can sometimes lead to the loss of potential or nascent competition. This point was made by a number of participants during the FTC's Hearings

[10] This is consistent with the FTC's frequent concern with research and development. For example, Gilbert and Greene (2015) identify 54 challenges where the FTC alleged harm to innovation or harm to research and development from 2004-2014 (the authors note that they may be under counting cases).

[11] Cadence/Cooper and Chyan (1997), Barnes and Noble/Ingram (1999), Dominion Resources/Consolidated Natural Gas (1999) , El Paso/Coastal (2001), Cytyc/Digene (2002), Verisk/Eagleview (2014) and Energy Equity Transfer/Williams (2016)..

on Competition and Consumer Protection in the 21st Century -- one hearing on Vertical Mergers[12] and one hearing on the Antitrust Framework for Evaluating Acquisitions of Potential or Nascent Competitors[13] -- and in comments on the draft Vertical Merger Guidelines.[14] Many of the concerns focused on settings where a large platform facing weak competition acquires a firm that makes a complementary product. The concerns came in two variants. In one, the combination may eliminate the incentive for the platform to enter the complementary market of its merger partner – rather than "build" capability, it "buys" capability – and eliminate an independent source of competition in the complementary market.[15] In the other, the combination may eliminate a significant future competitor that would challenge the platform in its own market by entering with its own version of the product, or by successfully re-positioning its product as a substitute to the platform.[16]

These concerns go beyond platform markets, and they can arise with mergers between firms at different levels in a supply chain, as well as mergers of complements. While the concern is essentially horizontal, the vertical or complementary relationship between the merging parties is an important part of the factual context of a case. Firms at one level in a supply chain, or makers of one complement, may be well placed to enter other levels in the same chain or to enter complementary markets. This can happen, for example, if a firm's existing operations mean that it has capabilities, expertise, industry contacts, or assets that can facilitate entry, or if it can take

[12] See Federal Trade Commission, Hearings on Competition and Consumer Protection in the 21st Century: Vertical Mergers (November 1, 2018); transcript at pages 48, 106, 126, 133, and 136, https://www.ftc.gov/news-events/events-calendar/ftc-hearing-5-competition-consumer-protection-21st-century. https://www.ftc.gov/policy/public-comments/2018/07/initiative-759.

[13] See Transcript, Federal Trade Commission, Hearings on Competition and Consumer Protection in the 21st Century: Antitrust Framework for Evaluating Acquisitions of Potential or Nascent Competitors (October 17, 2018), transcript at 168-385, https://www.ftc.gov/system/files/documents/public_events/1413712/ftc_hearings_session_3_transcript_day_3_10-17-18_1.pdf.

[14] See, e.g., Recommendations and Comments on the Draft Vertical Merger Guidelines by Jon Baker, Nancy Rose, Steve Salop, and Fiona Scott Morton (February 24, 2020) at 25, https://www.ftc.gov/system/files/attachments/798-draft-vertical-merger-guidelines/vmg21_baker_rose_salop_scott_morton_comments.pdf; Comments of the American Antitrust Institute (February 2020) at 6-7, https://www.ftc.gov/system/files/attachments/798-draft-vertical-merger-guidelines/aai_comments_draft_vm_guidelines_f.pdf; Public Comments of 28 State Attorneys General on the Draft Vertical Merger Guidelines (February 26, 2020) at 5-6, https://www.ftc.gov/system/files/attachments/798-draft-vertical-merger-guidelines/state_ags_final_vmg_comments.pdf.

[15] See, e.g, presentation of Susan Athey, Nascent Competition: Platforms and Market Structure, at FTC Hearings on Competition and Consumer Protection in the 21st Century (October 17, 2018) at 32, available at https://www.ftc.gov/system/files/documents/public_events/1413712/cpc-hearings-gmu_1017.pdf.

[16] Id. at 32.

advantage of vertical or complementary efficiencies. The firm may also have incentives to enter a related vertical market, or a complementary market, if competition in that related or complementary market is weak, as high prices in one part of a supply chain can depress demand in all the other parts. This type of concern, while involving mergers of vertically related firms, is essentially amenable to analysis under standard horizontal merger analysis because the potential competition lost due to the merger would occur at the same level of the supply chain.[17]

In addition to the theories described above, the Vertical Merger Guidelines also recognize that a vertical merger may eliminate potential competition through a more clearly vertical mechanism – "foreclosure of potential competition." This arises when the merged firm has both the ability and incentive to use its position at one level of the supply chain to hinder entry of potential rivals at another stage, for example as the result of a merger between a downstream producer and the supplier of a key input, and any harmful effects on competition are not offset by vertical efficiencies. The FTC has alleged versions of each of the aforementioned theories, as shown in the following case descriptions.

Verisk/Eagleview (2014) is an example of a firm acquiring another vertically related firm that had also recently become a horizontal competitor. The FTC alleged that Verisk's acquisition of Eagleview would eliminate the benefits of new competition in the market for Rooftop Aerial Measurement Products ("RAM Products") for insurance purposes from a firm that was a dominant provider of services in another market in the supply chain that were integrated with RAM Products. At the time of the proposed merger, EagleView was a near monopoly provider of RAM Products, with a 90% share. Verisk was the dominant provider of Claims Estimation Software used by insurers to process roof damage claims. Prior to the proposed merger, Eagleview, by agreement, had integrated its products into Verisk's claims estimation software. Approximately five months prior to the proposed merger, Verisk launched a RAM Product that was well positioned to take business from Eagleview and had begun replacing EagleView as a supplier to significant insurance

[17] U.S. Dep't of Justice & Fed. Trade Comm'n, Vertical Merger Guidelines (2020) at 1 ("if one of the parties to a transaction could use its pre-existing operations to facilitate entry into the other's market, the Agencies may consider whether the merger removes competition from a potential entrant, using the methods described in the Horizontal Merger Guidelines.").

carriers. The FTC's investigation concluded that the combination of Verisk and Eagleview would eliminate the nascent competition in RAM products between the two firms.

Barnes & Noble/Ingram (1999) also illustrates the logic of concerns that a firm might acquire another in a vertically related market, thereby removing itself as a potential entrant into that that market. It is also an example of foreclosure of potential competition. Ingram was the largest book wholesaler in the United States, supplying both traditional offline retailers and online sellers (it was the largest supplier to a growing online bookseller called Amazon, which vigorously opposed the deal),[18] and Barnes and Noble was a large retail bookseller. Prior to the proposed transaction, Barnes and Noble had been considering entry into the book wholesaling market, so the transaction directly eliminated a potential entrant into the upstream market. There was also an additional concern that control of Ingram would allow the merged firm to disadvantage, either by raising prices or reducing quality, potential competitors to Barnes and Noble downstream, who might rely on Ingram for a supply of books across the country, with the effect that consumers of books would ultimately pay higher prices. The parties abandoned the transaction after hearing staff's concerns.

Cytyc/Digene (2002) illustrates the other variant on concerns that vertical mergers can eliminate potential entrants – the concern here was that the acquirer was buying a firm that at the time made a complement, but which was poised to enter the acquiring firm's market. It also raised concerns about foreclosure of entry. The merging parties sold complementary products used to screen women for cervical cancer. Cytyc produced a liquid-based Pap test that physicians used for primary, front-line cervical cancer screenings. At the time of the merger, Cytyc had a 93% share in the market for liquid Pap tests. Digene's product was a DNA-based test for human papillomavirus (HPV), the cause of nearly all cervical cancers. Physicians did not use Digene's HPV test as a primary cervical cancer screen, but they did use it as a follow-up test if results from a liquid Pap test were unclear. At the time, Digene was pursuing (and was expected to receive) FDA approval to use its HPV test as a primary cervical cancer screen in place of (and in competition with) liquid-based Pap smears. The FTC alleged that Cytyc's proposed acquisition of Digene eliminated a vertically related potential entrant. In addition, the FTC alleged that the merged firm would foreclose potential competition from other firms that would enter in

[18] https://www.thefreelibrary.com/Barnes+and+Noble+Gives+Up+on+Contested+Ingram+Acquisition.-a054804161

combination with Digene. The proposed merger would eliminate this future competition to Cytyc, if, as the FTC believed, the combined Cytyc/Digene would not have the incentive to pair Digene's HPV test with the liquid Pap test of the combined firm's competitors. The parties abandoned the proposed transaction after the FTC voted to approve filing a complaint in federal district court.

The FTC has also alleged foreclosure of potential entry in mergers in the energy sector. For example, the proposed **Energy Transfer Equity (ETE)/Williams (2016)**[19] merger involved companies that both owned 50% shares in the two existing pipelines used to supply natural gas to central and southern Florida. (ETE owned a 50% share in one pipeline, Williams owned a 50% share in the competing pipeline.) Aside from this horizontal concern, Williams also owned 100% of the Transcontinental (Transco) pipeline, which had agreements to supply gas to a third pipeline, Sabal, that planned to serve central Florida, and which, as it developed, was expected to compete particularly closely with ETE's pipeline. The merger involved no change in the extent of vertical integration, and there were no vertical efficiencies. The FTC's Complaint alleged that the merger would provide Williams with a stronger incentive to try to limit the growth of Sabal than Williams would have had prior to the merger.

A second pipeline case involving similar foreclosure issues is **El Paso Energy/Coastal (2001)**.[20] Coastal owned the only natural gas pipeline supplying the Milwaukee-Waukesha area of Wisconsin and, in particular, was able to provide "tailored" services, where the quantity of gas supplied to a customer responds immediately to changes in demand, through its ownership of low-cost gas storage in Michigan. El Paso owned the Midwestern Gas Transmission (MGT) pipeline, which was expected to be the source of gas, storage, and tailored services for the Guardian pipeline that a third party that was proposing to build into the Milwaukee area. The FTC determined that control of MGT would provide the merged firm the ability and incentive to prevent Guardian from competing effectively, reducing competition in the Milwaukee area. The concern was removed through divestiture of the MGT assets. This case also involved a simpler elimination of potential competition in central Florida where El Paso owned 50% of the only interstate pipeline serving

[19] https://www.ftc.gov/system/files/documents/cases/160608etecmpt.pdf
[20] https://www.ftc.gov/sites/default/files/documents/cases/2001/03/elpasocmp_0.pdf.

the region and Coastal had signed contracts to supply Florida utilities in advance of building its own pipeline to the region.

Conclusion

The statistics on a summary sample of FTC enforcement provide evidence of long-term and consistent FTC concern about the loss of potential competition through horizontal or vertical mergers, across a wide spectrum of industries. Particular concerns that a vertical merger, or merger of complements, can eliminate potential or nascent competition are particularly salient in light of the recent publication of the Vertical Merger Guidelines in the United States and are often voiced in discussions of digital platforms. The cases described above illustrate how the FTC has approached these concerns in several different factual contexts.

References

Caffarra, Cristina, Gregory Crawford, Tommaso Valletti (2020), "`How Tech Rolls': Potential Competition and Reverse Killer Acquisitions", CPI Antitrust Chronicle, 2(2).

Cunningham, Colleen, Florian Ederer, and Song Ma (2020), "Killer Acquisitions," Yale University.

Gilbert, Richard and Hillary Greene (2015), "Merging Innovation into Antitrust Agency Enforcement of the Clayton Act", *George Washington Law Review*, 83(6), 1919-1947.

Hemphill, C. Scott, and Tim Wu (2020), "Nascent Competitors," *University of Pennsylvania Law Review*, forthcoming.

Sweeting, Andrew, Joel Schrag and Nathan Wilson, "", *CPI Antitrust Chronicle*, forthcoming.