Published in the United Kingdom by Law Business Research Ltd
Holborn Gate, 330 High Holborn, London, WC1V 7QT, UK

www.globalcompetitionreview.com

Enquiries concerning reproduction should be sent to Law Business Research, at the address above. Enquiries concerning editorial content should be directed to the Publisher – clare.bolton@lbresearch.com

ISBN 978-1-80449-266-6

Printed in Great Britain by
Encompass Print Solutions, Derbyshire
Tel: 0844 2480 112

CHAPTER 5

Merger Remedies in Dynamic Industries

Margaret T Segall and Nicole M Peles[1]

Introduction

In the United States, the Antitrust Division of the Department of Justice (DOJ or the Division) and the Federal Trade Commission (FTC) (together, the antitrust authorities) are responsible for reviewing mergers and acquisitions and imposing appropriate remedies. In rapidly evolving sectors, such as technology, consumer services, online retail and pharmaceuticals, these responsibilities can be particularly challenging.

Unlike traditional industries that may change steadily or very little over time, dynamic industries are characterised by 'higher entry and exit rates, as well as continuous processes of innovation that systematically disrupt existing business models and create entirely new markets'.[2] In these markets, it can be very difficult to predict the competitive effects of a transaction or to craft an appropriate remedy to maintain competition.

This chapter contains four sections, which, in turn, briefly identify common types of merger remedies, discuss the characteristics of dynamic industries and the challenges posed for traditional merger remedies, and cover the different approaches adopted by the antitrust authorities in fashioning remedies in two dynamic industries. It also includes citations to the DOJ's Merger Remedies Manual, which, although it has been withdrawn, is still informative.

---

1 Margaret T Segall is a partner and Nicole M Peles is a practice area attorney at Cravath, Swaine & Moore LLP.

2 Organisation for Economic Co-operation and Development [OECD], Merger Control in Dynamic Markets (2020) [Merger Control in Dynamic Markets], at 7, available at https://www.oecd.org/daf/competition/merger-control-in-dynamic-markets-2020.pdf.

Overview of merger remedies

As previously described by the antitrust authorities, the goal of a merger remedy is to effectively preserve efficiencies while maintaining competition in the relevant market.[3] The FTC and DOJ have long recognised that determining an appropriate remedy – perhaps particularly when the transaction involves a dynamic industry – requires a careful analysis of the facts of each individual transaction and implicated market.[4]

Nevertheless, the antitrust authorities historically have adhered to several key principles and preferences regarding merger remedies: they require that merger remedies (1) must preserve competition, (2) should not create ongoing government regulation, (3) should protect competition, not competitors, and (4) must be enforceable.[5]

Merger remedies typically fall within one of two categories: structural remedies that require divestitures of assets or business divisions; or behavioural remedies that impose conduct restrictions or requirements on the merging parties.[6]

Structural remedies are generally required to remedy competitive concerns in horizontal mergers, or in vertical mergers where behavioural remedies are deemed inadequate, and are much more common than behavioural remedies.[7] When imposing structural remedies, the FTC and DOJ historically have (1) preferred

---

3 US Department of Justice [DOJ], Merger Remedies Manual (September 2020) [Merger Remedies Manual], at 2 (describing the goal of preserving the efficiencies created by the merger 'while preserving competitive markets'), available at https://www.justice.gov/atr/page/file/1312416/download. See also Richard Feinstein, US Federal Trade Commission [FTC] Bureau of Competition, 'Negotiating Merger Remedies' (January 2012), at 4 (acceptable remedies 'maintain or restore competition in the markets affected by the merger'), available at https://www.ftc.gov/system/files/attachments/negotiating-merger-remedies/merger-remediesstmt.pdf.

4 Merger Remedies Manual (see footnote 3, above), at 2 ('Tailoring the remedy to address the violation is the best way to ensure that the relief obtained cures the competitive harm.').

5 id. at 3–6.

6 id. at 4.

7 See FTC, 'The FTC's Merger Remedies 2006–2012' (January 2017) [FTC Remedy Review], at 13, available at https://www.ftc.gov/system/files/documents/reports/ftcs-merger-remedies-2006-2012-report-bureaus-competition-economics/p143100_ftc_merger_remedies_2006-2012.pdf (80 per cent of challenged mergers resulted in structural remedies, with 87 per cent of challenged horizontal mergers resulting in a structural remedy).

divestitures of an existing business,[8] (2) typically required an 'upfront' as opposed to post-close buyer,[9] and (3) allowed for divestiture of discrete assets, despite their stated preference for ongoing business divestitures.[10]

When vertical mergers have raised competitive concerns, the FTC and DOJ historically often relied on behavioural remedies. The antitrust authorities have a range of remedies at their disposal, including firewalls, temporary supply agreements and temporary limits on the combined entity's ability to rehire divested employees.[11] The agencies have also combined structural and behavioural remedies.[12]

However, in recent years, the agencies have both indicated and demonstrated that they are less willing to entertain remedies to resolve horizontal or vertical concerns than they have been in the past, preferring instead to challenge in their entirety mergers that they find problematic and pursue structural remedies in cases where they would have historically pursued behavioural remedies.[13] When the agencies do approve remedies, they have done so with much more stringent review and conditions, such as the inclusion in FTC consent decrees of 'prior approval' provisions.[14]

---

8 Merger Remedies Manual (see footnote 3, above), at 8.

9 The FTC's remedy study found that 69 per cent of the transactions included in the study required an upfront buyer, compared with 33 per cent for which a post-close remedy was allowed. FTC Remedy Review, table 2, at 14. The DOJ's Merger Remedies Manual states that the DOJ will require an acceptable upfront buyer '[i]n most merger cases'. Merger Remedies Manual (see footnote 3, above), at 22.

10 FTC Remedy Review (see footnote 7, above), table 2, at 14 (finding that historically only 40 per cent of structural remedies included in the study involved ongoing business divestitures, compared with 67 per cent involving discrete assets).

11 Merger Remedies Manual (see footnote 3, above), at 14–15.

12 id.

13 See Speech, DOJ, 'Assistant Attorney General Jonathan Kanter of the Antitrust Division Delivers Remarks to the New York State Bar Association Antitrust Section' (24 January 2022), available at https://www.justice.gov/opa/speech/assistant-attorney-general-jonathan-kanter-antitrust-division-delivers-remarks-new-york.

14 Such provisions require the merging parties (and to a certain extent, the divestiture buyer) to seek FTC approval before closing future transactions in each relevant market at issue in the order. See Press Release, FTC, 'FTC to Restrict Future Acquisitions for Firms that Pursue Anticompetitive Mergers' (25 October 2021), available at https://www.ftc.gov/news-events/news/press-releases/2021/10/ftc-restrict-future-acquisitions-firms-pursue-anticompetitive-mergers.

Overview of dynamic industries

Dynamic industries (those characterised by rapid change, innovation and disruption) have become prevalent in today's technology-driven world. This has led to increased challenges for merger control because it is not always clear how a transaction might affect competition in markets that are subject to constant innovation and change. And traditional merger assessment tools may overly 'focus on the current structure of markets, instead of forwardly looking at how markets might evolve post-merger'.[15]

Section 7 of the Clayton Act prohibits transactions whose effect 'may be substantially to lessen competition, or to tend to create a monopoly'.[16] The antitrust authorities have stated that, under this standard, they seek 'not only to stop imminent anticompetitive effects', but to be forward-looking and stop potential restraints on competition 'in their incipiency'.[17]

Dynamic industries raise several unique issues with respect to merger analysis. First, innovation and new product development are often key elements of competition. The 2023 Draft Merger Guidelines indicate the agencies view that certain transactions harm competition by 'reduc[ing] incentive[s] to engage in disruptive innovation'.[18] The agencies consider 'harm to innovation in competition' in their analyses of transactions and may even define the 'relevant antitrust markets around products that would result from innovation' to gauge the competitive harm of a transaction.[19]

---

15 Merger Control in Dynamic Markets (see footnote 2, above), at 7.

16 15 USC § 18.

17 Draft Merger Guidelines § I, 'Overview' (19 July 2023), available at https://www.ftc.gov/system/files/ftc_gov/pdf/p859910draftmergerguidelines2023.pdf. See also Hearing Before the US Senate Subcommittee On Antitrust, Competition Policy and Consumer Rights (statement by Bill Baer, Assistant Attorney General, Antitrust Division) (9 March 2016), available at https://www.justice.gov/opa/file/831686/download.

18 Draft Merger Guidelines (see footnote above at 17), at App'x 2(e). See also guidelines that agencies 'may [use to] consider whether a merger is likely to decrease innovation competition' as well as 'whether [a] merger is likely to enable innovation that would not otherwise take place', Horizontal Merger Guidelines § 6.4, 'Innovation and Product Variety' (19 August 2010) [HMG], available at https://www.justice.gov/atr/horizontal-merger-guidelines-08192010 and 'deterr[ence] from innovation' as a consideration in identifying whether a vertical merger may diminish competition, Vertical Merger Guidelines § 4(a)(1), 'Unilateral Effects' (30 June 2020), available at https://www.justice.gov/media/1090651/dl?inline.

19 Draft Merger Guidelines (footnote above at 17), at App'x 3(b)(7).

Second, 'potential competition' analyses take on heightened importance. Mergers in dynamic industries can raise concerns when the merging parties, absent the transaction, were planning to, or would have had the ability or incentive to, enter the other's market and compete directly.[20]

Third, the authorities recognise that elimination of competition from new, disruptive 'maverick' firms – including those with new, unusual business models – may cause significant harm, even when the maverick player is a new entrant or has only a modest market share.[21]

Where appropriate, mergers in dynamic industries can be cleared subject to remedies tailored to address the harm to competition, including harm to innovation. But one of the challenges of merger enforcement in dynamic industries is to craft adequate remedies when it is uncertain how the market will evolve in the future. The antitrust authorities regularly analyse mergers in dynamic industries, such as pharmaceuticals and high-technology goods and services. This chapter discusses how the antitrust authorities have addressed each in turn.

Remedies in the pharmaceutical sector

There has been a consistently high volume of mergers and acquisitions within the pharmaceutical industry. Between 2016 and 2021, there were more than 1,200 deals in this industry representing more than US$1 trillion.[22] The goal of merger enforcement in the pharmaceutical space is to protect and promote competition and innovation across product lines. Historically, the FTC has engaged in an analysis, product by product, to assess where overlap or potential future competition can be found. If the FTC believed that the effect of a transaction 'may be substantially to lessen competition'[23] in a particular market (or markets), the FTC would seek remedial action, such as pursuing a settlement or attempting to block the merger in court or through the agency's administrative process. FTC enforcement actions in the pharmaceutical sector historically have resulted in settlement between the parties and the government, rather than litigation.

---

20 Draft Merger Guidelines (footnote above at 17), at § II(4)(a).

21 Draft Merger Guidelines (footnote above at 17), at § II(3)(a).

22 Jan Ascher, Bihe Chen, Corina Curschellas, Anna Mattsson and Ari Perl, 'Five Ways Biopharma Companies Can Navigate the Deal Landscape', McKinsey & Company (1 February 2023), available at https://www.mckinsey.com/industries/life-sciences/our-insights/five-ways-biopharma-companies-can-navigate-the-deal-landscape.

23 15 USC § 18.

Although the FTC has discretion in pursuing settlements in merger cases, the most common remedy in a pharmaceutical consent decree has been a structural remedy, which typically involves divesting one of the parties' overlapping pharmaceutical products and its related assets. As part of its traditional pharmaceutical remedies, the FTC typically would require (1) ongoing business divestitures that allow for the buyer to become fully operational quickly;[24] (2) an upfront buyer that is familiar with and committed to the relevant market, including current involvement in the same or adjacent markets and prior dealings with the same customers and suppliers, and that has the financial ability to acquire and maintain the divested assets;[25] and (3) an interim monitor to oversee the transfer of the divestiture assets and the buyer's actions in connection with the new business.[26] Many consent decrees also required that the merged firm supply buyers with inputs or products for a specified period post-divestiture to support the buyer's ability to immediately compete successfully in the market. Similarly, consent decrees also could include transition services agreements, which require the merged firm to provide the buyer with back-office and other functions for a limited period until the buyer can perform the services on its own. To further mitigate any risk associated with divesture, the FTC has required the parties to present an upfront buyer, which it would then analyse to determine whether the buyer is capable of competing with the newly acquired product.

In addition to these general principles, the FTC's experience with settlements in the pharmaceutical industry has led to certain expected practices for divestitures in this area. For example, the FTC has required that the merging parties divest the 'easier to divest' product when possible, including prod-ucts made at third-party manufacturing sites.[27] Where the merging parties have an overlap between a branded and pipeline product, the FTC's position has been that the currently marketed product must be divested.[28] This approach reflects the FTC's view that divesting a pipeline product, where the divestiture buyer must navigate the final development and approval of the to-be-marketed drug, places the risk of

24 See FTC, 'The FTC's Merger Remedies 2006–2012', at 12, 21–22 (January 2017), available at https://www.ftc.gov/system/files/documents/reports/ftcs-merger-remedies-2006-2012-report-bureaus-competition-economics/p143100_ftc_merger_remedies_2006-2012.pdf.

25 id. at 24.

26 id. at 10.

27 id. at 36.

28 D Bruce Hoffman, 'It Only Takes Two to Tango: Reflections on Six Months at the FTC', Remarks at GCR Live 7th Annual Antitrust Law Leaders Forum (2 February 2018), at 6, available at https://www.ftc.gov/system/files/documents/public_statements/1318363/hoffman_gcr_live_feb_2018_final.pdf.

failure onto consumers. This is also in keeping with the FTC's stated mission of encouraging innovation, as it incentivises the merged firm to continue channelling resources towards new pipeline products.

During the Trump Administration, the FTC's traditional approach to pharmaceutical transactions, including the use of product divestitures, faced increased scrutiny about whether it fully and appropriately captured all potential anticompetitive effects from a proposed transaction, as described in the dissenting statements by the minority Democratic Commissioners concerning several consent decrees during this time period. For example, in connection with Bristol-Meyer-Squibb's US$74 billion acquisition of Celgene in 2019, the parties agreed to divest Celgene's Otezla psoriasis treatment to Amgen, another pharmaceutical and biologic company.[29] However, in their dissenting statements concerning the proposed settlement, Democratic Commissioners Rohit Chopra and Rebecca Kelly Slaughter stated that the settlement did not fully capture all competitive consequences of the transaction, such as possible effects on drug prices, innovation competition and incentives to engage in other anticompetitive conduct.[30] On 12 January 2020, the FTC approved the final consent order requiring divestiture to Amgen.[31]

In May 2020, AbbVie Inc and Allergan plc agreed to divest exocrine pancreatic insufficiency (EPI) assets to Nestlé, SA and IL-23 inhibitor assets to AstraZeneca plc to remedy the FTC's allegation that the US$63 billion acquisition would

29 Press Release, FTC, 'FTC Requires Bristol-Myers Squibb Company and Celgene Corporation to Divest Psoriasis Drug Otezla as a Condition of Acquisition' (15 November 2019), available at https://www.ftc.gov/news-events/news/press-releases/2019/11/ftc-requires-bristol-myers-squibb-company-celgene-corporation-divest-psoriasis-drug-otezla-condition.

30 See FTC, Dissenting Statement of Commissioner Rohit Chopra in the Matter of Bristol-Myers Squibb Company and Celgene Corporation (15 November 2019), available at https://www.ftc.gov/system/files/documents/public_statements/1554293/dissenting_statement_of_commissioner_chopra_in_the_matter_of_bristol-myers-celgene_1910061.pdf; FTC, Dissenting Statement of Commissioner Rebecca Kelly Slaughter in the Matter of Bristol-Myers Squibb Company and Celgene Corporation (15 November 2019), available at https://www.ftc.gov/system/files/documents/public_statements/1554283/17_-_final_rks_bms-celgene_statement.pdf.

31 See FTC, 'FTC Approves Final Order Requiring Bristol-Myers Squibb Company and Celgene Corporation to Divest Psoriasis Drug Otezla as a Condition of Acquisition' (13 January 2020), available at www.ftc.gov/news-events/press-releases/2020/01/ftc-approves-final-order-requiring-bristol-myers-squibb-company.

impose significant competitive harm on consumers.[32] Commissioners Chopra and Slaughter again dissented from approval of the remedies, challenging the FTC's approach of focusing on discrete product overlaps and raising a number of general concerns, including the merging companies' desire to sell assets to weak buyers, buyers lacking incentives and ability to restore competition, and the increased likelihood that divestitures would fail if the FTC relies on speculation rather than robust due diligence, as well as concerns that remedies do not account for harm to innovation.[33]

Lastly, in November 2020, the Democratic commissioners again expressed their concerns with the effectiveness of traditional remedies in response to the FTC's consent decree regarding the Pfizer Inc and Mylan NV merger, which required Pfizer and Mylan to divest products in 10 generic markets to Prasco, LLC.[34]

In Commissioner Chopra's dissent, which Commissioner Slaughter joined, he stated that the FTC's record of not pursuing litigation to block mergers of this calibre 'encourages market actors to propose even more unlawful mergers', given that they believe 'that there is simply no risk of the FTC blocking an unlawful pharmaceutical merger outright', signalling further dissatisfaction with the current remedy framework in this industry.[35]

These cases illustrate a growing tension within the FTC about whether structural divestitures of overlapping products are the best way to prevent anticompetitive behaviours and encourage innovation in pharmaceutical transactions. On

---

32 See Press Release, FTC, 'FTC Imposes Conditions on AbbVie Inc.'s Acquisition of Allergan plc' (5 May 2020), available at https://www.ftc.gov/news-events/news/press-releases/2020/05/ftc-imposes-conditions-abbvie-incs-acquisition-allergan-plc.

33 See FTC, Dissenting Statement of Commissioner Rohit Chopra in the Matter of AbbVie Inc. and Allergan plc (5 May 2020), available at https://www.ftc.gov/system/files/documents/public_statements/1574583/191-0169_dissenting_statement_of_commissioner_rohit_chopra_in_the_matter_of_abbvie-allergan_redacted.pdf; FTC, Dissenting Statement of Commissioner Rebecca Kelly Slaughter Regarding the Proposed Acquisition of Allergan plc by AbbVie Inc. (5 May 2020), available at https://www.ftc.gov/system/files/documents/public_statements/1574577/191_0169_dissenting_statement_of_commissioner_rebecca_kelly_slaughter_in_the_matter_of_abbvie_and_0.pdf

34 See FTC, 'FTC Imposes Conditions on Combination of Pfizer Inc.'s Upjohn and Mylan N.V.' (30 October 2020), available at https://www.ftc.gov/news-events/news/press-releases/2020/10/ftc-imposes-conditions-combination-pfizer-incs-upjohn-mylan-nv.

35 FTC, Dissenting Statement of Commissioner Rohit Chopra in the Matter of Pfizer Inc. and Mylan N.V. (30 October 2019), available at https://www.ftc.gov/system/files/documents/public_statements/1582382/191_0182_pfizer-mylan_-_dissenting_statement_of_commrs_chopra_and_slaughter_1.pdf.

16 March 2021, following the transition to the Biden Administration, the FTC announced the creation of a working group comprising various antitrust enforcement agencies to evaluate the impact of mergers in the pharmaceutical industry and to identify 'concrete and actionable steps to review and update the analysis of pharmaceutical mergers'.[36] In May 2021, the Multilateral Pharmaceutical Merger Task Force sought public comment regarding the future direction of enforcement and policymaking.[37] The questions the group proposed included the following:

- What theories of harm should enforcement agencies consider when evaluating pharmaceutical mergers, including theories of harm beyond those currently considered?
- What is the full range of a pharmaceutical merger's effects on innovation? What challenges arise when mergers involve proprietary drug discovery and manufacturing platforms?
- In pharmaceutical merger review, how should we consider the risks or effects of conduct such as price-setting practices, reverse payments and other ways in which pharmaceutical companies respond to or rely on regulatory processes?
- How should we approach market definition in pharmaceutical mergers, and how is that implicated by new or evolving theories of harm?
- What evidence may be relevant or necessary to assess and, if applicable, challenge a pharmaceutical merger based on any new or expanded theories of harm?
- What types of remedies would work in the cases to which those theories are applied?
- What factors, such as the scope of assets and characteristics of divestiture buyers, influence the likelihood and success of pharmaceutical divestitures to resolve competitive concerns?[38]

This year-long effort was part of a significant shift in the agencies' approach to merger review for the pharmaceutical industry, including: (1) applying a presumption of harm for mergers of large firms and shifting the burden to merging firms

36 Press Release, FTC, 'FTC Announces Multilateral Working Group to Build a New Approach to Pharmaceutical Mergers' (16 March 2021), available at https://www.ftc.gov/news-events/news/press-releases/2021/03/ftc-announces-multilateral-working-group-build-new-approach-pharmaceutical-mergers.

37 FTC, 'Multilateral Pharmaceutical Merger Task Force Seeks Public Input' (11 May 2021), available at http://www.ftc.gov/news-events/press-releases/2021/05/multilateral-pharmaceutical-merger-task-force-seeks-public-input.

38 id.

to prove that efficiencies outweigh competitive harms; (2) 'abandon[ing] the use of divestiture settlements in merger challenges'; and (3) 'scrutiniz[ing] competition' and incentives 'at all stages of innovation'.[39]

Remedies in the technology sector

Merger remedy considerations in high-technology markets implicate a host of complex legal, economic and technical issues. These considerations must also be examined against the backdrop of increased antitrust scrutiny of high-tech markets.[40]

For much of its history, antitrust policy has focused on the likely consequences of mergers for competition in existing product markets. However, in recent years, antitrust enforcement agencies have paid much attention to potential harms from mergers affecting competition for new products and incentives to innovate. Antitrust regulators have also recognised that many high-tech markets have characteristics such as economies of scale and network effects that erect barriers to new competition and can enhance the persistence of market power.[41]

In prior years, the antitrust authorities have imposed merger remedies to maintain innovation competition. For example, in May 2018, the Division took action to preserve innovation competition in agricultural product markets as a resolution in the *Bayer AG/Monsanto Co* transaction.[42] According to the Division, the originally proposed transaction 'threatened to stifle the innovation in agricultural technologies that has delivered significant benefits to American

39 FTC, 'The Future of Pharmaceuticals: Examining the Analysis of Pharmaceuticals Mergers FTC-DOJ Workshop Summary,' available at https://www.ftc.gov/system/files/ftc_gov/pdf/Future%20of%20Pharma%20Workshop%20--%20Summary.pdf.

40 See, e.g., Exec. Order 14,036, 'Promoting Competition in the American Economy', 86 Fed. Reg. 36,987 at 36,988 (14 July 2021) ('It is also the policy of [the Biden] Administration to enforce the antitrust laws to meet the challenges posed by new industries and technologies, including the rise of dominant Internet platforms, especially as they stem from serial mergers, the acquisition of nascent competitors, the aggregation of data, unfair competition in attention markets, the surveillance of users, and the presence of network effects.').

41 See Speech, DOJ, Assistant Attorney General Jonathan Kanter of the Antitrust Division Delivers Remarks at the Keystone Conference on Antitrust, Regulation & the Political Economy (2 March 2023), available at https://www.justice.gov/opa/speech/assistant-attorney-general-jonathan-kanter-antitrust-division-delivers-remarks-keystone.

42 Press Release, DOJ, 'Justice Department Secures Largest Negotiated Merger Divestiture Ever To Preserve Competition Threatened by Bayer's Acquisition of Monsanto' (29 May 2018), available at https://www.justice.gov/opa/pr/justice-department-secures-largest-merger-divestiture-ever-preserve-competition-threatened.

farmers and consumers'.[43] Absent the merger, Bayer and Monsanto competed in offering 'integrated solutions' that combined innovations in various parts of the agricultural sector. The remedy was valued at US$9 billion, the DOJ's largest-ever negotiated merger divestiture at the time. The divestiture package included certain intellectual property rights and research capabilities, including research and development projects, to support innovation competition.[44] The proposed merger between Thales SA and Gemalto NV raised similar issues. Thales and Gemalto were the world's leading providers of general purpose hardware security modules (GP HSMs), which are frequently included as components of complex encryption solutions to safeguard sensitive data. The Division's remedy required a divestiture of Thales's GP HSM business, which was designed to preserve the incentive and ability to innovate by requiring the divestiture of certain intellectual property and research capabilities for products still under development.[45]

The agencies also have rejected the potential for remedies to resolve innovation concerns in connection with a proposed transaction. For example, in the proposed 2015 merger of Applied Materials and Tokyo Electron, two of the largest suppliers of inputs for semiconductor chips, the Division concluded that there were no acceptable remedies for the predicted harms to innovation.[46]

The Division identified a variety of specific overlaps that represented only a small portion of the merging parties' revenues; however, because of the dynamics of future tool competition, the overlaps led the Division to conclude:[47]

---

43 id.

44 id.

45 Press Release, DOJ, 'Justice Department Requires Divestiture of Thales' General Purpose Hardware Security Module Business in Connection with its Acquisition of Gemalto' (28 February 2019), available at https://www.justice.gov/opa/pr/justice-department-requires-divestiture-thales-general-purpose-hardware-security-module.

46 Press Release, DOJ, 'Applied Materials Inc. and Tokyo Electron Ltd Abandon Merger Plans After Justice Department Rejected Their Proposed Remedy' (27 April 2015) (statement by Acting Assistant Attorney General Renata Hesse: 'The semiconductor industry is critically important to the American economy, and the proposed remedy would not have replaced the competition eliminated by the merger, particularly with respect to the development of equipment for next-generation semiconductors.'), available at https://www.justice.gov/opa/pr/applied-materials-inc-and-tokyo-electron-ltd-abandon- merger-plans-after-justice-department.

47 Nancy Hill, Nancy L Rose and Tor Winston, 'Economics at the Antitrust Division 2014–2015: Comcast/Time Warner Cable and Applied Materials/Tokyo Electron', 47 Rev. Ind. Org. 425, 433 (2015), available at https://economics.mit.edu/sites/default/files/publications/RIO-2015.pdf.

> *[b]ecause [Applied Materials] and [Tokyo Electron] are so capable, they are often the two best (or among the three best) development partners to solve a leading-edge semiconductor manufacturer's high-value deposition and etch problems. The merger would have eliminated the competition between [Applied Materials] and [Tokyo Electron] to be selected as a future development partner, as well as any eventual competition between their competing products.*[48]

Accordingly, the Division ultimately rejected the proposed remedies because the necessary assets to address future innovation concerns could not be isolated from the companies' broader capabilities and experiences in the relevant industry.[49] In 2022, Nvidia Corporation announced that it would abandon its proposed acquisition of Arm Ltd after the FTC brought suit to challenge the transaction. The FTC alleged that the transaction would stifle innovation in the market for semiconductors by 'giving Nvidia access to the competitively sensitive information of Arm's licensees, some of whom are Nvidia's rivals, and by undermining the incentives for innovations that conflicted with Nvidia's business interests.'[50]

The antitrust authorities also closely analyse mergers that they believe may eliminate a nascent or disruptive competitor, especially in dynamic high-technology markets. In many instances, this has led the authorities to seek to enjoin transactions.[51] In some cases, market dynamics have supported decisions not to

48 id. at 434.

49 id. at 426

50 FTC, 'Statement Regarding Termination of Nvidia Corp.'s Attempted Acquisition of Arm Ltd' (14 February 2022), available at https://www.ftc.gov/news-events/news/press-releases/2022/02/statement-regarding-termination-nvidia-corps-attempted-acquisition-arm-ltd.

51 See, e.g., FTC, *In the Matter of Illumina, Inc. and GRAIL, Inc*. (3 April 2023), available at https://www.ftc.gov/legal-library/browse/cases-proceedings/illumina-inc-grail-inc-matter-timeline-item-2023-04-03; Complaint ¶ 66, *United States v. Visa Inc.*, No. 3:20-cv-07810 (N.D. Cal. 2020) (filed 5 November 2020) ('If the acquisition were enjoined, Plaid – on its own or in combination with a company other than Visa – would continue to act as a disruptive competitor, developing and launching new, innovative solutions in competition with Visa.'), available at https://www.justice.gov/atr/case-document/file/1334736/download; Complaint ¶ 10, *United States v. Sabre Corp*., No. 1:19-cv-01548 (D. Del. 2019) (filed 20 August 2019) ('Sabre now seeks to eliminate its disruptive competitor once and for all. Sabre executives have acknowledged that acquiring Farelogix would eliminate a competitive threat and allow Sabre to charge higher prices.'), available at https://www.justice.gov/atr/case-document/file/1196836/download.

intervene in mergers in high-tech markets. For example, the DOJ did not challenge the merger of the satellite radio companies XM and Sirius, in part because the Antitrust Division anticipated competition from new audio-streaming services.[52]

Recent statements by the agencies indicate a tougher stance on what they believe may be the elimination of potential competition. In June 2022, the FTC sued to block Meta's acquisition of Within Unlimited, Inc., a developer of virtual reality technologies (VR), arguing that the acquisition would reduce future competition in the nascent VR market. However, after a federal district court denied the FTC's request for a preliminary injunction, the FTC later dismissed its case.[53] In July 2023, the DOJ and FTC released their new proposed Merger Guidelines in which they notably lowered the market concentration threshold for mergers that would eliminate potential entrants in a concentrated market.[54]

Previously, the antitrust authorities have accepted behavioural or structural commitments for merging parties in technology industries. For example, the FTC approved semiconductor manufacturer Broadcom's 2017 acquisition of Brocade Systems subject to a requirement that Broadcom implement firewalls to protect confidential information.[55] The FTC's concerns arose because of Broadcom's access to the confidential business information of Brocade's major competitor, Cisco Systems, Inc, which 'could be used to restrain competition or slow innovation in the worldwide market for fibre channel switches'.[56] The parties accepted a consent decree that required Broadcom to implement firewalls preventing the flow of Cisco's confidential business information outside an identified group of

52 DOJ, Statement of the Department of Justice Antitrust Division on its Decision to Close its Investigation of XM Satellite Radio Holding Inc.'s Merger with Sirius Satellite Radio Inc. (24 March 2008) ('Any inference of a competitive concern was further limited by the fact that a number of technology platforms are under development that are likely to offer new or improved alternatives to satellite radio.'), available at https://www.justice.gov/archive/opa/pr/2008/March/08_at_226.html.

53 Ashley Gold, 'After court loss, FTC dismisses Meta-Within case' (24 February 2023), available at https://www.axios.com/2023/02/24/ftc-meta-within-case-dismissed.

54 Brownstein, 'FTC, DOJ Issue Updated Merger Guidelines' (26 July 2023), available at https://www.bhfs.com/insights/alerts-articles/2023/ftc-doj-issue-updated-merger-guidelines#:~:text=The%2013%20new%20proposed%20guidelines,increase%20the%20risk%20of%20coordination.

55 Press Release, FTC, 'FTC Accepts Proposed Consent Order in Broadcom Limited's $5.9 Billion Acquisition of Brocade Communications Systems, Inc.' (3 July 2017), available at https://www.ftc.gov/news-events/news/press-releases/2017/07/ftc-accepts-proposed-consent-order-broadcom-limiteds-59-billion-acquisition-brocade-communications.

56 id.

relevant Broadcom employees.[57] In connection with its review of Google's acquisition of ITA Software Inc, the Division required Google to develop and license travel software, to establish internal firewall procedures and to continue software research and development.[58] The Division stated that these measures were designed to avoid the 'less innovation for consumers' that would have resulted from the acquisition as originally proposed.[59] In the case of the proposed merger between T-Mobile and Sprint, the DOJ reached a settlement with the merging parties designed to promote the new entry of a competitor to the market. The settlement required the divestiture of Sprint's prepaid business to Dish Network Corp and also provided for the divestiture of certain spectrum assets to Dish. T-Mobile and Sprint were also required to make available to Dish at least 20,000 cell sites and hundreds of retail locations, and T-Mobile was required to provide Dish with access to the T-Mobile network for seven years while Dish builds out its own 5G network.[60] According to the DOJ, the goal of the remedy provided by the settlement was to 'enable a viable facilities-based competitor to enter the market'.[61] However, the agencies in the current administration have not been willing to accept such behavioural or structural commitments given their general scepticism of remedies altogether.

Conclusion

One of the challenges of merger enforcement in dynamic industries is to craft adequate remedies when it is uncertain how competitive dynamics will play out in the future. There is no one solution for how to approach merger review and remedies in dynamic industries; instead, there are many examples of the different approaches taken by the antitrust authorities in the United States depending on the specific industry and facts at issue.

---

57 id.

58 Press Release, DOJ, 'Justice Department Requires Google Inc. To Develop and License Travel Software in Order To Proceed with Its Acquisition of ITA Software Inc.' (8 April 2011), available at https://www.justice.gov/opa/pr/justice-department-requires-google-inc-develop-and-license-travel-software-order-proceed-its.

59 id.

60 Press Release, DOJ, 'Justice Department Settles with T-Mobile and Sprint in Their Proposed Merger by Requiring a Package of Divestitures to Dish' (26 July 2019), available at https://www.justice.gov/opa/pr/justice-department-settles-t-mobile-and-sprint-their-proposed-merger-requiring-package.

61 id.

As seen in the above examples, structural remedies have in the past been used as a solution to address competition concerns, including loss of innovation competition, loss of potential competition or loss of a maverick competitor. But designing an effective remedy can be hindered when it is difficult to predict the exact assets that should be divested to promote innovation in the future and to maintain the innovation that would have happened absent the transaction. Moreover, structural remedies are often irreversible and, as a result, do not adapt to changing market circumstances.

Similarly, while behavioural remedies may have more flexibility than structural remedies, they have been used less frequently, particularly in the context of dynamic industries. It is challenging to design behavioural remedies that anticipate future competitive dynamics, especially in rapidly changing industries where remedies can become redundant or counterproductive. The antitrust agencies under the Biden Administration have instead been more willing to challenge deals outright, particularly in dynamic industries where concerns about innovation and potential competition may be particularly prevalent.

Cravath, Swaine & Moore llp

This article was first published on Global Competition Review in October 2023; for further in-depth analysis, please visit the **GCR Merger Remedies Guide - Fifth Edition**.