Common Issues Relating to the Digital Economy and Competition

Report of the
International Developments and Comments Task Force
on Positions Expressed by the
ABA Antitrust Law Section
between 2017 and 2019

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The views expressed herein are presented on behalf of the Antitrust Law Section. They have not been approved by the House of Delegates or the Board of Governors of the American Bar Association and, accordingly, should not be construed as representing the position of the Association or any of its entities.

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Executive Summary

The last several decades have witnessed the introduction of significant new digital technologies, including the internet, smartphones, wireless broadband communication, artificial intelligence, electronic finance and many others. Although recent, these technologies are already having profound effects on the economy and society. New industries have emerged to provide products and services that have become commonplace, while older products and services and the firms that supplied them have been eclipsed. As this modern digital transformation has gathered momentum, many have questioned whether the legal and analytical tools available to antitrust enforcement are sufficient to deal with various forms of business conduct characteristic of the digital economy that have been identified as threats to welfare.

U.S. antitrust law is itself the product of a similar transformation that occurred during the Second Industrial Revolution when new technologies such as railroad transportation, telephone and telegraph communication, electricity generation and petroleum extraction first arose. The emergence of U.S. antitrust law was one of the main responses to public demands for government limitations on certain forms of business conduct perceived as threatening. Just as the developments of the late 19th Century produced the Sherman Act, the current transformation is raising questions about industrial organization and the proper role of government in limiting private business conduct perceived as harmful. Some have questioned the policy objectives and analytical methods of antitrust law, while others claim that enforcement activity should be intensified for industries and practices in the digital economy.

This Report attempts to identify and summarize the positions expressed by the Antitrust Law Section (the Section) on some of the more common issues that have risen to prominence in this ongoing discussion. With a few exceptions noted in the Appendix, the positions stem from comments produced in the period between 2017 and 2019.

The goal of this Report is to assist the work of the Section in providing commentary to foreign antitrust agencies as they seek input on proposals for change and adjustment in their own competition-rule enforcement systems as the digital transformation envelops their own jurisdictions. In the course of its regular work, the International Developments and Comments Task Force (IDCTF) observed that the type of questions arising with respect to U.S. antitrust law are also commonly encountered by foreign antitrust agencies. The Section has submitted comments regarding new approaches to the application of antitrust law in digital sectors in Australia, the EU, the UK and other jurisdictions. Such issues are arising with a frequency suggesting that they will be of continuing interest for some extended time period. Accordingly, the IDCTF (with approval of Section leadership) undertook this effort in hopes it would lend consistency to Section commentary on the various common issues arising with regard to competition and antitrust in the digital economy. This Report should also help expedite and simplify the process of developing such comments—especially important due to the strict time constraints that typically apply with regard to agency consultations.

The Report is organized in six major sections corresponding to the major categories of issues that have arisen most often in consultations dealing with competition and the digital economy: Market Definition and Market Power; Big Data; Merger Issues; Exclusionary Conduct;

Algorithms and Artificial Intelligence; and Privacy and Data Security Law. Each section describes the issue, identifies prior Section documents expressing views on the issue, and summarizes how the Section generally views the main questions associated with the issue. There is an Appendix that provides in tabular form a comprehensive list of Section comments that have addressed each issue and a summary of the positions taken.

The IDCTF worked closely with the Section's Committees with subject matter expertise in the various topics of the Report. Special thanks are due to Amadeu Ribeiro and Kathleen Bradish, who co-led the organization of the Report and the drafting process, and of course to the listed drafters who devoted very substantial effort to the project.

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Chapter 1:

Market Definition and Market Power

Market Definition—Special Challenges

Market definition is usually considered a precursor to the measurement of market power. That is, establishing market (or monopoly) power and the application of competition law require a fact-specific, case-by-case analysis that generally requires consideration of what constitutes a well-defined relevant market, whether there are potential substitutes, and other case specific factors.

Digital platforms typically involve two- (or multi-) sided markets. The analysis of competitive behavior in such markets can pose challenges for competition law, as well as for policy-makers and other types of regulation. In particular, traditional competition law tools used in market definition and market power analysis can be more difficult to apply in these markets and may require modifications or the introduction of new methods of analysis.¹

Some two-sided platform markets can be analyzed using traditional tools. For example, in circumstances where the impacts of indirect network effects and relative pricing may be weak, analyzing a single side of the market with traditional forms of competition analysis may be appropriate.² Newspapers may be an example of a two-sided market where indirect network effects have been considered one-directional because readers may be relatively indifferent to the volume of advertisements in their paper.³ In this situation, market definition and market power can be evaluated by focusing on one side of the market using traditional analytic tools, such as the "small but significant non-transitory increase in price test" (SSNIP), upward pricing pressure, and critical loss tests.

Where platforms exhibit more substantial indirect network effects and interconnected pricing and demand, including both sides in the relevant antitrust market is appropriate. The U.S. Supreme Court considered the degree of interrelation between both sides of the credit-card network when addressing the relevant market in *Ohio v. American Express.*⁴ While the government argued that the appropriate relevant market was a single side of the platform, ⁵ the Court analyzed the two-sided market for credit-card transactions as a single antitrust market for three reasons. ⁶ First, the Court found pronounced network effects that two-sided transaction platforms exhibit and,

¹ See David S. Evans, *The Antitrust Economics of Multi-sided Platform Markets*, 20 YALE J. ON REG. 325, 325 (2003) ("For example, market definition and market power analyses that focus on a single side will lead to analytical errors; since pricing and production decisions are based on coordinating demand among interdependent customer groups, one must consider the multiple market sides in analyzing competitive effects and strategies.").

² Lapo Filistrucchi, Damien Geradin, Eric van Damme & Pauline Affeldt, *Market Definition in Two-Sided Markets: Theory & Practice*, 10 J. Comp. Law & Econ. 293, 321-322 (2014).

³ Ohio v. Am. Express Co., 138 S. Ct. 2274, 2286 (2018) (citing Filistrucchi, et al, *supra* note 2, at 321, 323, and n. 99).

⁴ Ohio v. Am. Express Co., 138 S. Ct. 2274 (2018).

⁵ Petition for Writ of Certiorari at 20-21, Ohio v. Am. Express Co., 838 F.3d 179 (2d Cir. 2016), cert. granted, 138 S. Ct. 355 (2017).

⁶ Am. Express Co., 138 S. Ct. at 2287.

specifically, the joint consumption of transactions by cardholders and merchants. ⁷ Second, only other credit-card companies, with both cardholders and merchants willing to use the network, could compete with a credit-card company like American Express. ⁸ Third, to properly evaluate the impact of the restrictions at issue, it was necessary to evaluate their effects on both sides of the platform to see if higher prices to merchants were offset by greater benefits to card holders. ⁹

Accordingly, market definition for platforms cannot be fully understood or analyzed without a clear understanding of the interaction between the different sides. In multi-sided markets, there can be important demand externalities between one side of the market and the other sides. Conduct that might appear anticompetitive if one focuses on one side of the market might be viewed as benign or procompetitive when all sides of the market are taken into account. Where platforms exhibit more substantial indirect network effects and interconnected pricing and demand, including both sides in the relevant antitrust market is appropriate.

Traditional tools for market definition applied to only one side of the market can cause the market to be defined either too narrowly or too broadly if there are significant, positive demand feedbacks. For example, a SSNIP may be profitable on one side of a market if one assumes that prices on the other side of the market will not change. However, a price increase on one side of the market may feedback to the other side (e.g., the price increase on one side causes the demand on the other side to fall, which in turn causes the demand in the first market to fall as well). In this case, a SSNIP may no longer be profitable, and the relevant market presumably would need to be expanded.

Moreover, when firms set a zero price on one side of the market, or there are substantial changes to non-price factors (e.g., degradation of product quality), standard approaches to market definition will often require some modification, and the SSNIP test may be less helpful to determine whether products compete. However, this phenomenon is not limited to digital markets, and alternative tests may and can be employed within the existing competition rules.

Some economists have argued that modification of traditional tools should account for the different sides of multi-sided markets. For example, in markets in which different groups purchase services from both sides of the market in fixed proportions, traditional tools, such as the SSNIP test, critical loss test, and Lerner market power analysis, could be based on a composite price that incorporates the prices on both sides of the market.¹¹

⁸ *Id.* at 2287.

As Profs. Evans and Schmalensee have noted:

The link between the customers on the two-sides affects the price elasticity of demand and thus the extent to which a price increase on either side is profitable. It therefore necessarily limits market power all else equal. For two-sided platforms it can be important to recognize that competition on both sides of a transaction can

For two-sided platforms it can be important to recognize that competition on both sides of a transaction can limit profits.

Price equals marginal cost (or average variable cost) on a particular side is not a relevant economic benchmark for two-sided platforms for evaluating either market power, claims of predatory pricing, or excessive pricing under EC law.

The constraints on market power that result from interlinked demand also affect market definition.

David S. Evans & Richard Schmalensee, *The Industrial Organization of Markets with Two-Sided Platforms*, 3 COMPETITION POL'Y INT'L 151, 173-174 (2007) [hereinafter Evans & Schmalensee, *The Industrial Organization of Markets*].

This approach was taken by Douglas Bernhaim, the Defendant's economic expert in the *Amex* case.

In the case of a critical loss analysis the Lerner-based elasticity of demand would be based on the composite price and the composite marginal cost of providing the service to the two sides, though the same concerns about

⁷ *Id.* at 2286).

⁹ *Id.* at 2287.

In addition, some types of firm behavior may not require detailed market definition analysis if they take into consideration the potential impact on all sides of the platform. For example, in the U.S. Federal Trade Commission's case against 1-800-CONTACTS, it found a restriction on paid search advertising competition through trademark litigation settlements to be anticompetitive based on direct evidence of agreements that (1) restricted truthful advertising and (2) resulted in an increase in contact lens prices sold online. ¹²

Recommended Approach

Despite the challenges to market definition and other aspects of analyzing digital platform markets, the Section believes current and developing analytic tools can address these challenges. Accordingly, the Section does not see the need for additional regulations to deal with these challenges, and that competition authorities should assess competitive restraints on a case-by-case basis within the current framework.

Market Power, Monopoly Power, and Market Concentration

Market power and monopoly power are related but are not the same. Market power is generally defined as the ability to raise prices above what would be charged under conditions of perfect competition, i.e., the ability of a firm to exert some control over the price it charges. Analogously, market power may also be defined in terms of a firm's ability to reduce quantity, quality, or other product characteristics below the level that would prevail under conditions of perfect competition. Few firms are pure price takers facing perfectly elastic demand (i.e., the situation under which any increase in price would eliminate all demand for the product). Virtually all differentiated products have some degree of market power, if only because consumer tastes, seller reputation, or location confer upon their sellers at least some degree of pricing flexibility. This degree of market power is unavoidable and understood not to warrant antitrust intervention.

Monopoly power is generally understood to mean substantial market power, i.e., the power to control market-wide prices or to exclude competition. In other words, market power may be defined as power over one's own price, while monopoly power is defined as power over market prices. Monopoly power may also be defined as the ability to exclude competitors from the market since such power characteristically allows the firm to control market-wide prices. With monopoly power, a firm may be in a position to take advantage of reduced competition to raise prices well above the competitive level.

Measuring market and monopoly power can be critical, since potentially anticompetitive actions typically require a substantial degree of market power to be successful in reducing competition or maintaining monopoly power. One traditional measure of market power is market share. The higher the market share, the more likely a firm has substantial market power. Market

these approaches in one-sided analyses would generally apply. Emch and Thompson (2006) propose applying this approach to payment cards. The composite price includes the fees charged to merchant acquirers for each transaction (a network fee plus an interchange fee) and the fees charged to issuers for each transaction (a network fee minus the interchange fee which they are paid). The U.S. Department of Justice adopted this approach in a case involving payment cards.

David S. Evans & Richard Schmalensee, *The Antitrust Analysis of Multi-Sided Platform Businesses* 22 (Nat'l Bureau of Econ. Research, Working Paper No. 18783, 2013), *available at* https://www.nber.org/papers/w18783.pdf [hereinafter Evans & Schmalensee Working Paper].

Opinion of the Commission, In the Matter of 1-800-CONTACTS, Docket N. 9372 (Nov. 7, 2018), at 42-47, https://www.ftc.gov/system/files/documents/cases/docket_no_9372 opinion of the commission redacted public version.pdf.

structure, as presently defined by reference primarily to market shares and ease of entry, can provide a starting point for evaluating the likely impact a merger or single-firm conduct will have upon future competition. However, rigid reliance on market shares can invite errors when attempting to identify substantial market power.

The Section believes that the presence of sustainable dominant positions can be determined only on the basis of a case-specific economic analysis. A number of factors may make achieving a sustainable dominant position in online platform markets difficult, even if the platform has a large market share. For example, customers' ability to use multiple products or services (i.e., "multi-homing") may lower barriers to entry. Demand-side substitution may be unusually easy and, if so, established firms could be quickly displaced by innovation. As a result, high market shares in online platform markets may not indicate durable market power.

The market power of a platform depends not only on the network effects, but also on the degree of scale economies in production, the ability to differentiate the network from other products or networks, the existence of alternatives to the network, and superior technology and the intensity of network usage may facilitate entry into the network.

- a.) Degree of Scale Economies in Production. Network externalities influence the character of competition within network industries. A larger network is, all else equal, more attractive to customers than a smaller network. In addition to the network efficiencies in consumption, a network often enjoys economies of scale or scope in production. In some cases, however, congestion costs limit network size. Internet advertisers, for example, may choose to advertise on platforms with smaller user bases where they face less competition for clicks or impressions. When the size of the network is limited by congestion costs, there is room for more than one network, which may reduce market power. 14
- b.) Differentiating Networks From Other Products or Networks. In some cases, more than one network can survive if networks offer differentiated services. Ratings and review (R&R) platforms are an example of a differentiated network industry. These platforms differentiate their products by offering different features and customizations to suit particular customers.
- c.) Existence of Alternatives to the Network. In network industries, entry by another network may reduce an existing network's market power, while in other cases the duplication of a network can be very costly.¹⁶
- d.) Superior Technology / Intensity of Network Usage. A firm with a large market share may have its market power limited or quickly eroded in the face of an entrant with superior technology that enables superior network usage.¹⁷

Recommended Approach

The Section in general recommends that regulators not rely exclusively on market shares or market concentration when analyzing market and monopoly power. This recommendation is

¹³ Andres V. Lerner, *The Role of "Big Data" in Online Platform Competition* 6, 59 (Aug. 26, 2014) *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2482780; *see also* D. Daniel Sokol & Roisin Comerford, *Antitrust and Regulating Big Data*, 23 Geo. Mason L. Rev. 1129, 1149-50 (2016).

¹⁴ See Daniel A. Lyons, An Antitrust-Informed Approach to Regulating Internet Interconnection, 24 B.U. J. Sci. & Tech. L. 229, 237-38 (2018).

See United States v. Bazaarvoice, Inc., No. 13-cv-00133-WHO, 2014 WL 203966, at *5-*10 (N.D. Cal. Jan. 8, 2014).

See Kenneth A. Bamberger & Orly Lobel, Platform Market Power, 32 BERKELEY TECH. L. J. 1051, 1062-1071 (2017).

See *id.*; Catherine Tucker, *Network Effects and Market Power: What Have We Learned in the Last Decade?*, Antitrust, Spring 2018, at 77-81; David Evans & Richard Schmalensee, Matchmakers: The New Economics of Multisided Platforms 197-206 (2016).

particularly important in platform markets, because some digital platform markets have characteristics that can limit market power, such as the threat of entry by technologically superior platforms, easy demand-side substitution, and multi-homing that lowers barriers to entry.

Market Power and Competitive Effects

In the United States, there has been a movement away from just focusing upon market definition and market shares to infer competitive effects. In particular, the U.S. competition agencies have increased their reliance on direct assessment of incentives and competitive effects as evidenced by the 2010 *Horizontal Merger Guidelines*, which follow recent economic research. This development is particularly important in evaluating the competitive effects of potentially anticompetitive acts or mergers. The U.S. Supreme Court in *Amex* explained that "[d]ue to indirect network effects, two-sided platforms cannot raise prices on one side without risking a feedback loop of declining demand." That is, a price increase on one side might be offset by increased benefits to the other, which implies simple market structure tests should in many instances be augmented with more detailed studies of competitive effects in the related markets.

Due to network effects, there may be a limited number of competing platforms providing services to multiple user groups. Users typically value a platform because it provides quick and low-cost access to other users and to other user groups. An incumbent platform may have a significant advantage over new entrants because the viability of a platform depends on having a sufficient number of users. Users can be "locked-in" a platform due to their investment in learning the system and to a need for a sufficient number of other users with whom they can connect on the system. This can lead to a platform gaining a large share of various user groups and potentially having sufficient market power to engage in anticompetitive acts. However, there are a number of other considerations in evaluating the market power of a platform and potential anticompetitive effects of its actions or a merger.

For example, the ability to overcome lock-in depends in part on the rate of growth of the industry. If new customers are available, a new firm can build a network based on industry growth, rather than conversion of existing customers. Low switching costs and the ability to multi-home has also diminished the significance of lock-in, particularly in technology markets. Incumbents may also be displaced if users do not always use the entire network but rather rely on a limited portion of the network. A new network can form by beginning with core groups of consumers and then expanding.

In addition, competition can be enhanced for compatible products if networks are compatible or if standardization is achieved. When systems are compatible, competition exists for components of the network. Furthermore, standardization, by avoiding "tipping" to one network (rapid obsolescence of other networks when one network reaches a critical size), may allow

¹⁸ See U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES §§ 2.1.2, 2.1.3 (2010), available at https://www.justice.gov/atr/file/810276/download ("The Agencies look for historical events, or 'natural experiments,' that are informative regarding the competitive effects of the merger. For example, the Agencies may examine the impact of recent mergers, entry, expansion, or exit in the relevant market. Effects of analogous events in similar markets may also be informative. The Agencies also look for reliable evidence based on variations among similar markets. . . . The Agencies give weight to the merging parties' market shares in a relevant market, the level of concentration, and the change in concentration caused by the merger.").

¹⁹ Am. Express Co., 138 S. Ct. at 2285.

multiple networks to exist. Standards that are established early in the development of a network, however, may result in less competition to provide the best technology.²⁰

Multi-sided platforms may also compete in environments with a wide range of competitors and alternatives that can limit the extent of any market power. Potential competitors may include other platforms, differentiating themselves in terms of quality, known as "vertical differentiation" (e.g., American Express and Visa/Mastercard) or by choosing particular features and prices that attract certain group of consumers, known as "horizontal differentiation." When users have the option to participate in more than one platform ("multi-homing"), different platforms compete to "steer" participants to their platforms. Multi-sided platforms may also face competition for participants for only one side of the platform, which can similarly constrain the platform from exercising market power. As such, the Section believes it is important to take into account interplatform competition, which will discourage a platform operator from charging supra-competitive prices or degrading the quality of its platform. Under these circumstances, the effects of potentially anticompetitive acts should be carefully investigated on a case by case basis, focusing on the impact across all sides of the platform where there is evidence of these potential procompetitive effects.

The imperative to achieve critical mass on all sides sometimes gives rise to pricing and investment strategies that may be necessary to establish and maintain the platform but that may be seen as anticompetitive in a single-sided market context. For example, the imperative to attract a sufficient number and an appropriate mix of participants to a multi-product platform may require a pricing structure in which on-going losses generated by "low prices" (e.g., below marginal cost) on one side of the platform may be recouped through sustained "high prices" on the other side. Under these circumstances, the evaluation of potentially anti-competitive restrictions associated with platforms should consider the extent to which these restrictions are necessary to preserve the platform's viability.

Procompetitive justification for some restrictions may be more important in the context of multi-sided platforms. For example, pricing below variable costs can be considered as predatory in certain instances.²³ However, in the context of platform markets, below-cost pricing on one side of the platform may be profit maximizing, because it attracts more participants to the platform. As a result, pricing on the other side of the market may need to be substantially above cost to ensure the platform's viability. Given these circumstances, this interdependence would require at least some consideration of prices and costs on each side of the platform in assessing the existence of alleged anti-competitive behavior.

[&]quot;Although compatibility has obvious benefits, obtaining and maintaining compatibility often involves a sacrifice in terms of product variety or restraints on innovation." Michael Katz & Carl Shapiro, Systems Competition and Network Effects, 8 J. Econ. Persp. 93, 95 (1994). "In markets with network effects, there is natural tendency toward de facto standardization, which means everyone using the same system. Because of the strong positive-feedback elements, systems markets are especially prone to 'tipping,' which is the tendency of one system to pull away from its rivals in popularity once it has gained an initial edge." Id. at 105-06. "The potential costs of compatibility depend upon the mechanism by which compatibility is achieved. Broadly speaking, there are two mechanisms: standardization, whereby systems are designed to have interchangeable components; and adapters, which attach to a component of one system to allow it to interface with another system. With adapters, the principal cost is that of the adapters themselves, plus the fact that adapters may work imperfectly. By contrast, the primary cost of standardization is a loss of variety: consumers have fewer differentiated products to pick from, especially if standardization prevents the development of promising but unique and incompatible new systems." Id. at 110.

Evans & Schmalensee Working Paper, *supra* note 11, at 14-15.

Evans & Schmalensee, The Industrial Organization of Markets, supra note 10, at 174.

See Herbert J. Hovenkamp, *Predatory Pricing under the Areeda-Turner Test* (2015), Faculty Scholarship at Penn Law. 1825, available at https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=2827&context=faculty_scholarship.

For example, as recognized by the Supreme Court in *Leegin Creative Leather v. PSKS, Inc.*, resale price maintenance (RPM) is often used to address free rider problems, wherein low-service sales outlets may try to usurp sales from higher service sales outlets through price discounting enabled by the lower service costs.²⁴ Such free-rider concerns are potentially exacerbated in the context of platforms, especially in the presence of multi-homing by platform participants. In these circumstances, multi-homing on platforms may reduce the search and transactions costs of a participant using the informational services provided by one seller to find the exact product they want, and then purchase that product at a lower price from another seller on a different platform that has not invested in providing information services. As a result, when analyzing potential anti-competitive effects from RPM or similar requirements in multi-sided platform markets, one should consider whether and the extent to which such requirements might be necessary for the platform to attract and maintain a critical mass of participants needed to make the platform viable.

Antitrust authorities have examined barrier-to-entry issues involving platforms that have bundled access to the platform with other products, creating potential disadvantages for competitors to the bundled product.²⁵ Although the Section recognizes the potential anticompetitive effects from these policies, the Section also recognizes that bundling under certain circumstances may be essential to the business model of a platform to ensure high quality, integrated product groups that generate sufficient participation from all sides of a platform.

Exclusionary contracts also have the potential for creating anticompetitive barriers to entry. In general, allegations of creating barriers to entry through exclusionary contracts should involve an assessment of whether the restrictions were reasonably necessary for a platform to maintain its own critical mass of participants, as opposed to being designed to prevent any potential competitor to achieve that critical mass of customers. Enforcers should also consider whether platform participants would be better off if the platform did not have exclusionary contracts. An absence of exclusive contracts could potentially result in the platform being smaller and unable to benefit from large indirect network effects, potentially leading to reduced value to platform participants.

Any potential anti-competitive effects associated with an action should be considered in light of not only the substantial benefits that derive from the transactions made possible by the platform, but also of the inherent challenges faced by multi-sided platforms to attract and maintain a critical mass of participants on all sides of the platform to make the platform viable. Consideration of only selected portions of a multi-sided platform (e.g., examination of the competitive dynamic of only one side of the platform) may result in flawed conclusions concerning the value and competitive effects of the conduct in question.

Leegin Creative Leather Prod., Inc. v. PSKS, Inc., 551 U.S. 877, 878 (2007) ("Absent vertical price restraints, retail services that enhance interbrand competition might be underprovided because discounting retailers can free ride on retailers who furnish services and then capture some of the demand those services generate. Retail price maintenance can also increase interbrand competition by facilitating market entry for new firms and brands and by encouraging retailer services that would not be provided even absent free riding.").

²⁵ See Press Release, Eur. Comm'n, Antitrust: Commission Fines Google €4.34 Billion For Illegal Practices Regarding Android Mobile Devices To Strengthen Dominance of Google's Search Engine (July 18, 2018) (IP/18/4581), available at https://ec.europa.eu/commission/presscorner/detail/en/IP_18_4581 (involving Google's agreements with Android OEMs in which Google (1) required OEMs to take Google Search and Google Chrome in a bundle with the Google Play Store, and (2) required OEMs to agree not to sell devices running Android forks as a condition of licensing Google apps). See also United States v. Microsoft Corp., 253 F.3d 34 (D.C. Cir. 2001) (the DOJ alleged that: (1) Microsoft unlawfully bundled Internet Explorer with Windows; (2) Microsoft attempted to monopolize the market for Internet browsers; and (3) Microsoft sought to maintain its operating system monopoly through agreements with OEMs and ISPs as well as other conduct related to Internet browsers).

Recommended Approach

In view of the above, the Section recommends that regulators move away from relying strictly on market definition and market power, and instead look to assess incentives and competitive effects.

Requisites for Finding Durable Monopoly Power

Even in the face of larger market shares, network effects, and user switch costs, dynamic competition can provide a competitive constraint when large-scale entry is likely to occur in the short- to medium-term, illustrated by the demise of MySpace and the growth of Facebook. Accordingly, market and monopoly power must be more than fleeting for a platform to be able to engage in anticompetitive acts or mergers, it must be durable.

Some technology industries are more susceptible than others to the possibility of durable market power. Markets, such as the operating systems market at issue in the Microsoft case, may demonstrate significant entry barriers, lock-in effects, and first-mover advantages that can facilitate the maintenance of market power. Further, simply being in a dynamic industry does not necessarily mean that market power is ephemeral. In the U.S. *Bazaarvoice* case, which involved a merger of online product review platforms, the Court wrote that the case "inescapably adds fuel to the debate over the proper role of antitrust law in rapidly changing high-tech markets." As the Court has set forth in detail, while Bazaarvoice indisputably operates in a dynamic and evolving field, it did not present evidence that the evolving nature of the market itself precludes the merger's likely anticompetitive effects. Some digital platform markets may be more susceptible to durable monopoly power including where there are lock-in effects and/or first mover advantages.

Recommended Approach

The Section has previously recommended that durable market/monopoly power is a prerequisite to finding a unilateral conduct violation. In this sense, some digital markets may be more susceptible to durable monopoly power than others, including where there are elements such as lock-in effects.

Combined Monopoly Power

The Section recommends against the adoption or reliance on collective market power theories absent some kind of concerted action, since applying such a theory would likely discourage rather than promote competition. For example, treating the second and third largest firms in a market as having collective substantial market power is likely to deter them from competing aggressively against the market leader, which is likely to harm competition given that they are often in the best position to compete most effectively against the market leader.

²⁶ "In systems markets, even more so than in other markets, firms with established reputations, well-known brand names, and ready visible access to capital have competitive advantages." Katz & Shapiro, *supra* note 20, at 107. "Popular opinion suggests that systems markets may tend to get locked-in to obsolete standards or technologies. Some theoretical models do indeed exhibit excess inertia; that is, users tend to stick with an established technology even when total surplus would be greater were they to adopt a new but incompatible technology." *Id* at 108.

²⁷ United States v. Bazaarvoice, Inc, No. 13-CV-00133-WHO, 2014 WL 203966, at *76 (N.D. Cal. Jan. 8, 2014).

Recommended Approach

As such, the Section's view is that reliance on collective market power theories requires concerted action as a joint monopoly, which is the approach generally required by the European Commission.²⁸

Network Effects

The economic literature cautions against antitrust enforcement actions applied to platforms based solely on their relative size and user base.²⁹ As a general matter, multi-sided platforms create value by coordinating groups of users in two important ways: 1) minimizing transactions costs, thereby making the interactions of groups of consumers possible; and 2) providing a structure (e.g., pricing schedule and participation incentives) to attract enough participants on each side of the platform, so participation is valued for users on all sides of the platform.

Network effects, innate in platforms, have been an important consideration when analyzing potential market power. Recent academic studies, however, suggest that network effects are not the guarantor of substantial market power that had been initially feared by antitrust authorities. First, the literature suggests that, due to the rapid changes in technology, and the fact that platform business may compete without relying on any one type of hardware, users may have low switching costs. The history of social networks suggests that size is not necessarily a guarantee of market dominance and entrenchment. For example, MySpace, which surpassed Google in terms of number of website visits in 2006, was quickly replaced by Facebook and subsequently declined. Second, the instability of network effects frequently leads users to choose multiple platforms instead of sticking to a single platform. For example, it is common for riders and drivers to use both Uber and Lyft. Such "multihoming" increases competitive pressures on platforms. Finally, platform congestion may lead users to switch to other less congested platforms.

Users value the services provided by a two-sided platform more as the platform attracts more users. When the value of the platform to one user group increases with additional participation from another user group, indirect network effects exist. For example, credit-card networks experience indirect network effects because users benefit from a wide merchant network and merchants benefit from a large user base.

Indirect network effects are an important consideration when making pricing decisions for each side of the market. Pricing decisions for each side of the market must consider the effect on the other side. Pricing one side too high may deter users and, in turn, reduce utilization of the other

See Guidelines on Market Analysis and the Assessment of Significant Market Power under the EU Regulatory Framework for Electronic Communications Networks and Services, 2018 O.J. (C 159) 1, ¶ 65 ("The definition of what constitutes a position of joint dominance in competition law is provided by the jurisprudence of the Court of Justice of the European Union and has evolved over time. The joint SMP [significant market power] concept is to be derived from the same basis. A dominant position can be held by several undertakings, which are legally and economically independent of each other, provided that — from an economic point of view — they present themselves or act together on a particular market as a collective entity.").

See Catherine E. Tucker, What Have We Learned in the Last Decade? Network Effects and Market Power, ANTITRUST, Spring 2018, at 80, available at https://www.americanbar.org/content/dam/aba/publishing/antitrust_magazine/anti-spring18-3-23.pdf ("in general, platform markets may still be competitive even if larger firms in these industries exhibit both sizable user bases and competitive dynamics, which are driven by network effects. This implies a tempering of antitrust enforcement actions surrounding market dominance of digital platforms predicated simply on their relative size of user base.").

³⁰ *Id.* at 30.

Id. at 78 ("Launched in 2002, Friendster is often considered the first real social network. However, it was quickly replaced by MySpace, and by 2006, MySpace surpassed Google as the most visited website in the United States. The subsequent decline of MySpace, and the speed with which users switched to Facebook, was also startling, and has attracted much academic inquiry.").

side, creating a negative feedback loop. Where each side's indirect network effects are of similar strength, the threat of a feedback loop is potentially greater as the platform's value to each side is more closely tied to the size of the other side. In some cases, the optimal price charged by one side of the market may be lower than marginal cost. In those cases, unlike a single-sided market, which produces output up to the point where price equals marginal cost, the subsidized side of a two-sided market produces output beyond this point. Finding the right balance when pricing each side of the market is essential when determining how to maximize the value of the platform.

In two-sided platforms, a price increase on one side might be offset by increased benefits to the other, an effect that would be missed if plaintiffs only had to show harm to one side of the market. "For platforms with substantial indirect network effects, a price increase for one side of the market does not suggest an anticompetitive effect without evidence of increasing the overall cost of the platform to all customer groups considered together." "The Court also made clear that its ruling does not apply where network effects are weak or one-sided, [although it] did not attempt to classify any platform other than the credit-card network at issue in the case."

Recommended Approach

As such, the Section's view is that regulators should not assume that network effects alone are a guarantor of substantial market power. In this sense, factors to consider include, among others: (i) whether there are low switching costs; (ii) whether there is multi-homing; and (iii) whether platform congestion will lead users to switch to other platforms.

No Presumption of Monopoly Power Based on Data

The Section believes it is important that competition authorities continue to base market definitions, assessments of market power, and competitive effects in relation to online platforms (as with other technology industries) on sound economic analysis of the particular facts of the case, and refrain from adopting presumptions that may be unwarranted. Possession of large data bases theoretically could create market power for some applications, since it could be very costly to replicate. However, there should be no presumption that "big data" leads to market power.

Data are generally replicable, and one firm's collection of data may not preclude another's collection of identical or substitutable data. Moreover, the data itself may not constitute a properly defined market but instead may constitute only one of many inputs that affect the quality of a product or service. Also, large technology companies and online platforms do not "monopolize" data even if they have amassed large amounts of data. Indeed, due to the unique features of data, data may not be a "monopolizable" asset.

Recommended Approach

The Section's view is that there should be no presumption that "big data" leads to market power. For additional comments on the subject of big data, please refer to Chapter 2 of this report.

³² Supplemental Comments of the Section of Antitrust Law of the American Bar Association Following the Federal Trade Commission Hearings on Competition and Consumer Protection in the 21st Century 36 (June 30, 2019), *available at* https://www.regulations.gov/document?D=FTC-2019-0032-0010.

³³ *Id*.

Chapter 2:

Big Data

Data has always been an important business input. Firms acquire, analyze and use information on customers and their habits and preferences, on inputs and input suppliers, and on other relevant technical and economic matters in order to guide a variety of commercial decisions. As all aspects of information technology—acquisition, transmission, compilation and storage, processing and analysis—continue to increase in sophistication and decline in unit cost, the scope and amount of data handled by high-technology and other businesses have also increased. The term "big data" was coined to refer generally to this increasing significance of information in our economy.

Because the increasing role of information is pervasive and diverse, it is difficult to characterize "big data" precisely, and, in any event, it continues to evolve rapidly and often in surprising directions. One definition is offered in the U.S. Federal Trade Commission's recent report, *Big Data: A Tool for Inclusion or Exclusion? Understanding the Issues*:

The term "big data" refers to a confluence of factors, including the nearly ubiquitous collection of consumer data from a variety of sources, the plummeting cost of data storage, and powerful new capabilities to analyze data to draw connections and make inferences and predictions.

A common framework for characterizing big data relies on the "three Vs," the volume, velocity, and variety of data, each of which is growing at a rapid rate as technological advances permit the analysis and use of this data in ways that were not possible previously.³⁴

Some have expressed concerns that large data sets or other aspects of information-dependent business operations comprise barriers to entry or expansion of competitors. Some have suggested that new modes of competitive analysis are needed in cases involving "big data," or that additional enforcement tools are required. Enforcement experience, however, does not support a presumption that "big data" necessarily or even characteristically impedes entry or expansion, nor has there emerged any need for alterations or additions to the existing modes of antitrust analysis, which are recognized for their ample flexibility. Specifically, there is no known antitrust decision that has encountered any gap in enforcement tools in any case involving "big data."

In any antitrust proceeding, the focus should be on the competitive effects of particular forms of business conduct, such as the creation and strengthening of barriers to competition due to predatory and exclusionary conduct, or the possibility that a business combination will lead to a substantial lessening of competition or creation of a monopoly. While the presence of a competitively significant information component of a particular firm and/or industry may be relevant to these issues, there is no demonstratable basis for any presumption that this is so in the

FED. TRADE COMM'N, BIG DATA: A TOOL FOR INCLUSION OR EXCLUSION? UNDERSTANDING THE ISSUES 1 (Jan. 2016), available at https://www.ftc.gov/system/files/documents/reports/big-data-tool-inclusion-or-exclusion-understanding-issues/160106big-data-rpt.pdf (citations omitted).

general population of antitrust matters. Accordingly, it is important to analyze data-related questions on a case-by-case basis and to focus on credible evidence that a particular transaction or competitive practice has harmed or likely would harm competition on the merits. Whether access to a large volume of data creates a competitive advantage will depend on the specific market at issue, the nature of the data, and the competitive significance of the data set.

In comparison with tangible assets, data has characteristics requiring special caution in attributing competitive significance to a firm's use or reliance on information. First, data is often available from a variety of sources; for example, the fact that one competitor has extensive customer information does not impede the acquisition by a competitor of similar data from the same customer set. In some cases, governments collect and provide relevant data sets free of charge. Aside from public sources, data can often be replicated or purchased. Second, data markets are characteristically very dynamic. In many contexts individual data points quickly become stale, meaning that a firm that holds a significant data set at a given point in time may not enjoy any long-term advantage over competitors on the basis of that data. Moreover, new technologies employ constantly evolving types of data. Where these factors are present, it may be very difficult for any incumbent competitor to obtain a significant and non-transient competitive advantage from a large data set or from particular methods of analyzing such data.

These considerations indicate that enforcers should be cautious in responding to claims that any particular data held by a firm is an "essential" input or facility. To begin with, there is substantial doubt as to the existence of an "essential facilities doctrine" in U.S. antitrust law. On three distinct occasions the U.S. Supreme Court has commented skeptically on lower-court attempts to formulate and apply such a doctrine.³⁷ Even if such a doctrine were recognized, it is equally important for courts and agencies to be aware of the specific risks posed by remedies such as mandatory sharing of or access to data or to systems and/or methods of analyzing and using data. As the U.S. Supreme Court has observed, such remedies could lead to worse competitive outcomes, whether due to a chilling effect on incentives to innovate or due to the increased risk of collusion that information sharing presents.³⁸ For example, there may be less incentive to develop a collection of data if there is a risk that the data set will be subject to forced sharing. For these reasons, U.S. law generally does not impose a unilateral duty to share assets with competitors, even where such assets may give rise to monopoly power.³⁹

³⁵ See, e.g., Request for Comments on the Cross-Agency Priority Goal: Leveraging Data as a Strategic Asset, 83 Fed. Reg. 30113 (June 27, 2018). There are also Freedom of Information Act requests, Company registries, etc.

³⁶ United States v. Microsoft Corp., 253 F.3d 34, 49 (D.C. Cir. 2001) ("Rapid technological change leads to markets in which 'firms compete through innovation for temporary market dominance, from which they may be displaced by the next wave of product enhancements." (internal citations omitted).

Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 610-11 (1985) (declining to consider whether a monopolization verdict could have been upheld under an "essential facilities" theory); Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 407, 410-11 (2004) (referring to "essential facilities" as a "doctrine crafted by some lower courts," declining to rule on its existence *vel non* and treating it as irrelevant to the outcome); AT&T Corp. v. Iowa Utilities Bd., 525 U.S. 366, 428 (1999) (describing essential facilities as "an antitrust doctrine that this Court has never adopted").

See Verizon, 540 U.S. at 407; see also Morris Commc'ns v. PGA Tour, 364 F.3d 1288, 1295-96 (11th Cir. 2004); see also, Barry Nigro, U.S. Dep't of Justice, Antitrust Div., "Big Data" and Competition for the Market, Address Before the Fourth Annual Tech, Media & Telecom Competition Conference 4 (Dec. 13, 2017), available at https://www.justice.gov/opa/speech/file/1017701/download.

³⁹ There may be a narrow exception to this general rule, described by the U.S. Supreme Court in the *Aspen Skiing* case, when a dominant company ceases a voluntary, profitable prior course of dealing with a competitor, indicating that its decision was "not motivated by efficiency concerns and that it was willing to sacrifice short-run benefits and consumer goodwill in exchange for a perceived long-run impact on its smaller rival." *Aspen Skiing*, 472 U.S. at 610-11.

Recommended Approach

The Section's view is that access to big data alone should not be presumed to create competitive advantages. Whether the control of a particular type of data allows exclusion of competition will depend on the specific markets at issue, which is why the focus should be on the actual competitive effects of the conduct at issue.

With respect to remedies, the Section's view is that competition authorities should ensure that: (i) feasible remedies to address the specific concerns exist; and that (ii) those remedies do not pose their own prohibitive costs or other risks to the competitive process – such as a chilling effect on incentives to innovate or an increased risk of collusion.

Chapter 3:

Merger Issues

Merger Thresholds

Several recent initiatives globally have considered whether alternative merger review thresholds are necessary or advisable to address competition issues in digital markets. With regard to proposals to vary merger thresholds by sector, e.g. to address the acquisition of nascent technology companies or pipeline pharmaceutical suppliers, the Section recommends against the addition of such thresholds. One concern for any agency conducting pre-merger review is that the system's notification requirements capture only competitively relevant transactions, i.e., those likely to result in appreciable competitive effects in the jurisdiction. This is important to avoid unnecessary expenditure of agency and party resources on the notification and review of transactions that have little or no competitive effect in the jurisdiction. By attempting to capture the acquisition of nascent targets, the proposed sectoral threshold tests are unlikely to catch additional matters that raise clear anticompetitive issues at the time of the transaction. Thus, the Section believes that such proposed thresholds would result in costs and burdens on merging parties and the agency without countervailing benefit to the effectiveness of the domestic competition law regime. Moreover, the proposed threshold tests would add additional complexity into notification systems by imposing different rules for different sectors of the economy. Instead, the Section continues to support merger review thresholds that are benchmarked against international standards, particularly those established by the ICN and OECD. 40 In this manner, the Section consistently emphasizes the importance of clear and objective merger review thresholds that ensure a material local nexus to the jurisdiction, as recognized in the ICN Recommended Practices and the OECD Recommendation on Merger Review.

Several of the proposed merger review thresholds focus on transaction value. While transaction value can be a clear and objective threshold for merger review, transaction value alone cannot measure the impact of a transaction on a specific jurisdiction. To meet international best practice, any transaction value threshold must be coupled with an appropriate measure of material local nexus to the jurisdiction. Thresholds that incorporate an appreciable domestic nexus benefit both parties and regulators by limiting the expenditure of resources "only over those mergers that have an appropriate nexus with their jurisdiction" and help prevent "unnecessary transaction costs and commitment of competition agency resources without any corresponding enforcement benefit." When the threshold is based on an overall worldwide transaction value, an effective

See Int'l Competition Network, ICN Recommended Practices for Merger Notification and Review Procedures (2018), available at https://www.internationalcompetitionnetwork.org/wpcontent/uploads/2018/09/MWG_NPRecPractices2018.pdf [hereinafter ICN Recommended Practices]; OECD, Recommendation of the OECD Council on Merger Review (2005), available at http://www.oecd.org/daf/competition/mergers/40537528.pdf [hereinafter OECD Recommendation].

OECD Recommendation, *supra* note 40, at 2.

ICN RECOMMENDED PRACTICES, supra note 40, § II.B.1.

and significant local nexus test is particularly important to avoid capturing a large number of transactions with little competitive impact in the jurisdiction.

Any local nexus test should be clear, understandable and based on objectively quantifiable criteria such as assets and sales (turnover). A test based on a different criterion would need to be based on information that is sufficiently easy to define and measure across industries that it would ensure materiality and objectivity. In the Section's experience, such an alternative measure has proved difficult to develop. Thresholds based on market share or potential effects on competition are not objectively quantifiable at the notification stage and are better evaluated further into the merger review process. Further, industry-specific criteria, such as number of active users, may be challenging to apply in a manner consistent with international norms of objectivity and materiality.

An alternative to revising thresholds is to provide competition agencies with the jurisdiction to review proposed mergers of concern that are not subject to notification (referred to as "residual" jurisdiction). Bifurcating jurisdiction from mandatory reportability enables the agency to review potentially anticompetitive transactions of concern without requiring notification of a broad swath of transactions that are unlikely to raise competitive concerns in the jurisdiction. The Section recommends that if a jurisdiction adopts agency residual jurisdiction for merger review, the jurisdiction take steps to address the desire of the parties to the transaction for certainty. The ICN Recommended Practices recognize that "[s]uch steps may include restricting the competition authority's ability to exercise residual jurisdiction to a specified, limited period of time after the completion of a transaction and authorizing the parties to submit voluntary notifications to the competition authority."43 To avoid creating wide-spread uncertainty for nonnotifiable transactions, the Section recommends a time limit on such residual jurisdiction. The OECD has noted that most jurisdictions have a one-year time limit for instituting review following the closing of a transaction.⁴⁴ In the Section's view, a one-year time limit would be an appropriate and proportional period for undertaking reviews of non-notifiable transactions, as it strikes the right balance between the public and private interests (avoids unduly chilling or delaying beneficial investments and still may allow for effective relief). The Section also suggests that a jurisdiction might consider permitting voluntary filings by parties whose transactions may not reach mandatory filing thresholds but may raise competition concerns. Such a system would enable parties to mergers that pose antitrust risk to obtain legal certainty, while bringing potentially problematic transactions to the attention of the enforcement agency. Finally, to further reduce uncertainty, the Section recommends that the competition authority issue guidance on the types of transactions that will be subject to residual jurisdiction.

Recommended Approach

Based on the above, the Section (i) supports benchmarking thresholds against international standards; (ii) understands that a transaction value threshold, by itself, is unsuitable to determine whether a transaction will impact a specific jurisdiction; (iii) submits that local nexus tests should be clear, understandable, and based on objectively quantifiable criteria; (iv) encourages that, as an alternative to revising thresholds, the competition agency could be empowered to review proposed

⁴³ *Id.*, § II.A.3.

OECD Competition Comm., Local Nexus and Jurisdictional Thresholds in Merger Control – Background Paper by the Secretariat, at \P 64, DAF/COMP/WP3(2016)4 (Mar. 10, 2016), available at http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WP3(2016)4&docLanguage=En.

mergers of concern that are not subject to notification, for a limited duration after the merger (in this case, a one-year time limit would be appropriate).

Merger Analysis: General

Several initiatives globally have considered whether there should be special rules for mergers involving technology firms. The Section believes in the primary importance of clear standards for evaluating mergers. Special rules for reviewing mergers in the technology industry are, in the Section's view, unnecessary and risk muddying standards of review.

As with mergers and acquisitions in other parts of the economy, a decision to block a transaction involving technology firms should be grounded in careful economic analysis of the totality of the facts and a showing that a transaction is likely to substantially lessen competition in the foreseeable future. In the Section's experience, the same fact-based economic scrutiny that is used for analyzing transactions in other sectors of the economy is sufficiently flexible to identify transactions that are likely to significantly harm competition in the technology sector as well. Although merger analysis is necessarily predictive, there also must be limits on speculation about future developments. In their *Horizontal Merger Guidelines*, for example, the U.S. antitrust agencies acknowledge that there are limits on their ability to reliably predict the future. ⁴⁵ The technology industry provides a particularly good example of how difficult it is to predict future developments accurately and underscores the importance of relying on facts specific to each merger investigation to guide any analysis.

The Section urges particular caution when analyzing nascent markets and the effects of recent or potential entry in merger review. The Section recognizes that some typical merger tests and standards may be difficult to apply in data-driven markets, e.g., the hypothetical monopolist test can be difficult to apply to products offered at zero price. As a result, the Section encourages additional reflection and guidance on how agencies will evaluate non-price elements of competition in merger reviews as well as how the hypothetical monopolist test might be transposed in the non-price digital context.

Market Definition with Multisided Markets

Multi-sided markets are those in which multiple groups of participants are brought together such that the value of a product or service to one group depends on usage by a different group. While there are a number of such markets in the digital economy, traditional markets sometimes have similar properties. For example, a credit card is more valuable to consumers the more merchants that accept it and is more important for merchants to accept the more consumers that carry it. In other words, these markets are characterized by "indirect network effects." The indirect network effect can be bilateral as in the credit card example above or it can go primarily in one direction. For example, newspapers are commonly thought of as multi-sided markets that bring together readers and advertisers. The more readers a newspaper has, the higher the value of ads placed in the newspaper to advertisers. But the effect does not necessarily go the other way—

U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines \S 5.2 (2010), available at https://www.justice.gov/atr/file/810276/download [hereafter U.S. Horizontal Guidelines].

⁴⁶ See Ohio v. Am. Express Co., 138 S. Ct. 2274, 2280-81 (2018).

⁴⁷ *Id*.

⁴⁸ *Id*.

increasing the number of advertisers in a newspaper does not necessarily make that newspaper more valuable to consumers.⁴⁹

Multisided markets create complexities for merger review, both within the digital economy and without, because price changes in one side of the market can have implications for demand from the other side. As a result, when mergers occur in the context of multi-sided markets, analysts have raised questions whether the common tools of merger analysis should be used.⁵⁰ Tools like SSNIP and critical loss tests are premised on the impact on profitability of a small but durable price increase.⁵¹ But if a multisided market is viewed from one side only, the impact of that small price increase might be misunderstood.⁵² In the credit card example, an analysis focusing only on the merchant side would traditionally view an increase in the transaction fee to merchants as having two simultaneous effects: it could lead to higher revenues due to merchants paying the increase, and it could lead to lower revenues due to some merchants dropping the card altogether. But, if the consumer side is considered as well, a large enough decline in the number of merchants accepting the card could reduce the number of customers willing to carry the card, potentially reducing the profitability of the price increase further. As a result, a price increase that might appear to increase profits if only the merchant side of the market is considered could lead to lower profits if both sides of the market are considered.⁵³ When the price increase is part of a SSNIP test that means that additional firms could be added to the hypothetical monopolist even when that price increase is not profitable for the hypothetical firm raising prices. In this case, ignoring the presence of a multisided market in the merger analysis would lead to larger than appropriate relevant markets.54

The Supreme Court's June 2018 decision in *Amex*⁵⁵ appears to illustrate the problems caused by considering the anticompetitive effects on one side of a multi-sided market only. In that case, the question was whether a plaintiff's showing of "anticompetitive effects" on one side suffices to shift the burden of proving offsetting benefits to the defendant, or whether the plaintiff must show that the defendant's conduct is harmful taking account of all sides of the market. Over a vigorous dissent by Justice Breyer, a 5-4 majority held that where two sides of a market are linked by strong "indirect network effects," and where transactions require the simultaneous participation of both sides, the plaintiff cannot meet its burden by showing harm to only one side of the market. The majority of the *Amex* Court determined there were sufficiently substantial indirect network effects in that case to require an analysis of both sides of the market, and not just one side as the Department of Justice had argued. The basis for this determination was that credit card networks are "transaction" platforms "because credit-card networks cannot make a sale unless

⁴⁹ See Lapo Filistrucchi, Damien Geradin, Eric van Damme & Pauline Affeldt, Market Definition in Two-Sided Markets: Theory and Practice, 10 J. Competition L. & Econ. 293, 301, 315-19 (2014).

Id. at 329-38; see also David S. Evans & Richard Schmalensee, The Antitrust Analysis of Multi-Sided Platform Businesses 21-22 (Nat'l Bureau of Econ. Research, Working Paper No. 18783, 2013), available at https://www.nber.org/papers/w18783.pdf.

See, e.g., U.S. HORIZONTAL GUIDELINES, supra note 45, at 8-12.

Evans & Schmalensee, *supra* note 50, at 18 ("the demand on each side of the platform is more elastic, and the profitability of a price increase is lower, when these positive feedback effects are considered than when they are not considered."). This might be particularly the case if one side of the market prices its product or service at zero. Filistrucchi, et al, *supra* note 49, at 321("The risk of neglecting one side of a two-sided market is particularly high when the product on the overlooked side is priced at zero.").

Evans & Schmalensee, *supra* note 50, at 18 ("if the subject of an antitrust inquiry is a multi-sided platform, one would at least need to inquire into the strength of these feedback effects in assessing the profitability of raising prices on any side").

⁵⁴ *Id.* at 22 ("The key point is that it is wrong as a matter of economics to ignore significant demand interdependencies among the multiple platform sides.").

⁵⁵ Ohio v. Am. Express Co., 138 S. Ct. 2274 (2018).

both sides of the platform simultaneously agree to use their services."⁵⁶ As such, "they exhibit more pronounced indirect network effects and interconnected pricing and demand."⁵⁷

The *Amex* decision provides some guidance on how enforcers should define the relevant market and evaluate anticompetitive effects for multi-sided platforms that, like credit-card networks, exhibit strong, cross-directional, indirect network effects. Where sufficiently strong network effects exist, courts and enforcement agencies should consider the entire platform. ⁵⁸ As the Court majority put it, "[d]ue to indirect network effects, two-sided platforms cannot raise prices on one side without risking a feedback loop of declining demand." ⁵⁹ In other words, a price increase on one side might lead to harm to the other, an effect that would be missed if plaintiffs only had to show harm to one side of the market. For platforms with substantial indirect network effects, a price increase for one side of the market does not suggest an anticompetitive effect without evidence of increasing the overall cost of the platform to all customer groups considered together. ⁶⁰ Although the Court did not attempt to classify any platform other than the credit-card network at issue in the case, the Section believes that this analysis is useful in evaluating mergers in digital markets showing characteristics of multisided markets.

Recommended Approach

Generally speaking, when it appears that a merger is occurring in a multisided market—where there have been significant indirect network effects noted in either one direction or in both directions—the Section's view is that it is important to consider the potential impact of the merger on consumers in light of those network effects. ⁶¹ Depending on the structure of the industry, that could mean that the tools used to develop the relevant market need to be slightly different (for example considering the prices in both sides of the market together). Alternatively, it could mean that the tools are the same but that they need to be used from multiple different starting points (for example attempting a SSNIP test in both sides of the market independently). ⁶² Finally, it is possible that a merger in a multisided industry can be evaluated in the same manner as a merger in a more traditional industry.

Loss of Innovation/Potential Competition

While the global economy is indisputably undergoing a digital transformation, the Section's comments on whether and how this issue should affect and inform merger regulation

⁵⁶ *Id.* at 2278.

⁵⁷ Id

⁵⁸ *Id.* at 2286-87.

⁵⁹ *Id.* at 2285.

⁶⁰ Id. at 2285-86. Also relevant to the merger analysis is that the prevalence of indirect network effects could be important to the question of whether competitive entry is possible after the merger. See Evans & Schmalensee, supra note 50, at 19 ("the existence of indirect network effects can also limit supply-side substitutability and increase entry barriers for multi-sided platforms.").

See generally Evans & Schmalensee, supra note 50, at 18-28 ("The important point is to recognize the economic structure of these platforms, especially the role of competitive constraints and demand-side efficiencies, and factor that into the overall judgement concerning the merger.... Conducting a standard one-sided analysis just because it is easier is tantamount to committing the classic drunk's mistake—looking under the streetlight for his lost keys just because the light is better there." *Id.* at 28-29.).

⁶² See generally Filistrucchi, et al, supra note 49, at 300-19; see also Evans & Schmalensee, supra note 50, at 27 ("Analysts face a quandary in examining mergers of multi-sided platforms. . . . [S]tandard back-of-the-envelope calculations may give highly misleading results for the merger of platforms that have significant interdependencies in demand between customer groups.").

have focused on the tenet that traditional merger theories premised on the loss of either innovation or a potential competitor persist, and the digitization of the economy does not necessarily give rise to new or unique concerns with regard to these classic theories of harm.⁶³

Does the Digital Economy Require New or Updated Regulations?

The Section acknowledges that certain technologies (e.g., artificial intelligence (AI)) present unique characteristics that might require updates to regulations as those technologies evolve but believes that existing regulations and laws available to antitrust enforcers are sufficient to regulate those technologies now and are not inappropriate or ill-suited to address concerns arising in those markets today.⁶⁴ The Section points out that the "competitive significance of the challenged conduct therefore turns on the relevant facts of the case."⁶⁵ That is as much the case in the digital economy as it is in more traditional markets.

Should Sector-Specific Theories of Harm Be Developed?

The Section cautions against developing sector-specific theories of harm relating to the digital economy, as the necessity of such theories is as yet unproven and may be misplaced, and their introduction may indeed have the unintended and inadvertent effect of chilling competition by deterring procompetitive transactions to the detriment of competition, small and emerging businesses, and, ultimately, consumers.⁶⁶

How Should New Tools and Concepts Developed to Assess Innovation and Potential Competition Be Used?

The Section has encouraged antitrust enforcers to remain attentive to new tools and concepts developed to assess innovation and potential competition, such as those used by the Commission in *Dow/DuPont*, ⁶⁷ and, as necessary, provide further guidance on how best to deploy these tools and apply their results in merger investigations, including in markets where innovation may be less susceptible to measurement based on patents. ⁶⁸

Need For Clarity on Potential Competition Theories and Factual Evidence Required Under Those Theories

While there is a well-established doctrine of potential competition that, the Section submits, likely remains both a sufficient and appropriate tool for analyzing the competitive effect of an acquisition of a nascent competitive threat, it would be helpful to clarify both (1) the situations where an enforcer is likely to be concerned about the loss of a potential competitor, and

⁶³ Comments of the American Bar Association's Section of Antitrust Law on the European Commission's Request For Input on the Evolution of Competition Policy In Light of the Digitization of the Economy (Dec. 18, 2018), available at https://www.americanbar.org/content/dam/aba/administrative/antitrust_law/comments/december-2018/sal-comments-on-eudigitisation-consultation final 12182018.pdf [hereinafter ABA Comments to EU on Digitization].

⁶⁴ *Id*.

⁶⁵ *Id.* at 2.

⁶⁶ *Id.* at 5.

⁶⁷ See, e.g., Case M.7932—Dow/DuPont, Comm'n Decision, (Mar. 27, 2017) (summary at 2017 O.J. (C 353) 9), available at http://ec.europa.eu/competition/mergers/cases/decisions/m7932 13668 3.pdf.

ABA Comments to EU on Digitization, *supra* note 63, at 8.

(2) the factual evidence that should be used to evaluate these theories.⁶⁹ This is particularly necessary in the current environment of increased scrutiny and reinvigorated public debate as to whether antitrust enforcers are able to adequately assess or predict the potential competitive effects of a proposed merger, especially where the acquisition involves a firm that could be considered a nascent competitive threat to a leading firm with which it proposes to merge.⁷⁰

Evidentiary Challenges

The Section has pointed out that theories of potential competition in merger regulation do carry significant evidentiary challenges, particularly in dynamic markets where a new technology has been recently introduced. Predicting the future competitive pressures that potential competitors may place on legacy technology may be difficult.⁷¹ For example, a technology that may not be a close substitute today (for at least certain customer classes) may be a close substitute tomorrow (and may even force the legacy product from the market).

Where Acquisitions Preventing Entry—or of Potential Entrants—are Problematic

The Section has submitted that a merger resulting in increasing the scale required for entry is "problematic only in the relatively unusual case where it will shield the merging firms from efficient and effective new entry." The Section distinguishes this circumstance from that in which a merger engenders substantial efficiency benefits, allowing the merged company to offer a product at a reduced cost, thereby "discourag[ing] entry by less efficient potential competitors."

Likewise, the Section has submitted that a merger involving a potential entrant is unlikely to harm competition unless: "the relevant market is highly concentrated (i.e., already characterized by single-firm or collective dominance), [but for the merger,] the potential competitor was likely to enter in the near term, entry by the [potential entrant] would significantly increase competition, and there are no or few other potential entrants also likely to enter in the near term that would have a similar impact on competition."⁷⁴

Recommended Approach

Based on the above, the Section's view is that (i) the digitization of the economy does not give rise to any new or unique concerns in relation to loss of innovation- nor potential competition-based theories of harm; (ii) sector-specific theories of harm may inadvertently chill competition by deterring procompetitive transactions; (iii) theories of potential competition carry significant

⁶⁹ Comments of the Section of Antitrust Law of the American Bar Association In Advance of the Federal Trade Commission Hearings on Competition and Consumer Protection in the 21st Century 46 (Aug. 20, 2018), available at https://www.americanbar.org/content/dam/aba/administrative/antitrust_law/comments-2018/sal-sipl-comments-2018-ftc-hearings final 8202018.pdf [hereinafter ABA Comments to FTC Hearings].

⁷⁰ *Id*.

⁷¹ *Id*

Comments of the ABA Sections of Antitrust Law and International Law to the Irish Competition Authority's Public Consultation on Merger Guidelines 2 (Oct. 30, 2013), available at https://www.americanbar.org/content/dam/aba/administrative/antitrust-law/at-comments-salsil-ica.pdf.

⁷³ *Id*.

Comments of the ABA Sections of Antitrust Law and International Law to the Bundeskartellamt's Draft Guidance on Substantive Merger Control Dated July 21, 2011 6 (Sept. 21, 2011), available at https://www.americanbar.org/content/dam/aba/administrative/antitrust_law/at_comments_20110921.pdf.

evidentiary challenges, particularly in dynamic markets where a new technology has been introduced; (iv) a merger resulting in increasing the scale required for entry is problematic only if it shields the merging firms from efficient and effective new entry; likewise, a merger involving a potential entrant would only be likely to harm competition in the presence of specific characteristics (including high market concentration).

Big Data

The Existing Analytical Framework For Merger Analysis Set Forth in the Horizontal Merger Guidelines is Sufficiently Flexible to Identify Transactions That are Likely to Lead to Harm Because of "Big Data."

The Section believes that the fact-based analysis and economic principles articulated in the U.S. Department of Justice Antitrust Division (DOJ) and Federal Trade Commission (FTC) *Horizontal Merger Guidelines*⁷⁵ are sufficiently flexible to identify transactions involving "big data" that are likely to significantly harm competition.⁷⁶ Therefore, the Section submits that there is no need for special rules for mergers involving big data and that competition authorities should not adopt presumptions that transactions involving big data are inherently anticompetitive.

In general, "big data" refers to the collection of large amounts of consumer or other data and the analysis of such data. The Section submits that data should not be treated differently from any other asset that may be analyzed as part of the review of any given merger. The U.S. antitrust authorities' practice is to "apply a range of analytical tools to the reasonably available and reliable evidence to evaluate competitive concerns" of transactions involving big data. The U.S. antitrust authorities consider a wide variety of evidence in evaluating the potential competitive effect of a transaction, including the existence of substantial head-to-head competition, the disruptive role of

⁷⁵ U.S. HORIZONTAL GUIDELINES, *supra* note 45.

D. Bruce Hoffman, Competition Policy and the Tech Industry - What's at Stake?, Address Before the Computer & Industry Association 2018), (Apr. 12, https://www.ftc.gov/system/files/documents/public_statements/1375444/ccia_speech_final_april30.pdf ("our understanding is that at present there's neither a theoretical nor an empirical basis for assuming in every case that a firm acquiring more data about customers is imposing the equivalent of a price increase or quality decrease."); Bernard A. Nigro, Jr., "Big Data" and Competition for the Market, Address Before The Capitol Forum and CQ: Fourth Annual Tech, Media & Telecom Competition Conference (Dec. 13, 2017), available at https://www.justice.gov/opa/speech/file/1017701/download; Edith Ramirez, Deconstructing the Antitrust Implications of Big Data, Address Before the 43rd Annual Conference on International Antitrust Law and Policy 2 (Sep. 22, 2016), available at https://www.ftc.gov/system/files/documents/public statements/1000913/ramirez fordham speech 2016.pdf ("In assessing its potential significance or value, we generally view data as we would any other asset – either as a product or as an input to a product or service."); Deborah Feinstein, The Not-So-Big News About Big Data, FED. TRADE COMM'N (June 16, 2015), available at https://www.ftc.gov/news-events/blogs/competition-matters/2015/06/not-so-big-news-about-big-data ("Big data may be a hot topic, but the use of data by businesses is not that new, and the FTC has applied standard competition analysis to data markets for many years.").

The FTC characterizes "big data" as follows:

A common framework for characterizing big data relies on the "three Vs," the volume, velocity, and variety of data Volume refers to the vast quantity of data that can be gathered and analyzed effectively. . . .

Velocity is the speed with which companies can accumulate, analyze, and use new data. . . .

Variety means the breadth of data that companies can analyze effectively.

FED. TRADE COMM'N, BIG DATA: A TOOL FOR INCLUSION OR EXCLUSION? 1-2 (Jan. 2016), available at https://www.ftc.gov/system/files/documents/reports/big-data-tool-inclusion-or-exclusion-understanding-issues/160106big-data-rpt.pdf.

⁷⁸ U.S. HMG, *supra* note 75, at 1.

a merging party, the views of industry participants, and what is found in ordinary course business documents as well as data and econometric analyses.⁷⁹

Big data is no exception. If anything, big data and the technology industries are a good example of how difficult it is to predict future developments accurately. Accordingly, the Section urges competition agencies to proceed cautiously when analyzing nascent markets and the effects of a merger. Facts specific to each merger investigation should guide any analysis, and antitrust policymakers should consider the relative risks and costs associated with Type I ("false positive") and Type II ("false negative") enforcement errors, given the well-established link between innovation and economic growth. In their treatise on U.S. antitrust law, Areeda and Hovenkamp advised: "In the long run, technological progress contributes far more to consumer welfare than does the elimination of allocative inefficiencies." As a result, some argue that "successfully challenging business or product innovations is likely to dampen innovation across the economy, whereas Type 2 errors are at least mitigated in part by entry and other competition."

Competition Authorities Should Not Adopt Rules For or Against Mergers Involving Big Data and Instead Should Ground Analysis of Each Merger in the Facts.

The Section submits that it is difficult to generalize about competition issues arising from mergers involving big data. The competition implications of a merger involving big data vary widely and depend on factors such as the nature of the conduct and/or products and services at issue, the data being shared, the source of the data, the costs of procuring and analyzing the data, the significance of the data, whether alternative or adequate sources exist, the age of the data, the significance of new data, etc.

For example, a merger involving big data may feed the merged entity information about trends, habits, and patterns that provides valuable real-time feedback that enables companies to offer better products or services that consumers value or that enables consumers to make more informed choices. In another example, sensors that gather data by remotely monitoring machines and processes for maintenance issues and problems may reduce transaction costs, increase productivity, and enhance safety compared to human oversight, review, and assessment of these same issues. Cost savings and increased productivity from big data also can lead to lower prices for consumers. For example, certain auto insurers offer discounts on auto insurance to consumers with connected cars, 82 because insurers can determine customers' risk profiles and drivers, with access to real-time driving performance data, can improve their driving skills.

Even if a data set is proprietary, the biggest, and the best, it will not necessarily lead to anticompetitive effects in a merger. First, a data set might be limited to the users of a merged company's products and, therefore, may not include information about important customers or suppliers. Second, as laws on data privacy evolve, companies may be limited in how they can use or share data. Third, collecting, aggregating, cleaning, reporting, and analyzing data is not costless. Although big data may provide an advantage in one sense (more or better-quality information), it

⁷⁹ *Id.* §§ 2.1.4, 2.1.5, 2.2.3, and 2.2.1.

 $^{^{80}}$ IIA Phillip E. Areeda et al., Antitrust Law: An Analysis of Antitrust Principles and Their Application § 407a (2d ed. 1995).

⁸¹ Geoffrey A. Manne & Joshua D. Wright, *Innovation and the Limits of Antitrust*, 6 J. COMPETITION L. & ECON. 153, 167 (2010).

Press Release, Progressive, Progressive® Insurance Teams Up With Zubie to Reward Safe Drivers (Sept. 4, 2014), available at https://progressive.mediaroom.com/2014-09-04-Progressive-R-Insurance-teams-up-with-Zubie-to-reward-safe-drivers.

may provide a disadvantage in another (more cost). It may be that competitors with smaller data sets face lower input costs, or that such competitors can procure information from third parties or public sources (e.g., weather or traffic information) that are "good enough" to provide a competitor with the inputs it needs to be competitive, but at a lower cost. In other cases, data may have a short "shelf-life," meaning that a company's post-merger data cache may quickly become obsolete, diminishing the need for new competitors to accumulate vast amounts of historical data. Indeed, a small or emerging competitor that makes better use of technology, such as artificial intelligence, data mining, or statistical sampling, to gather and process data may face a unit cost advantage over incumbent competitors that are less nimble.

On the other hand, in some cases, the U.S. antitrust authorities have found that an acquisition of a company can reduce competition. For example, in 2010, the FTC settled charges that Dun & Bradstreet's acquisition of Quality Educational Data reduced competition in the market for United States K-12 data. ⁸³ The FTC found that the parties were two of just three companies that provided K-12 data, and that other sources were not close substitutes, had reduced functionality, and were updated less frequently. ⁸⁴ The FTC also found that it would not be possible for a new competitor to develop a database with the accuracy or market coverage comparable to the parties. ⁸⁵

Likewise, in 2008, the DOJ settled charges that combination of The Thompson Corporation and Reuters Group PLC was anticompetitive, because the transaction combined two of the three largest providers of certain financial data to institutions such as investment banks. ⁸⁶ The DOJ alleged that the parties were each other's closest competitors and could raise prices post-acquisition. ⁸⁷ The DOJ also alleged that new entrants could counteract such price increases because of the importance of historical data and the need to have local expertise in many countries, among other reasons. ⁸⁸

Recommended Approach

As the discussion above demonstrates, it is not possible to generalize about the competitive impact of a merger involving big data and the existing tools are capable of detecting those transactions that do lead to anticompetitive effects. Instead, in cases where antitrust scrutiny is appropriate, competition authorities should rely on fact-intensive analysis guided by well-established and empirically grounded economic theory to predict the competitive effects of a proposed merger, whether it involves big data or not.⁸⁹

Therefore, the Section respectfully submits that there is no need for special rules for mergers involving big data and that, as with mergers and acquisitions in other parts of the economy,

Analysis of Agreement Containing Consent Order to Aid Public Comment, In re The Dun & Bradstreet Corp., FTC File No. 9342, at 1 (Sept. 10, 2010), available at https://www.ftc.gov/sites/default/files/documents/cases/2010/09/100910dunbradstreetanal.pdf.

⁸⁴ *Id.* at 1.

⁸⁵ Id

Complaint at 2, United States v. The Thomson Corp. & Reuters Group PLC, No. 1:08-cv-00262 (D.D.C. Feb. 19, 2008), available at https://www.justice.gov/atr/case-document/file/513261/download.

⁸⁷ *Id.* at 10.

⁸⁸ *Id.* at 11.

Dissenting Statement of Commissioner Joshua D. Wright, In the Matter of Nielsen Holdings N.V. and Arbitron Inc., FTC File No. 131-0058 (Sept. 20, 2013), available at https://www.ftc.gov/sites/default/files/documents/public_statements/dissenting-statement-commissioner-joshua-d.wright/130920nielsenarbitron-jdwstmt.pdf.

a decision to block a transaction involving big data should be grounded in careful economic analysis of the totality of the facts, showing that a transaction is likely to substantially lessen competition in the foreseeable future.

Vertical Mergers

The Section believes that the challenges presented by vertical mergers in the digital economy are closely related to those presented by vertical mergers more generally. In particular, while it is well-understood that, in principle, vertical mergers can have anticompetitive effects, it is also widely understood that by combining businesses operating at separate levels of the production process, vertical mergers can create significant efficiencies. But guidance in the U.S. regarding how to evaluate these mergers is somewhat dated. In the United States, the task of arriving at a consensus regarding the likely competitive impact of a horizontal merger is made easier by the 2010 U.S. DOJ and FTC *Horizontal Merger Guidelines*. In the case of vertical mergers, there are no shared DOJ/FTC guidelines and the only specific guidance comes from DOJ-only Guidelines dating back to 1984 (although new guidelines are currently under consultation).

The potential procompetitive benefits of a vertical merger in digital markets as well as other markets include that the transaction can facilitate more efficient coordination with respect to design, production, promotion, and R&D. Another often stated potential benefit of vertical mergers in the presence of market power at both levels of a transaction is that a merger could eliminate double marginalization. Such efficiencies can translate into consumer benefits by way of lower prices, higher quality, and increased innovation. Such efficiencies can translate into consumer benefits by way of lower prices, higher quality, and increased innovation.

Several recent merger cases highlight these efficiencies in the vertical merger context. First, in the $AT\&T^{96}$ decision, the court credited executives' testimony that combining AT&T's wireless network and viewer data with Time Warner's content and advertising inventory would, among other efficiencies, enable the merged entity to distribute videos over mobile devices and better tailor advertisements. The district court found that the company's assets are "worth far more" together than alone, and would allow the merged entity to "transform" the way video content is distributed. Bayer's acquisition of Monsanto offered to combine seed and trait development with crop protection, biologics, and digital farming products to spur agricultural

⁹⁰ See generally, Koren W. Wong-Ervin, Antitrust Analysis of Vertical Mergers: Recent Developments and Economic Teachings, ANTITRUST SOURCE, Feb. 2019, at 3, 7, available at https://www.americanbar.org/content/dam/aba/publishing/antitrust_source/2018-2019/atsource-february2019/feb19 wong ervin 2 18f.pdf.

⁹¹ See U.S. HORIZONTAL GUIDELINES, supra note 45.

⁹² See U.S. DEP'T OF JUSTICE, NON-HORIZONTAL MERGER GUIDELINES (1984), available at http://www.justice.gov/sites/default/files/atr/legacy/2006/05/18/2614.pdf [hereinafter 1984 NON-HORIZONTAL MERGER GUIDELINES]. Recognizing the recent growth economic literature on these issues and new judicial precedents since 1984, the ABA has recommended that the U.S. enforcement agencies review their vertical merger policies and provide guidance to business. See, e.g., ABA Comments to FTC Hearings, supra note 69, at 40-43.

⁹³ Press Release, U.S. Dep't of Justice, DOJ and FTC Announce Draft Vertical Merger Guidelines for Public Comment (Jan. 10, 2020), available at https://www.justice.gov/opa/pr/doj-and-ftc-announce-draft-vertical-merger-guidelines-public-comment.

⁹⁴ See Wong-Ervin, supra note 90, at 5.

⁹⁵ Id

⁹⁶ United States v. AT&T, 310 F. Supp. 3d 161 (D.D.C. 2018).

⁹⁷ *Id.* at 182-83.

innovation.⁹⁸ The companies argued that the merger would "result in significant and lasting benefits for farmers: from improved sourcing and increased convenience to higher yield, better environmental protection and sustainability."⁹⁹

The anticompetitive harms that could result from a vertical merger include principally the possibility of vertical foreclosure, which is sometimes distinguished by the direction in which the foreclosure might occur. ¹⁰⁰ Input foreclosure occurs when the upstream division of a newly-integrated firm either stops supplying inputs to competitors of its downstream division, or continues to sell only at a substantially increased price. ¹⁰¹ Customer foreclosure occurs when the downstream division of a merged firm stops purchasing inputs from competitors of the upstream division and the loss of the downstream division as a customer denies the competitors of the upstream division needed scale or otherwise harms their ability to compete effectively with the upstream division. ¹⁰²

Foreclosure may allow the merged firm to raise the market price or otherwise harm consumers. However, for input or customer foreclosure to be credible, it must be profit maximizing for the merged firm to forgo selling inputs to downstream competitors or to obtain inputs from an external supplier. ¹⁰³ In this respect, although the U.S. enforcement agencies have brought on average a little more than one vertical merger challenge per year since 2000, ¹⁰⁴ it may be easier to state theories by which a particular transaction might harm competition than to show that the transaction is, in fact, likely to harm competition through vertical foreclosure. ¹⁰⁵ In part, this may

⁹⁸ Bayer Offers to Acquire Monsanto to Create a Global Leader in Agriculture, PR Newswire (Sept. 14, 2016), available at https://www.prnewswire.com/news-releases/bayer-and-monsanto-to-create-a-global-leader-in-agriculture-300327863.html.

⁹⁹ Id

There are other theories by which a vertical merger could be anticompetitive. See, e.g., Analysis to Aid Public Comment, Broadcom Ltd. & Brocade Commc'n Sys., Inc., FTC File No. 171 0027, 82 Fed. Reg. 32186 (July 12, 2017) (describing concern that the merger might facilitate coordination among competitors and requiring that the merged entity install firewalls to address concerns that Broadcom's access to the confidential business information of Brocade's competitor, Cisco, could facilitate coordinated interactions); Proposed Final Judgment and Competitive Impact Statement, United States v. Ticketmaster Entm't, Inc. and Live Nation, Inc., No. 1:10-cv-00139, 75 Fed. Reg. 6709 (Feb. 10, 2010) (describing a concern that the merger might eliminate the competitive constraint of a potential entrant.). The 1984 Non-Horizontal Merger Guidelines also noted a concern regarding the potential that the merger might lead to higher barriers to entry to one of the markets effected through the need for "two-level entry" into both markets after the merger." See 1984 Non-Horizontal Merger Guidelines, supra note 92, § 4.212.

¹⁰¹ See, e.g., Proposed Final Judgment and Competitive Impact Statement, United States v. Charter Commc'n, Inc., No. 16-cv-00759, 81 Fed. Reg. 30550 (May 17, 2016) (prohibiting acts that would limit an online distributor's access to content); Modified Final Judgment, United States v. Comcast Corp., 2013 U.S. Dist. LEXIS 132001 (D.D.C. 2013) (prohibiting acts that would limit an online distributor's access to content).

¹⁰² See, e.g., Consent Order, Etc., in regarding to Alleged Violations of Sec. 7 of the Clayton Act and Sec. 5 of the Federal Trade Commission Act, America Online, Inc. and Time Warner Inc., 131 F.T.C. 832 (2001) (opening the merged entity's cable system to competing Internet service providers); Proposed Final Judgment and Competitive Impact Statement, United States v. Google Inc. and ITA Software Inc., No. 1:11-cv-00688, 76 Fed. Reg. 21017 (Apr. 14, 2011) (imposing licensing requirements to address concern that merged entity will deny competing online travel intermediaries' access to forthcoming back-end technology).

¹⁰³ See Michael A. Salinger, Vertical Mergers in Multi-Product Industries and Edgeworth's Paradox of Taxation, 39 J. INDUS. ECON. 545 (1991).

See generally, Annual Reports to Congress Pursuant to the Hart-Scott-Rodino Antitrust Improvements Act of 1976, Fed. Trade Comm'n, available at https://www.ftc.gov/policy/reports/policy-reports/annual-competition-reports.

Wong-Ervin, *supra* note 90 at 7 ("The overall problem with the theoretical work is that it fails to generate administrable tests for real world cases,"); *see also* D. Bruce Hoffman, Vertical Merger Enforcement at the FTC, Address Before the Credit Suisse 2018 Washington Perspectives Conference 3 (Jan. 10, 2018), *available at* https://www.ftc.gov/system/files/documents/public_statements/1304213/hoffman_vertical_merger_speech_final.pdf ("the problem is that those theories don't generally predict harm from vertical mergers; they simply show that harm is possible under certain conditions").

be because many, if not all, theories of anticompetitive harm from vertical mergers require predictions of post-merger conduct by the merged firm. 106

For example, in *United States v. AT&T*, 107 the DOJ applied an increased bargaining leverage theory of harm to vertical mergers. Bargaining leverage theory predicts that parties will cooperate if the payoff from doing so exceeds the value of not cooperating. ¹⁰⁸ The Division alleged that pre-merger, Turner's failure to strike a deal with a video-programming distributor would result in a "blackout" period during which Turner would lose the rights to display its content to the distributor's customers. ¹⁰⁹ That would cause Turner to lose affiliate fees and advertising revenues. In that situation, the distributor may also be harmed, losing current and future subscribers. After the merger, because the merged entity would not only own the content, but would also own distribution businesses that compete with the blacked-out distributors, a blackout may be less problematic for the merged company because it could divert the distributor's customers to AT&T. Therefore, the merger would improve Turner's ability to threaten a blackout and thus shift bargaining leverage in Turner's favor. According to the Division, such a shift would enable Turner to demand higher prices for its content post-merger, which may in turn be passed on by the distributor to viewers in the form of higher subscription fees. While not deciding the legal sufficiency of the Division's allegations, the district court found that the evidence offered at trial was factually insufficient to show that Turner will gain and implement increased leverage. 110

Recommended Approach

Based on the above, the Section's view is that efficiencies are a common driver of vertical mergers; for instance, combining businesses operating at separate levels can intensify interbrand competition and eliminate double marginalization. Having said that, the Section notes the need to consider the potential risk of foreclosure in vertical mergers.

Remedies in the Digital Economy

Merger Remedies Generally

The Section believes that effective merger remedies should be proportional and used to effectively restore or preserve competition. This does not differ when analyzing a merger in the digital economy. In any given merger, the appropriate remedy is highly fact-specific. Merger remedies should conform to three basic principles. First, remedies should be used to effectively restore or preserve competition. Second, remedies should protect competition generally rather than seek to determine market outcomes. Third, there should be a close nexus between the remedy and the theory of harm in each particular case. In other words, merger remedies should be used to maintain or preserve competition that would have existed in the absence of a merger, rather than to determine market outcomes, favor a particular competitor, or promote goals that are beyond the

Hoffman, Vertical Merger Enforcement at the FTC, *supra* note 105, at 3.

¹⁰⁷ United States v. AT&T, 310 F. Supp. 3d 161 (D.D.C. 2018).

¹⁰⁸ See Robert Cooter & Thomas Ulen, Law & Economics 74-76 (6th ed. 2016).

¹⁰⁹ AT&T, 310 F. Supp. 3d at 200-201.

¹¹⁰ Id. at 202-219; see, e.g., id. at 210 (crediting AT&T's CEO when he wrote that they will not restrict distribution of Turner content after the merger. "We will continue to distribute Time Warner content broadly across the industry. In fact, we want to extend its distribution deeper into mobile so all wireless companies become distribution points for Time Warner content.").

scope of the antitrust or competition laws. Competition law should properly seek to protect the competitive process and consumers through the prohibition of anticompetitive conduct.

Behavioral Remedies

Behavioral remedies can be important in transactions where they obviate the need to divest assets that likely would generate efficiency gains in the hands of the merged firm. The Section submits that it is difficult to generalize about competition issues arising from behavioral remedies. The competition implications of behavioral remedies vary widely depending on factors such as the products at issue, the data and products being shared after integration, and the parties having access to such data and products.

The Section cautions against the adoption of an overly narrow view of the circumstances in which behavioral remedies are used. While many competition authorities express preference for structural remedies, particularly in the context of horizontal mergers, standalone business divestitures are not the only remedy that can eliminate (or reduce) competition concerns in appropriate transactions. Behavioral undertakings that modify or constraint the conduct of merged firms can also be useful in addressing competitive concerns in certain situations that are not limited to vertical transactions and are sometimes used in conjunction with, or instead of, structural remedies. For example:

- for the limited number of vertical mergers that do raise competitive concerns, conduct remedies may both be appropriate and superior to structural remedies;
- when divestiture is not feasible or subject to unacceptable risks (e.g., absence of suitable buyers) and prohibition is also not feasible (e.g., due to multijurisdictional constraints);
- when the competitive detriments are expected to be limited in duration owing to fast changing technology or other factors; or
- where the benefits of the merger are significant, and behavioral remedies are substantially more effective than divestitures in preserving these benefits in the relevant case.

Behavioral remedies can be implemented effectively through certain practices. For example:

- Monitoring. If appropriate means are provided to ensure implementation, monitoring of compliance, and enforcement of the remedy, monitoring can be an effective remedy. Monitoring obligations involved with behavioral remedies can also be outsourced to independent third-party firms. In the Section's view, if a behavioral remedy can address the competitive concerns identified by a competition agency without imposing any material monitoring burden on the competition agency going forward, the mere fact that some level of monitoring may be required (at the parties' expense) should not disqualify a behavioral remedy from consideration.
- *Firewalls*. Firewall remedies can be effective in resolving competitive concerns raised by merger transactions, particularly in vertical or joint venture transactions. Firewalls can efficiently and effectively prevent the sharing of competitively-sensitive information between joint venture partners or the upstream and downstream segments of a vertically-integrated business.

The Section submits that it is difficult to generalize about competition issues arising from behavioral remedies such as unbundling of applications and operating systems, duties to provide data, data pooling, data sharing, or mandatory licensing. The competition implications of these practices vary widely depending on factors such as the nature of the conduct and products at issue, the data and products being shared, and the parties having access to such data and products. On the one hand, access to data, in theory, could facilitate entry; however, it could also make entry less likely. For instance, there may be less incentive to develop a collection of data if it is likely that the collection will be subject to forced sharing. Moreover, antitrust mandates for mandatory data sharing pose well-recognized risks to a vigorous competitive process and to competition law enforcement. As explained by the U.S. Supreme Court, requiring a firm to supply its rival can actually reduce competition by "lessen[ing] the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities." Enforced sharing also requires the enforcer or court "to act as central planners, identifying the proper price, quantity, and other terms of dealing—a role for which they are ill suited." And, finally, compelling competitors to negotiate access to each other's inputs "may facilitate the supreme evil of antitrust: collusion." Other forms of alleged "leveraging," like so-called technological ties, often represent an efficient form of product integration or product enhancement that benefits consumers and is procompetitive.

The Section submits that consideration of the risk that potential data bottlenecks or aggregation may give rise to antitrust concerns should also take into account the risks to dynamic competition inherent in the types of antitrust remedies available to address such concerns. As such, remedies involving legally mandated data access, data sharing or data pooling could involve significant administrative costs and inhibit innovation. Given the significant investment many firms make in collecting data, and the importance of such data to their competitiveness, a requirement to share such data with competitors could create a significant disincentive to continuing innovation. The disincentive to innovate must therefore be balanced with whatever procompetitive benefit may be created through the proposed data access remedy.

The Section respectfully submits that these considerations are not materially reduced (and may in fact be enhanced) by the digitization of the economy. In particular, the Section strongly cautions against any presumption that the digitization of the economy should lead to an expansion of the circumstances in which behavioral remedies such as unbundling of applications and operating systems and sharing of data are mandated as part of a remedy. Such novel and potentially far-reaching enforcement approaches should continue to be considered only on a case-by-case basis and applied only when clearly justified following the most objective and rigorous analysis. In analyzing technology markets, enforcers should focus on whether the transaction creates or enhances entry barriers or otherwise enhances consumer lock-in. To the extent remedies are required to offset anticompetitive effects, those remedies should be narrowly tailored to redressing the perceived harm.

Structural Remedies

The Section encourages competition authorities to take a flexible approach on structural remedies, including divestitures. The Section submits that the approach to structural remedies applies equally to technology industries as to all other industries. In most merger remedies, competition authorities require the terms of a remedy, including the identification of a divestiture package, be determined prior to clearing a merger but allow identification and approval of a suitable buyer to occur following the closing of the main transaction. The choice of whether an

Verizon Comme'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 408 (2004).

¹¹² *Id*.

¹¹³ *Id*.

up-front buyer solution is preferred depends on the risks involved and whether the buyer's commitment will be implemented. This, in turn, depends on a number of factors, including the nature and scope of the business to be divested, the risks of degradation of the business in the period leading to divestiture, and any uncertainties inherent in the transfer and implementation, in particular the probability of identifying a suitable purchaser.

In the context of horizontal mergers, concerns over the merged firm's incentives to complete a structural remedy once agreed upon can be addressed by the structure of the remedy itself and ongoing monitoring, as well as potentially significant fines and other exposure from non-compliance. "Quasi-structural" or "semi-structural" measures such as changes to contracts that exist between competitors, removal of interlocking directors, and licensing arrangements, may provide effective remedies in these situations.

In comparison, vertical mergers are generally procompetitive and pose concerns only in limited circumstances. However, practitioners could benefit from more comprehensive guidance of the authorities' views concerning the circumstances when structural remedies may be necessary to remedy harm from vertical mergers. At this time, the Section submits that there is insufficient evidence from which to conclude that as a general presumption structural remedies ought to be preferred over behavioral remedies in vertical merger cases.

Recommended Approach

The Section's view is that merger remedies should be proportional and used to effectively restore or preserve competition, protect competition generally rather than to determine market outcomes, and there should be a close nexus between the remedy and the theory of harm in each particular case.

Chapter 4:

Exclusionary Conduct

When is an Online Platform Dominant?

Some online platforms may develop exceptionally large user bases, outsized revenues, or tremendous importance or influence. For example, the European Commission's e-commerce sector inquiry concluded that "the growth of e-commerce [platforms] over the last decade had a significant impact on companies' distribution strategies and customer behavior," while "the ability to compare prices of products across several online retailers [led] to increased *price competition* affecting both online and offline sales." Furthermore, "alternative online distribution models such as online marketplaces have made it easier for retailers to access customers." The Section notes that these outcomes, while sometimes unique to (or exaggerated in) the online platform world, do not necessarily make these platforms "dominant" under the competition laws. Dominance is found only where there is a lack of competition and alternative sources within the relevant market; dominant firms usually have the ability to act independently from customers and rivals. When analyzing whether an online platform is dominant, enforcers should consider factors such as competition from offline distribution, manufacturer websites, and other dissimilar online platforms, as well as the constraints suffered from potential entrants and new technologies.

While the Section uses the widely understood term "dominance" here, this concept has different names in different jurisdictions. U.S. jurisprudence historically tends to favor the term "monopoly power," while the terms "dominance" or "substantial market power" are used elsewhere (including, often interchangeably, in some U.S. Courts). In general, all of these terms refer to a firm having enough market power in a defined relevant market to control market-wide prices or to exclude competition. "Market power" is generally defined as the ability to raise prices above what would be charged under conditions of perfect competition and thus to exert some control over the price it charges. ¹¹⁷ Few firms are pure price takers facing perfectly elastic demand (the situation under which any increase in price would eliminate all demand for the

See European Comm'n, Final Report on the E-commerce Sector Inquiry, at ¶¶ 10 and 12, COM(2017) 229 final (Oct. 5, 2017), available at http://ec.europa.eu/competition/antitrust/sector inquiry final report en.pdf.

¹¹⁵ *Id.* ¶ 14.

See, e.g., United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 391 (1956) ("Monopoly power is the power to control prices or exclude competition."); Am. Council of Certified Podiatric Physicians & Surgeons v. Am. Bd. of Podiatric Surgery, Inc., 323 F.3d 366, 372 (6th Cir. 2003) ("Monopoly power is the power to exclude competition or control prices."); United States v. Microsoft Corp., 253 F.3d 34, 51 (D.C. Cir. 2001) ("a firm is a monopolist if it can profitably raise prices substantially above the competitive level").

See, e.g., Bruce H. Kobayashi, Spilled Ink or Economic Progress? The Supreme Court's Decision in Illinois Tool Works v. Independent Ink, 53 Antitrust Bull. 5 (2008); see also Ohio v. Am. Express Co., 138 S. Ct. 2274, 2288 (2018) ("Market power is the ability to raise price profitably by restricting output." (quoting Phillip E. Areeda & Herbert Hovenkamp, Fundamentals of Antitrust Law § 5.01 (4th ed. 2017) (emphasis added)). Analogously, market power may also be defined in terms of a firm's ability to reduce quantity, quality, or other product characteristics below the level that would prevail under conditions of perfect competition.

product). ¹¹⁸ Virtually all products that are differentiated from others have some degree of market power, if only because consumer tastes, seller reputation, or location confer upon their sellers at least some degree of pricing flexibility. This degree of market power is unavoidable and understood not to warrant antitrust intervention unless and until it becomes substantial enough to affect the larger relevant market. In other words, market power may be defined as power over one's own price, while dominance is defined as power over market prices. Dominance may also be defined as the ability to exclude competitors from the market since such power characteristically allows the firm to control market-wide prices. Finally, dominance must be more than temporary; it must be durable. ¹¹⁹

The factors considered by competition law enforcers around the world to establish the existence of a dominant position vary but generally include such considerations as (i) market share of the potentially dominant firm and competition from substitute goods or services; (ii) the presence of barriers to entry or expansion, including due to regulatory restrictions; (iii) whether the potentially dominant firm has the ability to unilaterally influence prices or to restrict supply or demand; and (iv) the degree to which competitors can counteract this power.¹²⁰

Recommended Approach

The Section recommends that competition law enforcers evaluate whether particular online platforms are dominant in a particular relevant market using the traditional methods of antitrust analysis noted above, under which the firm's market share serves as a useful first step. In the United States, monopolization cases have generally required market share of 65 percent or greater before analyzing other factors to determine monopoly power, with 80-90 percent market share being required to presume monopoly power. The European Commission is unlikely to find dominance in Article 102 TFEU cases if a firm has a market share of less than 40 percent. These

The demand elasticity (elasticity of demand) refers to how sensitive the demand for a good is to changes in other economic variables, such as prices and consumer income. Demand elasticity is calculated as the percent change in the quantity demanded divided by a percent change in another economic variable. A higher demand elasticity for an economic variable means that consumers are more responsive to changes in this variable.

¹¹⁹ See, e.g., Colo. Interstate Gas Co. v. Nat. Gas Pipeline Co. of Am., 885 F.2d 683, 695–96 (10th Cir. 1989) ("If the evidence demonstrates that a firm's ability to charge monopoly prices will necessarily be temporary, the firm will not possess the degree of market power required for the monopolization offense."); see also U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY § 2.2 (Jan. 12, 2017), available at https://www.justice.gov/atr/IPguidelines/download [hereinafter U.S. 2017 IP GUIDELINES].

In the case of online platforms, a few characteristics should also be taken into account when defining the relevant market (and, consequently, assessing dominance). The two-sidedness of the online platform is a relevant feature, especially considering that the firms often set a zero price in one of the sides. Network effects are also relevant, especially considering the potential creation of interdependencies among the different groups on a two-sided (or multi-sided) online platform. Please refer to Chapter 1 of this report for further remarks on market definition and market power.

¹²¹ See, e.g., 2B PHILLIP E. AREEDA ET AL., ANTITRUST LAW ¶ 532c, at 250 (3d ed. 2007) ("[I]t would be rare indeed to find that a firm with half of a market could individually control price over any significant period."); Bailey v. Allgas, Inc., 284 F.3d 1237, 1250 (11th Cir. 2002) ("[M]arket share at or less than 50% is inadequate as a matter of law to constitute monopoly power."); Blue Cross & Blue Shield United of Wis. v. Marshfield Clinic, 65 F.3d 1406, 1411 (7th Cir. 1995), as amended on denial of reh'g (Oct. 13, 1995); Eastman Kodak co. v. Image Tech Servs., 504 U.S. 451, 481 (1992); United States v. Grinnell Corp., 384 U.S. 563, 571 (1966) (87 percent); United States v. E.I. du Pont Numours & Co., 351 U.S. 377, 379 (1956) (75 percent); Am. Tobacco Co. v. United States, 328 U.S. 781, 797 (1946) (over 66 percent); United States v. Dentsply Int'l Inc., 399 F.3d 181, 188 (3d Cir. 2005) (75 to 80 percent predominant); United States v. Microsoft Corp., 253 F.3d 34, 73-74 (D.C. Cir. 2001) (80 to 95 percent predominant).

See, e.g., European Comm'n, Competition: Antitrust Procedures in Abuse of Dominance—Article 102 TFEU cases (July 2013), available at https://ec.europa.eu/competition/publications/factsheets/antitrust procedures 102 en.pdf.

percentages are warranted to demonstrate that an allegedly dominant firm might have the capability of exercising power over price, output, or other competitive factors in the market.

Analysis of whether an online platform is dominant should also include consideration of factors related to relevant market definition and substitutability that may not be present in other industries, including the following.

Competition From Offline Competitors. When analyzing the market share of an online platform, enforcers should be sure to consider offline sources of competition. Examining only competition from other online distribution may be insufficient in some circumstances to determine whether an online platform is dominant. For example, e-commerce platforms often compete with brick-and-mortar stores. Likewise, an online ride-hailing platform might compete with traditional offline taxicab services. Enforcers should therefore carefully define relevant markets to consider whether offline competition may be substitutable for the product provided by the online platform, thus potentially precluding dominance even if there are few or no other competing online platforms.

Competition From Direct Sources. Online platforms, by their nature, are multi-sided, meaning that two or more different groups of users use the platform for different-but-complementary purposes. A traditional example is a platform that brings together sellers and potential buyers. Such platforms may attract significantly large userbases and attain great size and popularity. Even in those circumstances, however, those same sellers often distribute their products via multiple channels, including other platforms and their own direct company websites or apps. This concept certainly applies to goods, such as clothing or consumer electronics, but may also apply to services, such as labor or financial services. Enforcers should consider whether such direct-source competition precludes a finding of dominance even by a large online platform.

Competition From Dissimilar Platforms or Websites. Online platforms may compete with each other in defined relevant markets even if they seem to provide different core functionality to users. For example, an e-commerce platform might compete with a search engine for shopping services, or a social networking platform might compete with a travel-booking platform for advertisers. As noted above, enforcers should also consider whether brick-and-mortar retailers or offline services providers compete against online platforms in defined relevant markets to an extent that may prevent them from controlling prices or excluding competitors.

Monopoly Leveraging and Lock-In Concerns

Dominant online platforms may give rise to concerns that the firm will leverage its monopoly to achieve monopoly power in a secondary market or to "lock in" users of the platform, disadvantaging rivals. The Section's past comments on monopoly leveraging includes noting that: (1) monopoly leveraging is only unlawful if the conduct maintains or poses a dangerous probability of creating monopoly power in the second market; (2) enforcement should be restricted to exclusionary conduct that creates dominance (or a dangerous probability thereof) in the "leveraged" market; (3) lock-in effects are not always related to monopoly power; and (4) in situations involving alleged leveraging or lock-in, competition authorities should carefully examine remedies requiring mandatory sharing or access to networks, data, or other valuable competitive resources where, absent exceptional circumstances, the costs involved and risks to innovation may not justify such relief absent unusually strong evidence of procompetitive benefit.

Monopoly leveraging occurs when a company unilaterally and anticompetitively uses its monopoly in one market to attempt to gain an advantage in a second market, and where a dangerous probability exists that the conduct will result in monopoly power in the second market. In the

context of online platforms, where network effects often confer durable market power on the first mover, a platform with a dominant position in its "core" business might seek to leverage its monopoly in that market to monopolize or foreclose its platform competitors with respect to an adjacent or related business.

<u>Lock-in</u> effects are not always an evidence of anticompetitive conduct and are not necessarily related to monopoly power and, as such, a case-by-case analysis will be necessary to determine the origin and the effects of the lock-in.

Lock in concerns can arise from tying or bundling arrangements, where the purchase or use of one product is conditioned on purchasing or using a second product. Tying and bundling are not always anticompetitive, but enforcers should be concerned when a firm with monopoly power over its own product or service requires customers to purchase a second as well. In addition to terms imposed by a monopolist, lock-in may also be achieved by so-called technological ties where two products are designed to work together to the exclusion of competitors' products. In the digital platform context, a platform with a monopoly in the tying service may leverage that power to monopolize the "tied" service as well by locking users in.

Lock-in concerns can also arise in the context of "aftermarkets," which typically involve the purchase or use of a primary product from a dominant firm where the user of the primary product has no choice but to obtain necessary aftermarket services from the same supplier and where that lack of choice was not apparent at the time of the initial purchase. ¹²³ In the context of digital platforms, an antitrust aftermarket might, for example, arise in the context of a dominant software platform that changes its terms and conditions to require users to make all follow-on purchases through the app, or modify the internal function of the software so that it is no longer compatible with other platforms.

U.S. antitrust law does not recognize a standalone offense of monopoly leveraging. Instead, enforcement actions must be brought either as monopolization or attempted monopolization claims under § 2 of the Sherman Act. As the Supreme Court clarified in 2004, monopoly leveraging is actionable only if the monopolist's conduct poses a "dangerous probability" of creating a monopoly in the second market as well. ¹²⁴ The attempted monopolization standard also requires specific intent and anticompetitive conduct. ¹²⁵

Some forms of monopoly leveraging that may lead to lock-in, such as bundling and tying arrangements, have historically been treated as illegal per se under the U.S. antitrust laws. But more recently, they are increasingly evaluated under a rule-of-reason framework that allows the court to weigh the potential procompetitive benefits of a bundle or tie against its alleged competitive harms. Rule of reason analysis may be particularly applicable in the context of a technological tie, which can be an efficient form of product integration and improvement that benefits consumers because it guarantees that the seller will internalize the gains of its initial R&D investment.

Finally, in terms of leveraging in an aftermarket, U.S. courts will almost always refuse to recognize an antitrust aftermarket absent some change in policy on the part of the aftermarket

This can be accomplished by contract (e.g., buying from a non-authorized dealer voids the product warranty), by technical design, or by the practical cost of switching to another platform for follow-on purchases.

Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 415 n.4 (2004).

¹²⁵ See, e.g., Four Corners Nephrology Assocs. v. Mercy Med. Ctr.of Durango, 582 F.3d 1216, 1222 (10th Cir. 2009) ("Before *Trinko*, some courts of appeals held that a monopolist could violate Section 2 by using monopoly power in one market merely to achieve a competitive advantage in a second market. But *Trinko* undid that, explaining that 'there [must at least] be a 'dangerous probability of success' in monopolizing a second market." (citations omitted)).

monopolist that unfairly and effectively locks in consumers.¹²⁶ In a situation where a digital platform has a high/dominant—but not overwhelming—share of the primary market, competition for sales into the aftermarket happens at the initial purchase stage. As long as the consumer is well-informed about the risks and benefits inherent in her original choice of platform, there is no separate aftermarket to monopolize.

Recommended Approach

In consideration of the above, the Section recommends a fact-specific, case-by-case approach to allegations of monopoly leveraging and lock-in.

First, monopoly leveraging and lock-in should only be considered unlawful when there is both monopoly power—established through market share presumptions and direct evidence — and anticompetitive conduct evidencing a specific intent to leverage the dominant platform to monopolize another properly defined antitrust market. In a leveraging scenario involving a monopolist, U.S. law finds no violation unless monopoly is threated in the second market as well. The EU and other jurisdictions find abuse of a dominant position in the first market when competition is merely distorted in the second market, without any dangerous probability of the firm achieving a monopoly position.

The Section considers that the latter view in the digital economy, in which an infringement may be found in many scenarios in which a firm simply seeks to monetize its assets, punishing such conduct may dampen innovation and dynamic platform competition. For instance, the fact that users find themselves "locked in" to a dominant or particularly popular platform that offers a vast suite of services is not necessarily evidence of anticompetitive conduct or anticompetitive intent on the part of that platform. Lock-in effects are not always related to monopoly power; they can also arise quite naturally in platform markets, which are often characterized by network externalities and intrinsic switching costs. These sources of lock-in, while they may push an industry towards consolidation, cannot be attributed to any abusive or unlawful behavior by the advantaged firm. In those circumstances, punishing a dominant platform for factors outside its control would not be appropriate.

Moreover, because of the possibility that certain types of leveraging or lock-in (like technological ties or bundling arrangements) may create procompetitive benefits, enforcement should be restricted to exclusionary conduct that creates dominance or a dangerous probability thereof in the "leveraged" market, and any alleged anticompetitive harms should be balanced carefully against any claimed efficiencies or consumer benefits. Even when a firm sets high prices for "locked in" users or charges them fees that other competing platforms do not charge without incentivizing switching, this is not necessarily actionable exclusionary conduct. Although the ability to charge a high price may be an indicium of monopoly power, the U.S. antitrust laws do not prohibit possession or exercise of monopoly power, only anticompetitive conduct intended to

see, e.g., PSI Repair Servs. v. Honeywell, Inc., 104 F.3d 811, 820 (6th Cir. 1997) ("[A]n antitrust plaintiff cannot succeed on a *Kodak*-type theory when the defendant has not changed its policy after locking-in some of its customers, and the defendant has been otherwise forthcoming about its pricing structure and service policies."); Alcatel USA, Inc. v. DGI Techs., 166 F.3d 772 (5th Cir. 1999) (no antitrust aftermarket claim in the absence of policy change); SMS Sys. Maint. Servs. v. Digital Equip. Corp., 188 F.3d 11, 18-19 (1st Cir. 1999) ("transparency" of the monopolist's policy was fatal to the plaintiff's aftermarket claim); Digital Equip. Corp. v. Uniq Digital Techs., 73 F.3d 756, 763 (7th Cir. 1996); Lee v. Life Ins. Co. of North America, 23 F.3d 14, 20 (1st Cir. 1994)) ("[T]he timing of the 'lock in' at issue in *Kodak* was central to the Supreme Court's decision. . . . Had previous customers known, at the time they bought their Kodak copiers, that Kodak would implement its restrictive parts-servicing policy, Kodak's 'market power,' *i.e.*, its leverage to induce customers to purchase Kodak servicing, could only have been as significant as its [market power] in the *copier market*, which was stipulated to be inconsequential or nonexistent." (citations omitted)).

obtain or maintain it.¹²⁷ Indeed, excessive pricing by a dominant firm may be procompetitive insofar as it invites entry and expansion by rivals.¹²⁸

To sum up, in both cases of alleged monopoly leveraging and lock-in, the Section recommends that authorities carefully examine remedies requiring mandatory sharing or access to networks, data, or other valuable competitive resources where, absent exceptional circumstances, the costs involved and risks to innovation may not justify such relief absent unusually strong evidence of pro-competitive benefit.

Exclusive Dealing-Style Restraints (Restraints on Using Other Distribution Channels)

Online platform businesses may present issues involving exclusive dealing restraints. For example, a dominant platform might leverage its position at a distribution "bottleneck" to foreclose rivals from access to customers or critical inputs or, conversely, manufacturers might seek to selectively exclude online platforms from distributing their products. Whatever the nature of the restraint, competition law authorities generally agree that vertical distribution restraints or "selective distribution" schemes frequently create procompetitive benefits like elimination of double marginalization and reduction in free-riding on the manufacturer's investment. In the past, the Section has noted that these types of restraints are not, and should not be, per se illegal, but that they may impair competition and should be analyzed on a case-by-case basis because the effects of vertical restraints are highly sensitive to the details of the particular economic conditions in which they are imposed.

Thus under U.S. law, exclusive dealing arrangements are evaluated under a rule of reason framework. The specific facts and circumstances surrounding the restraint are crucial to understanding its potential competitive impact and determining whether any competition law has been violated. In particular, non-price restraints are treated as far less suspect than price restraints. In endorsing rule of reason analysis for nonprice restraints, the Supreme Court has long recognized that the anticompetitive effects of vertical nonprice restraints on intrabrand competition generally are outweighed by the "market-freeing" benefits that such restraints may provide to interbrand competition. On the other hand, exclusive arrangements may impair competition if they foreclose a substantial portion of customers or suppliers, raise entry barriers, or stifle innovation. Specifically, with respect to digital platforms, exclusive dealing can protect monopolies by raising barriers to entry. Some defend that exclusive dealing generally will only *delay* entry (rather than deter it entirely)¹³⁰, because it requires any new competitor to enter at two levels. But, in new economy markets like digital platforms, where network effects and economies of scale are very

¹²⁷ See, e.g., Trinko, 540 U.S. at 407 ("To safeguard the incentive to innovate, the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive *conduct*.") (emphasis in original).

See Id. ("The mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system."). See also Berkey Photo v. Eastman Kodak Co., 603 F.2d 263, 274 n.12 (2d Cir. 1979) ("Nor is a lawful monopolist ordinarily precluded from charging as high a price for its product as the market will accept. True, this is a use of economic power But high prices, far from damaging competition, invite new competitors into the monopolized market.") (citations omitted).

¹²⁹ Bus. Elecs. Corp. v. Sharp Elecs. Corp., 485 U.S. 717, 726 (1988).

RICHARD A. POSNER, ANTITRUST LAW 225 (2d ed. 2001).

important, exclusive dealing may deter entry in the long term, despite high rates of innovation. ¹³¹ Thus, in the context of exclusive dealing concerning entrenched digital platforms, antitrust enforcers must carefully assess whether the exclusive arrangement will delay or prevent actual or potential entrants and/or chill innovation in that market.

In Europe, the enforcement situation is fairly similar. Selective distribution arrangements are:

not prohibited by Article 101(1) TFEU, to the extent that resellers are chosen on the basis of objective criteria of a qualitative nature, laid down uniformly for all potential resellers and not applied in a discriminatory fashion, that the characteristics of the product in question necessitate such a network in order to preserve its quality and ensure its proper use and, finally, that the criteria laid down do not go beyond what is necessary.¹³²

A recent report on the European Commission's inquiry into the e-commerce sector, however, determined that so-called "selective distribution" may "facilitate the implementation and monitoring of certain vertical restraints that may raise competition concerns and require scrutiny." For instance, some manufacturers may simply require that their retailers operate a brick-and-mortar store, functionally excluding all pure online players. These requirements, the Commission noted, lack any apparent link to distribution quality and potential and may not "enhanc[e] competition on other parameters than price, such as the quality of distribution and/or brand image." Recent European case law supports this case-by-case approach to selective distribution arrangements. For instance, the Court of Justice of the European Union (CJEU) held in 2017 that German cosmetic supplier Coty did not violate the competition laws when it prohibited one of its authorized distributors from selling Coty products on third-party e-commerce sites like Amazon and eBay. In the context of luxury goods, the CJEU reasoned, the restraints on e-commerce resellers may be required "in order to preserve the quality of those goods and to ensure that they are used properly."

Recommended Approach

In consideration of the above, the Section recommends that (1) competition law enforcers should first determine what type of exclusive arrangement is in play before making a recommendation, and (2) any enforcement decision be made only after undertaking an effects-based analysis of the likely competitive impact of the restraint on price, non-price aspects, as well as the arrangement's potential to foreclose or delay beneficial entry.

See Steven C. Salop, Understanding Richard Posner on Exclusionary Conduct, ANTITRUST SOURCE, Oct. 2018, available at https://www.americanbar.org/content/dam/aba/publishing/antitrust_source/2018-2019/atsource-october2018/oct18_salop_10_18f.pdf.

¹³² Case C-439/09, Pierre Fabre Dermo-Cosmétique SAS v. Président de l'Autorité de la concurrence, 2011 E.C.R. I-9419, ¶ 41.

European Comm'n, Report From the Commission to the Council and the European Parliament: Final Report on the Ecommerce Sector Inquiry, COM(2017) 229 final, ¶ 25 (Oct. 5, 2017), available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52017DC0229.

¹³⁴ *Id.* ¶ 27.

¹³⁵ Case C-230-16, Coty Germany GmbH v. Parfümerie Akzente GmbH, ¶¶24-29, available at https://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62016CJ0230.

¹³⁶ *Id.* ¶ 28.

In the world of online platforms, one potential class of restraints that may cause concern is "pure exclusives" with respect to online distribution. These arrangements grant exclusive distribution rights to a single online platform, replicating some aspects of vertical integration by contract. Depending on the extent to which other distribution channels like retail compete with online distribution, these restraints might be incapable of harming competition. Even if other channels do not compete, pure exclusively can be procompetitive insofar as they may eliminate free-riding by other online platforms, reduce the availability of counterfeit products, and promote competition between manufacturers. For this class of restraints, a key question is whether the exclusivity was imposed by the platform-distributor or whether the manufacturer requested the exclusivity. Distributor-enforced exclusivity—which may benefit entrenched e-commerce platforms at the expense of new entrants—is likely to be considered more suspect than manufacturer-imposed exclusivity.

A related class of restraints is "pure exclusives with manufacturer websites exempted." This is where a manufacturer agrees to sell only through a single online platform, but also retains the right to sell products direct-to-consumer through its own e-commerce portal. If a manufacturer competes with an otherwise exclusive online distributor, competition might or might not serve consumer interests. It might depend on how free each manufacturer is to compete as it pleases. Note that "manufacturer" in this context also include service providers like hotels or airlines, which offer bookings through travel portals but also allow customers to make purchases on their own websites or by phone.

Finally, as discussed above, online platforms often are implicated when manufacturers seek to enforce bans on the use of specific websites for distribution. This could be a very limited ban, or it may ban a class of sites from acting as resellers. Such restraints are likely to be procompetitive when they reduce counterfeiting and recoup its investment in creating a premium brand. As with other distribution restraints, manufacturer-imposed arrangements are likely to be less suspect than distributor-imposed restraints.

Predatory Pricing

Competition law scholars and practitioners are skeptical of what conduct should be punished as anticompetitive predatory pricing. This skepticism is no different with online platforms, which often boast their ability to reduce prices to consumers. In the past, the Section has commented on the need to prove an actual harm to the competitive process or consumers. Key positions include: (1) pricing schemes are only anticompetitive if the predator can eventually raise prices to above competitive levels in the future, and (2) enforcers should apply well understood cost-based tests. When addressing online platforms, issues related to market definition and other questions should also be considered—including the added challenge of cross-subsidization and zero-priced markets where platforms collect data rather than revenues.

Although U.S. law treats predatory pricing as anticompetitive in certain circumstances, it approaches the issue carefully. Competition on price remains "the very essence of competition," and so "[e]ven if the ultimate effect of the [price] cut is to induce or reestablish supracompetitive pricing, discouraging a price cut and forcing firms to maintain supracompetitive prices, thus depriving consumers of the benefits of lower prices in the interim, does not constitute sound antitrust policy." Low prices are generally a boon to consumers, even when they result in losses

¹³⁷ Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 226 (1993).

¹³⁸ *Id.* at 224.

by another individual competitor, and, without more, low prices do not harm the competitive process or consumers. 139

In *Brooke Group v. Brown & Williamson Tobacco Corp.*, ¹⁴⁰ the U.S. Supreme Court established a two-part test for predatory pricing under Section 2 of the Sherman Act: (1) the defendant set prices below an appropriate measure of its own costs, and (2) the defendant has a dangerous probability of recouping its losses by increasing its prices once competition in the market is limited. ¹⁴¹

The gateway issue in any predatory pricing case is the appropriate measure of the firm's own costs. The Section suggests that enforcers simplify and clarify discussions of economic cost-based tests and not attempt to measure difficult-to-quantify indirect costs, such as opportunity costs or social costs. The Section is not aware of "opportunity cost" being used as a measure of costs for purposes of assessing predatory pricing and are concerned that using such a measure that is not well defined or understood may introduce significant uncertainty for firms in assessing what level to price products to avoid predatory pricing risks. In light of the benefits of low pricing articulated above, the Section suggests that enforcers avoid amorphous or non-economic cost measures because they introduce uncertainty and may deter firms from beneficial price-cutting.

Instead, the Section recommends that enforcers articulate their approach to predatory pricing using well-understood economic cost-based tests that may help enterprises internally determine whether their pricing conduct is likely to be considered anticompetitive. One useful set of thresholds suggested by various U.S. courts is a sliding-scale approach that turns on the relationship of price to the seller's average total costs (ATC) and average variable costs (AVC): (1) prices at or above ATC fall clearly outside the domain of problematic "below-cost pricing;" 142 (2) prices at or above AVC but below ATC are presumptively legitimate; and (3) prices below AVC are presumptively illegitimate—with the burden of proof being on the party challenging either presumption. 143

Assessing Likelihood of Recoupment. Actionable predatory pricing also requires anticompetitive effects, whereby the predator is able to eventually raise prices to above competitive levels. Consistent with the notion that competition laws protect the competitive process, not individual competitors, a mere *intent* to cause competitors to exit the market or discourage entry by cutting prices below costs does not, on its own, harm the competitive process

¹³⁹ *Id.* at 225 ("That below-cost pricing may impose painful losses on its target is of no moment to the antitrust laws if competition is not injured: It is axiomatic that the antitrust laws were passed for 'the protection of *competition*, not *competitors*."") (citing Brown Shoe Co. v. United States, 370 U.S. 294, 320 (1962))); *see also* Atl. Richfield Co. v. USA Petroleum Co., 495 U.S. 328, 329 (1990) ("[C]utting prices to increase business is often the essence of competition.").

¹⁴⁰ 509 U.S. 209 (1993).

¹⁴¹ *Id.* at 221-24.

¹⁴² See, e.g., United States v. AMR Corp., 335 F.3d 1109, 1117 (10th Cir. 2003) (pricing above total costs has been "implicitly ruled out" by the Supreme Court as a basis for predatory pricing liability); McGahee v. N. Propane Gas Co., 858 F.2d 1487, 1496 (11th Cir. 1988) (recognizing "average total cost as the cost above which no inference of predatory intent can be made") (citations omitted); Henry v. Chloride, Inc., 809 F.2d 1334, 1346 (8th Cir. 1987) ("[A]t some point, competitors should know for certain they are pricing legally, and . . . this point should be average total cost."); Arthur S. Langenderfer, Inc. v. S.E. Johnson Co., 729 F.2d 1050, 1056 (6th Cir. 1984) (same standard).

See, e.g., Tri-State Rubbish, Inc. v. Waste Mgmt. Inc., 998 F.2d 1073, 1080 (1st Cir. 1993) (observing that pricing below variable cost is the "normal test of predation"); Kelco Disposal, Inc. v. Browning-Ferris Indus. of Vermont, Inc., 845 F.2d 404, 407 (2d Cir. 1988),), aff'd, 492 U.S. 257 (1989) (noting that prices below "reasonably anticipated average variable cost[] are presumed predatory"); Henry, 809 F.2d at 1346 (holding AVC "to be a marker of rebuttable presumptions"); William Inglis & Sons Baking Co. v. ITT Continental Baking Co., Inc., 668 F.2d 1014, 1035-36 (9th Cir. 1981) (holding that the plaintiff bears the burden of showing that prices above AVC but below ATC are "predatory," and that the plaintiff establishes a prima facie case of predatory pricing by proving that the defendant's prices were below AVC).

or consumers.¹⁴⁴ However, successful recoupment by the subsequent imposition of supracompetitive prices can cause consumer harm.¹⁴⁵ On the other hand, unsuccessful predation (i.e., below-cost pricing that does not result in recoupment of the losses) no matter how malicious, is "in general a boon to consumers."¹⁴⁶ For these reasons, the Section recommends that enforcers adopt the likelihood of recoupment of losses from below-cost pricing as a mandatory element to a finding of predatory pricing. A mere anticompetitive purpose is an insufficient basis for liability. Merely obtaining greater market power in this context is not also sufficient because gaining customers by lowering prices is "competition on the merits."¹⁴⁷ Instead, a violation must involve the unlawful maintenance of a dominant position. A finding of fairly durable market power relates to predatory pricing because firms without power over pricing—both now and in the foreseeable future—are unlikely to succeed in recoupment.

Recommended Approach

Generally, the predatory pricing doctrine should apply equally to online platforms as other market participants. Online platforms should be encouraged to lower prices, even when lower prices disrupt the status quo, but they should not be allowed to price below a relevant measure of their costs to obtain monopoly power and then raise prices later to recoup profits. Online platforms, however, do present some particular challenges for appropriately applying the predatory pricing doctrine.

Promotional Pricing

It is well recognized that not all below-cost pricing is predatory. Various forms of promotions, limited in scope, should not be treated as predatory pricing. This is no different in the digital economy than others. In either case, it can be difficult to determine when a price reduction has been in place long enough that it is no longer "promotional" and might be predatory.

Evaluating the Likelihood of Long-Term Consumer Harm

As explained above, failing a price-cost test does not necessarily prove pricing is predatory; rather, it should lead to further analysis of the conduct. Predatory pricing requires that the predator be able to harm consumers in the long term. The U.S. has a formal recoupment requirement outlined above. Although EU law does not require recoupment, it does undertake much the same inquiry by requiring proof of long-term consumer harm.

Enforcers must examine the alleged predator's market power, its competitors' relative shares, and the conditions of entry to analyze whether low prices in the short term can reasonably be expected to produce high prices in the long term. If, for example, a rival online platform can

Brooke Grp., 509 U.S. at 224 ("That below-cost pricing may impose painful losses on its target is of no moment to the antitrust laws if competition is not injured: It is axiomatic that the antitrust laws were passed for 'the protection of *competition*, not *competitors*." (citing Brown Shoe Co. v. United States, 370 U.S. 294, 320 (1962))); see also Atl. Richfield Co. v. USA Petroleum Co., 495 U.S. 328, 338 (1990) ("cutting prices in order to increase business is often the very essence of competition").

Brooke Grp., 509 U.S. at 224 ("Recoupment is the ultimate object of an unlawful predatory pricing scheme; it is the means by which a predator profits from predation.").

¹⁴⁶ Id.; see also Phillip Areeda & Donald Turner, Predatory Pricing and Related Practices Under Section 2 of the Sherman Act, 88 HARV. L. REV. 697, 699 (1975).

¹⁴⁷ *Id.* at 223.

weather the low prices of an aggressive competitor, then it is unlikely that a predatory pricing strategy would be successful. Similarly, if a new platform enters (or if the threat of entry is sufficient), the alleged predatory platform may not be able to raise prices in the future.¹⁴⁸

A successful predatory pricing theory will need to reliably estimate future entry to assess whether prices will rise again in the future. Entry conditions for online platforms, however, can be complicated. The digital economy is generally regarded for relatively low barriers to entry. However, certain types of platforms require a minimum scale of participation to be successful—Amazon, for example, would not be so popular if it could not offer a vast range of products and certain merchants would not sell their products on Amazon if the website did not attract millions of potential customers.

Defining a Market for Price-Cost Tests for Online Platforms

Scope of Products

Whichever price-cost test an enforcer utilizes, the threshold question is market definition. An online platform may offer thousands of goods or services for sale, so the first issue in applying a price-cost test is to determine which products or services are relevant. It is certainly wrong to apply a price-cost test to an arbitrary product grouping. U.S. courts have held that price-cost tests should compare entire product lines (not individual products) but may be limited to a certain target customer group. The proper grouping may be the range of products carried by the alleged prey.

Two-Sided Platforms

In *Ohio v. American Express Co.*, ¹⁵⁰ the U.S. Supreme Court instructed courts to analyze certain markets as "two-sided transaction platforms." Not all online platforms qualify as two-sided transaction platforms, but some will. When a platform "offers different products or services to two different groups who both depend on the platform to intermediate between them" and the two sides of the platform exhibit strong "indirect network effects," it may qualify as a "two-sided transaction platform." In such cases, both sides of the platform need to be analyzed as a single antitrust market and any theory of anticompetitive conduct needs to take into account the anticipated competitive impact on *both* sides. ¹⁵⁴

Areeda & Turner, *supra* note 146, at 699 (arguing that where barriers to entry are low, it is costly to lower prices to predatory level because new entrants can correct the market).

¹⁴⁹ See e.g., Brooke Group, 509 U.S. at 216 (analyzing price-cost for generic cigarettes); Int'l Travel Arrangers v. NWA, Inc., 991 F.2d 1389, 1395-96 (8th Cir. 1993) (finding that the proper evaluation of the pricing structure of airline tickets required consideration of all prices for the routes in question, not just the lowest priced seat); see generally, AM. BAR ASS'N, ANTITRUST LAW DEVELOPMENTS 287 (8th ed.).

¹⁵⁰ 138 S. Ct. 2274 (2018).

¹⁵¹ Id. at 2280.

^{152 &}quot;Indirect network effects exist where the value of the two-sided platform to one group of participants depends on how many members of a different group participate. In other words, the value of the services that a two-sided platform provides increases as the number of participants on both sides of the platform increases. A credit card, for example, is more valuable to cardholders when more merchants accept it, and is more valuable to merchants when more cardholders use it." *Id.* at 2280–81 (citations omitted).

¹⁵³ Id. at 2286-87.

Not all two-sided markets need to be analyzed this way. When network effects are weak or unilateral, each side can be analyzed independently. For example, the Supreme Court expressly stated that Newspapers are not a two-sided transaction platform for purposes of this analysis, because "the indirect networks effects operate in only one direction; newspaper readers are largely

Specifically, because online platforms connect participants to each other, the popularity of each side of a platform often depends on the popularity of the other side, and platforms may sell to one group at a loss, only to make their money on the other side. The mere fact that an online platform's business model involves such cross-subsidization is not predatory pricing. As the Supreme Court noted in *American Express*, "[s]ometimes indirect network effects require two-sided platforms to charge one side much more than the other The optimal price might require charging the side with more elastic demand a below-cost (or even negative) price." And the fact that two-sided platforms charge one side a price that is below or above cost reflects differences in the two sides' demand elasticity, not market power or anticompetitive pricing." 156

Instead, price effects cannot be measured on only one side of a two-sided transaction platform. To demonstrate anticompetitive effects on the two-sided credit-card market as a whole, the Supreme Court has instructed, plaintiffs must prove that [the alleged anticompetitive conduct] increased the cost of credit-card transactions above a competitive level, reduced [output], or otherwise stifled competition in the . . . market. Although *Amex* concerned vertical restraints, enforcers should consider both sides of a two-sided transaction platform in predatory pricing analyses as well.

Therefore, proving predatory pricing in a two-sided market may require a showing that the net price for both sides of the market is below the cost of operating both sides of the market *and* the platform has a dangerous probability of raising the net price above a competitive level in the future to recoup losses. Moreover, any theory of predatory-cost pricing would need to account for potential impacts of a below-cost price would have on the other side of the market in the short term.

Most-Favored-Nation-Style Restraints

Most-favored-nation (MFN) agreements are common in many industries. In circumstances not involving dominance, traditional MFN agreements (under which a seller agrees to provide the buyer with prices as good as or lower than it provides anyone else) are focused on the price paid by the firm that is a party to the MFN and are typically seen by competition law authorities and courts as procompetitive. Indeed no U.S. court analyzing these traditional MFNs has found the MFN, by itself, to be illegal under the U.S. antitrust laws. U.S. enforcers and courts have historically argued, however, that in some cases MFNs may help to facilitate other anticompetitive conduct, such as when a dominant firm requires firms that it deals with to enter into MFNs in order to exclude or disadvantage competitors. And more recently, authorities have asserted that in some cases, online platforms' use of retail price MFNs (under which a seller agrees to charge

indifferent to the amount of advertising that a newspaper contains." *Id.* at 2286. However, the Supreme Court expressly held that the "credit-card market" must be analyzed as two-sided transaction platform. *Id.*

¹⁵⁵ *Id.* at 2281.

¹⁵⁶ Id. at 2285–86.

¹⁵⁷ Id. at 2287 ("Evaluating both sides of a two-sided transaction platform is also necessary to accurately assess competition.").

¹⁵⁸ Id.

¹⁵⁹ Blue Cross & Blue Shield United of Wis. v. Marshfield Clinic, 65 F.3d 1406, 1415 (7th Cir. 1995), as amended on denial of reh'g (Oct. 13, 1995).

See, e.g., United States v. Delta Dental of Rhode Island, 943 F. Supp. 172, 179-80 (D.R.I. 1996) (denying motion to dismiss where an insurer with 90% market share entered into MFNs requiring it to pay only the lowest price charged to any of its rivals).

consumers on the platform prices as low as or lower than prices charged to consumers elsewhere) may have anticompetitive effects. ¹⁶¹

Retail price MFNs differ from traditional MFNs in that they focus not on the prices paid by the firm that is a party to the MFN, but by the consumers using the firm's platform. Enforcers have expressed concern that in online platform cases, a retail price MFN imposed by an online platform may help to facilitate collusion among suppliers or platforms. Retail price MFNs imposed by dominant online platforms may also contribute to exclusionary conduct, such as preventing manufacturers from offering consumers lower prices on their own websites even when costs may be lower because the manufacturer does not have to pay commission or revenue share to a platform.

In Europe, a recent discussion has taken place in the Booking.com matter¹⁶² related to the main differences between the effects of narrow and wide MFN clauses (or price parity clauses) imposed by online travel agencies on hotels. Whereas narrow clauses would prohibit the supplier (in that case, the hotels) to offer lower prices on their own channels, wide clauses would also prohibit offering lower prices on other platforms (thus reducing inter-brand competition between them).

Recommended Approach

The Section agrees with the view of U.S. antitrust regulators that in general, MFNs must be analyzed under the rule of reason on a case-by-case basis, taking into account the specific factors surrounding the firm's conduct and any procompetitive benefits weighed against any anticompetitive effects of the MFN. The Section recommends that this approach should remain consistent when the firm at issue is an online platform, but note the following factors that might distinguish this analysis when one or more online platforms are involved:

Restraints By an Online Platform on Manufacturer-Direct Pricing. Retail price MFNs can, of course, vary in scope. For example, an online platform might narrowly scope an MFN to require a manufacturer to charge consumers on its platform prices that are as low as or lower than prices charged on other online platforms, or it might broadly scope the MFN to require the manufacturer to charge consumers on its platform prices that are as low as or lower than prices charged anywhere else, including on the manufacturer's direct website or app. Even if an online platform is dominant, an MFN might have procompetitive benefits if it helps to ensure robust interbrand competition (such as among platforms) and lower prices for consumers. But MFNs by dominant online platforms that prevent manufacturers from charging lower prices in a direct-to-consumer sale from the manufacturer's own website or app (even when costs are lower because the manufacturer does not have to pay a commission or revenue share) might help to entrench a dominant platform or prevent new entry. The Sections recommends that when enforcers analyze retail price MFNs

¹⁶¹ See Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFN, FED TRADE COMM'N (Oct. 17, 2018), available at https://www.ftc.gov/news-events/audio-video/audio/understanding-exclusionary-conduct-cases-involving-multi-sided.

Bundeskartellamt, Case Summary: Decision B9-121/13 dated 22 December 2015—"Best Price" Clause of Online Hotel Competition Portal **Booking** Also Violates Law (Mar. 2016), available https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Kartellverbot/2016/B9-121-13.pdf? blob=publicationFile&v=2; Bundeskartellamt, Case Summary Decision B9-66/10 dated 20 December 2013—"Best Clauses of HRS Hotel Portal Violate Competition Law https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Kartellverbot/2014/B9-66-10.pdf? blob=publicationFile&v=3.

imposed by online platforms, they carefully examine the scope of the MFN, especially including any restraints on manufacturers' direct-to-consumer pricing.

MFN Restraints By Online Platforms on Pricing That the Manufacturer Cannot Control. Retail price MFNs, by definition, affect the prices charged to consumers, not the online platforms that are a party to (or impose) the MFN and facilitate those sales. Thus, in some scenarios an online platform may seek to impose a retail price MFN on a manufacturer that obligates the manufacturer to charge the platform's consumers prices that are as low as or lower than prices charged by some independent third party. To illustrate the problem this can create for manufacturers, imagine that a manufacturer sells a product on an online platform under an agency model (meaning that the manufacturer sets the price to the consumer and the platform takes a commission on each sale). The manufacturer also sells that same product in other channels using a reseller model, meaning that the manufacturer sells the product for a particular wholesale price and the reseller independently sets the price to the consumer. If the online platform imposes a broadly scoped retail price MFN, and some reseller then decides to sell the product for a very low price (perhaps even as a loss leader), the manufacturer would then be obligated to sell the product on the online platform for that very low price—a position which may very well be unsustainable for the manufacturer. Such circumstances may encourage a variety of anticompetitive activity such as resale price maintenance, collusion, or if the online platform is dominant, exclusionary conduct as the manufacturer is forced to stop selling its product in reseller model-based distribution channels. The Section recommends, therefore, that enforcers should examine whether retail price MFNs imposed by online platforms using agency models might have anticompetitive effects related to a manufacturer's inability to control prices subject to the MFN.

Chapter 5:

Algorithms and Artificial Intelligence

Background

Rapidly evolving development and use of algorithms and artificial intelligence (AI) in business continues to transform the antitrust landscape. Vast amounts of data, vastly greater computational power, and new methods of machine learning are changing the way that businesses operate and consumers make decisions. Many of these technologies also have powerful implications regarding privacy, security, competition, and data ownership.

Algorithms and AI present a "double-edged sword" to competitive markets. On one hand, they can enhance competition by facilitating rapid response to changing competitive conditions and customer demand. Enhanced price discovery and dissemination—the crucial function of the price system itself—is likely to make markets more efficient and competitive. On the other hand, the use of algorithms and AI may facilitate collusion and make cartels more stable. Whatever the effect of algorithms and AI on markets may be, it is the Section's view that their use does not alter the core elements of a cartel case.

Competitor Agreements Involving Pricing Algorithms

Recent literature on the topic of collusion through pricing algorithms has identified two scenarios that the current antitrust laws would capture. Professors Maurice Stucke and Ariel Ezrachi discuss these two scenarios in a recent paper exploring the use of new technologies in online markets.¹⁶³

In the first scenario, firms agree to collude and design a pricing algorithm to effectuate the terms of their agreement. Indeed, as the United States Department of Justice recently demonstrated in the online poster cases, *United States v. Topkins*¹⁶⁴ and *United States v. Aston*,¹⁶⁵ U.S. antitrust laws may be used to prosecute this type of classic collusive agreement to restrain trade.¹⁶⁶ Precedent indicates that this is neither a new behavior nor a new enforcement strategy. In *United States v. Airline Tariff Publishing Co.*,¹⁶⁷ airlines settled accusations that they used a jointly owned computerized online booking system to communicate and set collusive airline fares. Computer-determined pricing may be susceptible to coordination, just as human determined pricing can be,

Maurice Stucke & Ariel Ezrachi, *How Pricing Bots Could Form Cartels and Make Things More Expensive*, HARV. BUS. REV. (Oct. 27, 2016), *available at* https://hbr.org/2016/10/how-pricing-bots-could-form-cartels-and-make-things-more-expensive.

¹⁶⁴ Information, United States v. Topkins, No. 3:15-cr-0021 (N.D. Cal. Apr. 6, 2015), ECF No. 1, https://www.justice.gov/atr/case-document/file/513586/download.

¹⁶⁵ Indictment, United States v. Aston, No. 3:15-cr-00419 (N.D. Cal. Aug. 27, 2015), ECF No. 1, https://www.justice.gov/atr/file/840016/download.

Press Release, U.S. Dep't of Justice, Former E-Commerce Executive Charged with Price fixing in the Antitrust Division's First Online Marketplace Prosecution (Apr. 6, 2015), available at https://www.justice.gov/opa/pr/former-e-commerce-executive-charged-price-fixing-antitrust-divisions-first-online-marketplace.

United States v. Airline Tariff Pub. Co., 836 F. Supp. 9 (D.D.C. 1993).

and antitrust law already has confronted this issue when there is an agreement between competitors in place.

In the second scenario, a single firm creates a common pricing algorithm, which is then adopted by the consent of the market participants. This is a variation of a "hub-and-spoke" type of conspiracy, which also is within the ambit of current U.S. antitrust law prohibitions and precedents. 168

Unilateral Conduct Involving Pricing Algorithms

Absent agreements and concerted action, independent adoption of pricing algorithms may be beyond the reach of antitrust law, even if they make interdependent pricing more likely. Stucke and Ezrachi discuss two additional scenarios that do not involve agreements among competitors. In the first scenario, multiple firms unilaterally adopt pricing algorithms that act as "predictable agents," continually monitoring and adjusting to market changes, which may result in oligopolistic pricing outcomes. In the second, aided by AI, algorithms effectively engage in autonomous decision-making, "expand[ing] tacit collusion beyond price, beyond oligopolistic markets, and beyond easy detection." In both scenarios, the unilateral decisions to adopt such pricing strategies would appear to be beyond the reach of current laws applicable to interactions between competitors in the United States.

As Stucke and Ezrachi have noted, however, it is possible that big data and algorithmic pricing may combine to allow conscious parallelism to function more frequently and effectively in various markets, which may generate deadweight losses. ¹⁷⁰ On the other hand, sophisticated pricing algorithms, supported by large datasets, may reduce market transparency through the use of individualized pricing, individualized promotions, and real-time or near-real-time pricing, reducing the risk of conscious parallelism. In any event, for many years it has been clear that oligopoly conduct, including consciously parallel pricing, does not attract U.S. antitrust liability absent proof (direct or inferential) of an actual agreement. ¹⁷¹ For the last 25 years, the United States Supreme Court's *Brooke Group* opinion has provided an additional basis for requiring proof of express agreement, rather than mere non-conspiratorial competitive interactions, in establishing liability. ¹⁷² *E.I. duPont de Nemours & Co. v. FTC* teaches that unilateral conduct, even in an oligopolistic industry, can be labeled "unfair" under Section 5 of the FTC Act only if there is evidence of "anticompetitive intent or purpose" or "the absence of an independent legitimate business reason." ¹⁷³

See e.g., cases arguably adopting this theory include Interstate Circuit v. United States, 306 U.S. 208 (1939); United States v. Masonite Corp., 316 U.S. 265 (1942); Klor's, Inc. v. Broadway-Hale Stores, Inc., 359 U.S. 207 (1959); United States v. Parke, Davis & Co., 362 U.S. 29 (1960); United States v. Gen. Motors Corp., 384 U.S. 127 (1966). Although the first four of these cases have been questioned in some respects based on later cases, the last (General Motors) has received recent endorsements on this point.

Stucke & Ezrachi, *supra* note 163.

¹⁷⁰ Id

Theatre Enterprises, Inc. v. Paramount Film Distrib. Corp., 346 U.S. 537 (1954); Bell Atlantic Corp. v. Twombly, 550 U.S. 544 (2007).

¹⁷² Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209 (1993).

¹⁷³ E.I. du Pont de Nemours & Co. v. F.T.C., 729 F.2d 128, 139 (2d Cir. 1984).

Recommended Approach

The Section's view is that existing competition laws provide sufficient tools against the use of algorithms and AI to fix, manipulate or control market prices. The effects of pricing algorithms on consciously parallel pricing may, however, warrant careful attention. The Section recommends that relevant government authorities continue to evaluate such effects closely in order to determine when they may require further scrutiny under existing competition laws.

Chapter 6:

Privacy and Data Security Laws

Scope of Application

A growing number of online entities are daily collecting large amounts of personal data in the course of their ordinary businesses. As a result, issues relating to data privacy and security are increasingly important and common in the context of the digital economy— especially considering the vast array of laws and regulations that exist in many different jurisdictions to regulate the subject.

One of the most important issues relates to the scope of application of laws and regulations on data privacy and security. Companies, particularly those with multinational operations, need to be able to determine whether such laws and regulations will apply to them and to their businesses, and to ensure that their enforcement is consistent with general principles of international jurisdiction. Extraterritorial application of data protection laws is often questioned, especially considering the frequently global scope of the activities performed by digital entities.

Recommended Approach

The Section recommends that the law should apply to private entities and natural persons but should not apply to natural persons engaged in purely personal or household activities. The law should also ensure that its application is consistent with general principles of international jurisdiction and should not apply to online entities that do not target or otherwise do business in the subject country.

In addition, clear guidance should be provided to explain what activities would trigger the application of the law, enabling processors to predict whether it will apply to them, in particular those located outside the jurisdiction. The law should limit the obligations imposed on service providers that are not located in the jurisdiction.

When obligations apply to entities such as "processors" or "controllers" based on their activities of "processing," it is helpful to define these. For instance, the activity of "processing" may be an operation or set of operations on personal data or on sets of personal data, whether or not by automated means, as in the European General Data Protection Regulation¹⁷⁴ (GDPR) and California Consumer Privacy Act¹⁷⁵ (CCPA). This could be elaborated to include collecting, recording, organizing, structuring, storing, adapting, retrieving, transmitting, disseminating or otherwise making available, aligning or combining, restricting, erasing or destroying personal data.

If a distinction is made between the responsibilities of a "processor" (who engages in the activity of "processing") and a "controller," the latter could be defined as a person that determines

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), 2016 O.J. (L 119) 1.

¹⁷⁵ California Consumer Privacy Act of 2018, CAL. CIV. CODE §§ 1798.100-1798.198 (West 2018).

the purposes and means of the processing of personal data, including natural and legal persons and public authorities and agencies.

When obligations are based on conditions such as "offering goods and services" to or "monitoring the behavior" of data subjects (see below) within the jurisdiction, these activities should also be narrowly defined.

Scope of Personal Data

An excessively wide scope of data to be protected under privacy law risks treating all data as personal data and limiting the flow of data that does not require to be protected.

Recommended Approach

The Section recommends taking an approach similar to the GDPR and the U.S. Federal Trade Commission (FTC) privacy framework ¹⁷⁶ for defining personal data. This refers to data that relates to an "identifiable person" (sometimes referred to as a "data subject"), a term that should be precisely defined. Personal data should be limited to data from which it is reasonably likely to identify a natural person, not merely theoretically possible. Factors such as the cost or time required for identification, having regard to available technology, could be used to determine reasonable likelihood.

A clear standard should be articulated for defining whether data has been anonymized, pseudonomized or deidentified¹⁷⁷ and whether that process renders it outside the scope of personal data. The standards should incorporate a "reasonable efforts" approach.

Lawful Grounds for Processing

Privacy laws differ in their approach to lawful grounds for processing personal data. Some, such as the GDPR, affirmatively require there to be a lawful ground for such processing. Others do not require a legitimate ground but regulate the use of data collected and provide individuals with rights to opt out of or otherwise limit data collection, processing or sharing. Both approaches are reasonable depending on the overall package of restrictions, duties and rights applying to controllers, processors and data subjects.

Laws that do require an affirmative lawful ground for data processing often include the consent of the individual concerned as a lawful basis. Strict insistence on and requirements for consent as a basis for processing may constrain innovation, research and public use. The degree to which individuals understand the implications of consent may depend on the context in which such

The FTC refers to personally identifiable information (PII) as information that can be reasonably linked to an individual, computer, or device. Jessica Rich, *Keeping Up With the Online Advertising Industry*, FED. TRADE COMM'N (Apr. 21, 2016), available at https://www.ftc.gov/news-events/blogs/business-blog/2016/04/keeping-online-advertising-industry; FED. TRADE COMM'N, PROTECTING CONSUMER PRIVACY IN AN ERA OF RAPID CHANGE: RECOMMENDATIONS FOR BUSINESSES AND POLICYMAKERS (Mar. 2012), available at https://www.ftc.gov/sites/default/files/documents/reports/federal-trade-commission-report-protecting-consumer-privacy-era-rapid-change-recommendations/120326privacyreport.pdf.

[&]quot;Pseudonomization" refers to the processing of personal data in a manner that renders it longer attributable to a specific data subject without the use of additional information. This requires such additional information to be kept separately, subject to technical and organizational measures, to ensure that the personal information is not attributed to an identified or identifiable consumer. *See, e.g.*, GDPR, art 4(5), and CPPA §1798.140(r). "Deidentified" information is information that cannot reasonably identify a particular person and depends on use of technical safeguards and business processes to prevent reidentification of the person to whom the information relates. *See, e.g.*, CPPA §1798.140(h). "Anonymized" data is data where it is not possible to reidentify the person.

consent is sought and how it is requested and obtained. In some cases, it may be unrealistic to expect consumers to provide informed, meaningful consent. Legal grounds other than consent may therefore be appropriate in some circumstances, and so it is important that legislation provide for such a possibility.

Recommended Approach

Where processing of personal data may only be done on the basis of a lawful ground, the lawful grounds and the requirements for meeting them should be clearly set out.

In the case of consent as a ground for processing, rigid requirements for express, written consent may prove too burdensome for controllers, processors and/or data subjects. Multiple levels of prescribed consent may create more uncertainty than they resolve (e.g., "express," "unambiguous," "freely given"). Rather, a "contextual" standard for consent should be adopted, whereby the consent obligation is based on the context and privacy expectations of the transaction. The approach of the FTC is instructive in that it suggests that consent should only be required when the interaction is beyond the reasonable expectations of the consumer. 178

Legal grounds for processing personal data should not rely only on consent. In particular, omitting grounds such as "legitimate interest" and performance of a contract could negatively impact the online and mobile markets. When processing is based on "reasonable purposes," "legitimate interest" or a similar standard, a balancing test should be invoked that takes into account the interests of the controller, the effects on the rights of the data subject, the public interest and other relevant factors. Guidance should also identify cases when the use of this standard is inappropriate.

The fact that personal data is processed by the State (e.g., for provision of a public service) should not alone render such processing legitimate without further legal basis. Processing that is to be legitimated solely based on the functioning of the State or a similar basis should be limited to purposes related to national security, counterterrorism and the investigation of serious crimes and should be further limited in the absence of a judicial warrant.

When processing of publicly available personal data is permitted, there should be a requirement that the data is accessed in good faith, to prevent it from being used in an intentionally negative way or when processors know or should have known that the data was not lawfully released to the public.

Processing of Sensitive Data

Processing of "sensitive personal data" can create risks of unlawful discriminatory treatment or disparate impact based on a person's protected attributes or of disclosure of information that is sensitive for cultural, religious, or other personal reasons. A more protective approach to such data may be appropriate. The effectiveness of protections may need to take into account the risk that sensitive personal data may be inferred from other data, or that other data may serve as a proxy for sensitive personal data. The key to defining "sensitive data" is to determine areas that are sensitive in the life of data subjects. The relative sensitivity of data may depend on the context or the jurisdiction in question.

For an account of the FTC's focus on consumer expectations, *see* Daniel J. Solove & Woodrow Hartzog, *The FTC and the New Common Law of Privacy*, 114 COLUM. L. REV. 583 (2014).

Recommended Approach

Processing of "sensitive data" may be subject to limitations on processing beyond what is required for other personal data. It may also require a more limited set of grounds for lawful processing. Whether personal data is "sensitive data" requires the determination of areas that are sensitive in the life of data subjects in that jurisdiction. While it is appropriate to require consent to process sensitive data, in some circumstances processing without consent is appropriate, including in some aspects of employment.

Fairness and Transparency

Whether considering privacy as a matter of consumer protection or a fundamental right, baseline principles of fairness and transparency are appropriate to processing of personal data. Fairness may be achieved in a number of ways, for example, when considering whether a controller may rely on its legitimate interests to lawfully process personal data, it might be required to override its own competing interests if the data subject's rights and freedoms require protection of their personal data. Transparency may be sought by requiring controllers to provide data subjects with readily understandable information about data processing activities.

Recommended Approach

Processing of personal data should respect principles of fairness and transparency. Data processors should be required to make transparent disclosures that inform data subjects of the purposes of the data collection, the intended uses of the data collected, and how and with whom the data may be shared, and any rights they may have relating to such data. Transparent disclosure is critical to ensure consent-based processing is based on informed consent. Ideally such disclosure should also apply to processing based on other grounds.

Data Minimization

Collection and processing of personal data should generally respect the principle of data minimization. Generally, this means that the quantity and nature of the personal data collected should not exceed what is necessary to achieve the purpose for which it is collected. For example, if collecting data about race, ethnicity or religion is not actually necessary for the purpose of the processing (e.g., to identify an individual who could be identified using other data), then it may be contrary to the principle of data minimization to collect such data. Personal data should only be collected where the purpose of such collection is made clear to the data subject and not be used for any other purpose.

Recommended Approach

The collection and use of personal data should be limited only to those purposes for which the data subject has given consent or for which there are other lawful grounds for processing. Personal data collection and use should be limited to only the minimum necessary to achieve the stated purpose. Furthermore, only data that is relevant (i.e., has a rational link to that purpose) and adequate (i.e., is sufficient to fulfill a stated purpose) should be collected. Personal data should be stored no longer than is necessary to achieve the purposes for which it was collected.

Further processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes should not, however, generally be considered to be incompatible with the initial purposes.

Data Quality

Retention and circulation of personal data about individuals introduces risks that inaccurate, incomplete or outdated data may be held on record or used for decisions about them or others.

Recommended Approach

The principle of accuracy should be respected, so that personal data that is processed is accurate, and where necessary, kept up to date and complete.

Cross-Border Data Transfers and Data Localization Restrictions

Localization and cross border data transfer requirements may have potential negative effects. Data protection laws often take a position on cross-border data transfer, but to date localization has usually been the focus of separate legislation. Unnecessary localization requirements adversely affect multinational companies operating in various countries, as well as nations, firms, or individual Internet users trading and communicating via the Internet. Unnecessary localization requirements may also impede or prevent the development of new capabilities, technologies, or services. Localization requirements that may require multinational companies to maintain dozens of data centers increase cybersecurity risks and require significant computing complexity. It could be impractical for businesses that operate using complex server architectures with interlocking data sets.

Data localization requirements can impair competition, for instance, by (1) limiting access to, or artificially raising the price of, cheaper or more innovative data services; (2) forcing cross-border businesses to arrange duplicative and inefficient data storage and processing capabilities; (3) inhibiting start-ups and subject matter experts from scaling up their activities, entering new markets, or centralizing data and analytics capacities; and (4) hampering the adoption of cloud storage and computing.

They may not be necessary for, and are sometimes even unrelated to, privacy protection or security concerns. Indeed, there is no empirical evidence to our knowledge that supports the proposition that segmenting database architecture by the nationality of the data subjects provides greater data security than databases that house data from multiple nationalities. In reality, the security of data depends on the administrative, physical, and technical safeguards that are put in place to protect the confidentiality, integrity, and availability of the data. Where the data stored is not as important as how the data is stored and which safeguards protect it.

In the case of cross-border transfers, adequacy requirements and the requirement that contractual clauses be approved by a data protection authority could unnecessarily increase the cost, time and resources associated with doing business in the jurisdiction and harm the economy.

Recommended Approach

Data localization requirements should not apply simply for the purpose of protection of personal data. They should be permitted only where they are demonstrably necessary to achieve a legitimate privacy and security objective that could not be achieved by less restrictive means. Standards of data security protection, with appropriate oversight, should address concerns that are advanced in support of localization. If data can be anonymized, it should not be subject to localization requirements.

Data localization requirements should apply to a limited set of entities, principally critical infrastructure, and only that data that is critical to national security or the public interest and when localization can achieve the required protections.

Any data localization requirements that are applied should satisfy objective criteria to ensure that they do not disproportionately impede competition.

With respect to cross-border data transfer requirements, it is reasonable to require data controllers to take responsibility for ensuring that the data is protected, by securing user consent, by contract or otherwise. But it is important to create a flexible framework, which could evolve to take account of technological developments, increased global data flows and the interest of global entities. It is also important that the framework not rely heavily on determinations of an administrative body, which may be impose delays.

Free flow of data is often critical to support technical innovation and the competitiveness of economies. Authorities should identify and dismantle unjustified barriers to data transfer and storage, including through appropriate infringement proceedings and, potentially, through legislation.

Automated Decision Making and Profiling

Rapid innovation in automated decision making and profiling offers tremendous social and economic opportunities but can also pose risks such as bias or reduced accuracy, transparency and accountability.

Recommended Approach

Restrictions on automated decision making should be subject to a materiality threshold, applied only when automated decision-making has material adverse effects on the data subject. A right to object to an automated decision and obtain manual intervention should be limited to instances when a data subject's interests or fundamental rights are at issue.

Required disclosure of the logic behind automated decisions should be subject to the protection of intellectual property rights so as to protect the ability of businesses to innovate and compete.

The value of big data to some extent lies in the identification of unanticipated, but valid, correlations between data elements. Use of data already legitimately in the public domain should be permitted.

Data Subject Rights

As the persons most directly affected and sometimes best positioned to pursue remedies and enforcement, data subjects should have rights in relation to the processing, retention and accuracy of their data. However, these should be balanced against other interests and constraints. A rigid approach to data subject rights risks losing the innovation and efficiency opportunities from data processing and imposing barriers and costs on legitimate business without necessarily furthering the interests of individuals or other public interests.

Recommended Approach

Data subjects should be granted individual rights, including transparent processes and procedures to assert those rights, enabling them to:

- Confirm that their personal data has been processed;
- Access and review their personal data that has been processed;
- Correct or update any errors or inaccuracies in any personal data that has been processed;
- Object to the processing of personal information (for example, in the case of automated decision-making and profiling); and
- Easily move, copy or transfer any personal information processed to another system (data portability).

While a right to have personal information erased may be appropriate in some situations, it should provide a vehicle for balancing individuals' interest in limiting permanent use of their data with the legitimate needs of business. The right should be implemented as a set of principles recognizing data subjects' ability to cause the deletion of their personal information from digital memory where appropriate, rather than as an overriding personal right, which may conflict with the need of some data controllers to maintain that data in certain circumstances. The right to erasure should not be defined overly broadly, as it may have unintended consequences. Describing the right to erasure in absolute terms could have unintended consequences, including: (1) denial of an individual's ability to enforce legal rights and access social and other benefits; (2) facilitating illegal activity; (3) endangering health and safety; and (4) impeding the advancement of legal defenses.

The right to data portability should include parameters and limitations. For example, Article 20 of the GDPR requires that data be ported "in a structured, commonly used and machine-readable format" and applies only "when technically feasible." ¹⁸⁰

Data Security

Security of data is a prerequisite to protection of privacy. Data security involves assessing and planning for risk in a balanced and proportionate manner.

Recommended Approach

Data processors should be required to ensure that they have reasonable technical and administrative measures to mitigate the risks of security breaches or other loss, leakage or unauthorized disclosure of data.

¹⁷⁹ GDPR, art 20(1).

¹⁸⁰ GDPR, art 20(2).

Data processors may be required to periodically assess technical and administrative measures and update them as necessary. Requirements to "constantly" or "continuously" conduct assessments and make updates may be too burdensome.

Breach Notification

Notification of breaches can be important to ensure that affected persons are aware of what has occurred to personal data about them, the risks that may arise, and steps they may be able to take to mitigate such risks. However, notification requirements can also be burdensome and costly, and may create greater uncertainty for consumers and regulators than the benefits they purport to provide, particularly where insufficient time is allowed for the entity involved to understand the incident that has occurred. It is reasonable therefore for notification requirements to bear some relationship to the effect of the breach on consumers.

Recommended Approach

Clear guidance should be provided to data controllers and processors for when notification is appropriate and when it must be made. Only those breaches that are likely to materially and adversely affect consumers should require notification.

Notification of significant data breaches should be made "without unreasonable delay." Data controllers should be allowed sufficient time to conduct a proper review of the security incident, understand its root cause and scope, and mitigate any potential threats to the data subjects.

Establishment of a Data Protection Authority

While data protection authorities may take a variety of different administrative forms, some key principles and powers are necessary for them to be effective monitors and enforcers.

Recommended Approach

A data protection authority should be politically independent and have sufficient resources to carry out its functions. Functions of a data protection authority should include the power to receive complaints, conduct investigations and hold data processors accountable for violations. An authority's political independence depends on administrative and financial mechanisms that protect it from day-to-day influence from the political organs of the State. Care should be taken to avoid giving a newly-formed and untested regulator the authority to make critical determinations that should more properly be made by a legislature or to make decisions that it may lack the capacity to make on a timely basis.

Accountability/Fines

It is appropriate to hold controllers and processors responsible for violations of their legal obligations, including through liabilities and penalties, but these should be proportionate to the likely harm involved and not dampen innovation and investment.

Recommended Approach

Entities that process personal data should be accountable for demonstrating compliance with legal requirements.

Strict liability and joint and several liability are not recommended, but if included should be narrowly circumscribed and limited to data processing activities that are likely to cause actual, material harm to the individual.

Penalties should be effective, proportionate, and have a deterrent effect. Linking penalties to a high percentage of turnover of the defaulting data controller in the preceding year could be disproportionate to the benefit of processing activities and the harm to individuals, and excessively punitive. Penalties should be calculated in a gradated manner like that used in the GDPR model, with appropriate considerations for whether the full penalty is appropriate for a particular potential violation.

Criminal penalties will seldom be appropriate for data protection legislation. Violations that constitute criminal offenses should be narrowly circumscribed and liability for corporate offenses should not ordinarily extend to individual directors, officers and managers.

It is unnecessary and overly burdensome and inconsistent with approaches to most other forms of liability to require by law that data controllers take out insurance policies to meet their potential liabilities under the data protection law.

¹⁸¹ GDPR, art 83.

Appendix:

Summary of Common Issues Relating to the Digital Economy

Comments Cited in Summaries on Common Issues Relating to the Digital Economy

	Comments	Торіс
1.	ABA The Antitrust Source: Understanding Richard Posner on Exclusionary Conduct, by Steven C. Salop (October 2018)	Exclusionary Conduct
2.	Argentina: Comments on the Draft Guidelines for the Analysis of Cases of Abuse of Dominance Issued by the Argentinian Comision Nacional de Defensa de la Competencia (November 2, 2018)	Exclusionary Conduct
3.	Argentina: Comments Regarding the Proposed Revisions to the Argentine Merger Control Guidelines (September 1, 2017)	Mergers
4.	Australia: Comments on the ACCC's Preliminary Report on Digital Platforms (February 15, 2019)	Market Definition & Market Power
5.	Canada: Comments Regarding the Canadian Competition Bureau's Big Data and Innovation Draft Discussion Paper (November 16, 2017)	Algorithms & Artificial Intelligence Big Data Mergers
6.	Chile: Comments on the Chilean Fiscalía Nacional Económica's Draft Guidelines on Jurisdiction in Respect of Concentrations and Draft Guidelines on Merger Remedies (May 24, 2017)	Mergers
7.	European Commission: Comments on the Commission's Request for Input on the Evolution of Competition Policy in Light of Digitization of the Economy (December 18, 2018)	Algorithms & Artificial Intelligence Big Data Mergers
8.	European Commission: Comments on the Consultation on Possible Improvements to the EU Merger Regulation (September 20, 2013)	Mergers
9.	European Commission: Comments on the European Commission's Public Consultation on Building the European Data Economy (April 26, 2017)	Privacy & Data Security
10.	European Commission: Comments on the European Data Protection Board Guidelines 3/2018 on the Territorial Scope of the GDPR (January 17, 2019)	Privacy & Data Security
11.	European Commission: Comments on the Evaluation of Procedural and Jurisdictional Aspects of EU Merger Control (January 13, 2017)	Mergers
12.	European Commission: Report from the Commission to the Council and the European Parliament – Final Report on the E-commerce Sector Inquiry (October 5, 2017)	Exclusionary Conduct
13.	European Commission: Speech by Johannes Laitenbeger – Vertical Restraints, Digital Marketplaces, and Enforcement Tools (ICN Annual Conference, March 22, 2018)	Exclusionary Conduct
14.	France: Comments on the Competition Authority's Consultation on Modernizing and Simplifying the French Merger Control Law (November 30, 2017)	Mergers
15.	France: Comments Regarding the French Competition Authority's Consultation on Modernizing and Simplifying the French Merger Control Law (September 28, 2018)	Mergers

	Comments	Topic
16.	Germany: Comments on the Bundeskartellamt's Draft Guidance on Substantive Merger Control (September 21, 2011)	Mergers
17.	Germany: Comments on the First Draft Bill of the German Ministry of Economics and Energy for the 9th amendment of the Act Against Restraints of Competition (August 15, 2016)	Mergers
18.	India: Comments on Proposed Amendments and Revisions to India's Competition Act and Related Rules and Regulations (December 6, 2018)	Big Data Mergers
19.	India: Comments on the Personal Data Protection Bill 2018 (September 27, 2018)	Privacy & Data Security
20.	India: Comments on the White Paper on a Data Protection Framework for India (January 31, 2018)	Privacy & Data Security
21.	Ireland: Comments on the Irish Competition Authority's Public Consultation on Merger Guidelines (Oct. 30, 2013)	Mergers
22.	Israel: Comments on the Antitrust Authority Consultation on Competition Issues in the Digital Economy (October 31, 2018)	Big Data Mergers
23.	Netherlands: Comments on the Dutch Ministry of Economic and Climate Affairs Consultation on Online Platforms and Competition Law (February 5, 2019)	Market Definition & Market Power
24.	United States: Comments in Advance of the FTC Hearings on Competition and Consumer Protection in the 21st Century (August 20, 2018)	Algorithms & Artificial Intelligence Big Data Mergers
25.	United States: FTC Hearing 3 – Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFN (October 17, 2018)	Exclusionary Conduct
26.	United States: FTC Hearing 7 – Competition and Consumer Protection Issues of Algorithms, Artificial Intelligence, and Predictive Analytics (November 13-14, 2018)	Algorithms & Artificial Intelligence

Appendix 1:

Market Definition and Market Power

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
1.	Market Definition—Special Challenges	Australia: Comments on the ACCC's Preliminary Report on Digital Platforms (February 15, 2019) In the United States, there has been a movement away from focusing upon market definition and market shares to analyze actual competitive effects. For example, the 2010 Horizontal Merger Guidelines make clear that the agencies no longer rely solely on market shares to predict whether a firm possesses durable market power or is likely to be able to sustain significant non-transitory price increases. This shift in antitrust analysis is consistent with modern economics. Relatedly, the lines between markets may not be clearly delineated in sectors reliant on innovative and rapidly evolving technology (such as in the markets in which online platforms compete). Netherlands: Comments on the Dutch Ministry of Economic and Climate Affairs Consultation on Online Platforms and Competition Law (February 5, 2019) The Section would, however, like to point out that online platforms typically involve two- (or multi-)sided markets. The analysis of competitive behaviors in such markets poses a number of challenges for competition law, as well as for policy-makers in other areas, since traditional competition law tools (e.g., for market definition and market power analysis) can be more difficult to apply in such markets. As the Dutch Authority for Consumers & Markets ("ACM") acknowledged in its article "Big Platforms, Big Problems?", defining the relevant market can be more difficult in multi-sided markets. For example, the SSNIP-test might be less helpful to determine whether products	The Section in the past has recommended an evidenced-based approach to market definition in digital markets. Market power should not be assumed in digital markets. Rather, market definition is a necessary precursor to the measurement of market. In addition, the Section has noted the special challenges of market definition in "platform markets" including: Standard approaches to market definition will usually require some modification when firms set a zero price on one side of the market. Network effects must be taken into account. Alternatives to a SSNIP test may be necessary. However, one need not look to new regulations for such alternatives.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		compete. However, this phenomenon is not limited to digital markets, and alternative tests may and can be employed within the existing competition rules. The Section believes no additional regulation is required to deal with these challenges, but that competition authorities should assess competitive restraints on a case-by-case basis within the current framework.	
		<u>United States: Comments in Advance of the FTC Hearings on Competition and Consumer Protection in the 21st Century</u> (August 20, 2018)	
		Traditional tools for market definition, such as the SSNIP and critical loss tests, if applied to only one side of the market, can cause the market to be defined either too narrowly or too broadly if there are significant, positive demand feedbacks. For example, a SSNIP may be profitable on one side of a market if one assumes that prices on the other side of the market will not change, but once one allows for a price increase on one side of the market to feedback to the other side (e.g., the price increase on one side causes the demand on the other side to fall, which in turn causes the demand in the first market to fall as well), a SSNIP may no longer be profitable. However, if these demand externalities are small or one-sided, or if the particular conduct in issue affects only (or predominantly) one side, analyzing each side of the multi-sided market separately may be appropriate.	
2.	Market Power and Market Concentration	Australia: Comments on the ACCC's Preliminary Report on Digital Platforms (February 15, 2019) The Section respectfully points out that reliance on market shares alone (even within properly defined markets) is likely to invite errors when attempting to identify substantial market power. Additionally, the economic literature cautions against antitrust enforcement actions applied to platforms based solely on their relative size and user base. Network effects, innate in platforms,	The Section in the past has recommended that regulators not rely on market shares or market concentration when analyzing market power. Recent studies show little correlation between concentration and market power. Market structure, including shares and ease of entry not a good measure of likely impact of merger or single-firm conduct. Market shares should not be assumed to be durable. Even where market shares are high, there may not be durable market power because of the characteristics of some digital platforms

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		have been an important consideration when analyzing potential market power. Recent academic work, however, suggests that network effects are not always a guarantor of substantial market power, as had been initially feared by antitrust authorities.	including (i) easy demand-side substitution; and (ii) multi-homing that lowers barriers to entry.
		With respect to the Report's conclusion that certain companies combined possess substantial market power, we recommend against the adoption or reliance on collective market power theories. One concern is that regulation based on theories of combined substantial market power may harm as opposed to promote competition. At the very least, we recommend that these portions of the report be revised to require concerted action as a joint monopoly, which is the approach generally required by the European Commission.	
		Netherlands: Comments on the Dutch Ministry of Economic and Climate Affairs Consultation on Online Platforms and Competition Law (February 5, 2019)	
		The Section believes that the presence of sustainable dominant positions can be determined only on the basis of a case-specific economic analysis. [O]nline platforms are typically active in two- or multi-sided markets in which traditional approaches to defining markets – i.e., assessing demand substitutability and other elements in the context of the "hypothetical monopolist" test – may be difficult to apply. These challenges, however, have been addressed in a wide range of markets over decades and are not limited to online platforms.	
		[A] number of factors mentioned in the Discussion Note—network effects, economies of scale etc.—are also not unique to online platforms. These factors are typically taken into account by competition authorities in assessing whether a particular undertaking has market power. The Section notes, however, that other characteristics of online platforms not mentioned in the Discussion Note may make achieving a sustainable dominant position in online platform markets particularly difficult. For example, customers' ability to use multiple products or services	

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		(i.e., "multi-homing"), may lower barriers to entry. Demand- side substitution can be unusually easy, and established firms can quickly be displaced by innovation. As a result, high market shares in online platform markets may not indicate durable market power.	
3.	Market Power and Competitive Effect	Australia: Comments on the ACCC's Preliminary Report on Digital Platforms (February 15, 2019) In the United States, there has been a movement away from focusing upon market definition and market shares to analyze actual competitive effects. For example, the 2010 Horizontal Merger Guidelines make clear that the agencies no longer rely solely on market shares to predict whether a firm possesses durable market power or is likely to be able to sustain significant non-transitory price increases. This shift in antitrust analysis is consistent with modern economics. Relatedly, the lines between markets may not be clearly delineated in sectors reliant on innovative and rapidly evolving technology (such as in the markets in which online platforms compete).	The Section has previously recommended that, in digital markets, regulators follow the U.S. move away from relying strictly on market definition and market shares and instead look to assess directly incentives and competitive effects.
4.	Requisites for Finding Durable Monopoly Power	Australia: Comments on the ACCC's Preliminary Report on Digital Platforms (February 15, 2019) The Section respectfully points out that reliance on market shares alone (even within properly defined markets) is likely to invite errors when attempting to identify substantial market power. Netherlands: Comments on the Dutch Ministry of Economic and Climate Affairs Consultation on Online Platforms and Competition Law (February 5, 2019) On the other hand, some technology industries are more susceptible than others to a finding of durable market power.	The Section has previously recommended that, in digital markets, a finding of monopoly power is a pre-requisite to finding a unilateral conduct violation. The elements of monopoly power include: • Power over market prices, not just power over one's own price. • The power to exclude competitors. • Durability of power. Some digital markets may be more susceptible to durable monopoly power including where there are: • Lock-in effects. • First mover advantages.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		Some markets, such as the operating systems market at issue in the <i>Microsoft</i> case, may demonstrate significant entry barriers, lock-in effects and first-mover advantages that can facilitate the maintenance of market power. Further, simply being in a dynamic industry does not necessarily mean that market power is ephemeral. In a U.S. example, the <i>Bazaarvoice</i> case, which involved a merger of online product review platforms, the court wrote that the case "inescapably adds fuel to the debate over the proper role of antitrust law in rapidly changing high-tech markets []". As the Court has set forth in detail, while Bazaarvoice indisputably operates in a dynamic and evolving field, it did not present evidence that the evolving nature of the market itself precludes the merger's likely anticompetitive effects.	
5.	Combined Monopoly Power	Australia: Comments on the ACCC's Preliminary Report on Digital Platforms (February 15, 2019) With respect to the Report's conclusion that certain companies combined possess substantial market power, we recommend against the adoption or reliance on collective market power theories. One concern is that regulation based on theories of combined substantial market power may harm as opposed to promote competition. At the very least, we recommend that these portions of the report be revised to require concerted action as a joint monopoly, which is the approach generally required by the European Commission.	The Section has recommended that regulators not rely on theories of combined market power, absent some kind of concerted action, as the basis for antitrust intervention. This may discourage the second and third players from competing vigorously with the leader.
6.	Network Effects	Australia: Comments on the ACCC's Preliminary Report on Digital Platforms (February 15, 2019) Additionally, the economic literature cautions against antitrust enforcement actions applied to platforms based solely on their relative size and user base. Network effects, innate in platforms, have been an important consideration when analyzing potential	The Section has previously recommended that regulators not assume that network effects are a guarantor of substantial market power. Factors to consider include: • Whether there are low switching costs; • Whether there is multi-homing; and • Whether platform congestion will lead users to switch to other platforms.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		market power. Recent academic work, however, suggests that network effects are not always a guarantor of substantial market power, as had been initially feared by antitrust authorities. First, the literature suggests that, due to the rapid changes in technology, and the fact that platform businesses may be completely viral without relying on any one type of hardware, users may have low switching costs in a given case. Moreover, the instability of network effects may lead users to choose multiple platforms instead of sticking to a single platform. For example, it is common for riders and drivers to use both Uber and Lyft. Such "multihoming" increases competitive pressures on platforms. Finally, platform congestion may lead users to switch to other less congested platforms, where available and feasible, thereby potentially providing an opportunity for new entry.	
7.	No presumption of monopoly power based on data	Netherlands: Comments on the Dutch Ministry of Economic and Climate Affairs Consultation on Online Platforms and Competition Law (February 5, 2019) Given this, the Section believes it is important that competition authorities continue to base market definitions and assessments of market power in relation to online platforms (as with other technology industries) on sound economic analysis of the particular facts of the case, and refrain from adopting presumptions that may be unwarranted. For example, there should be no presumption that "big data" leads to market power, which is also acknowledged by the ACM. Data are generally replicable, and one firm's collection of data may not preclude another's collection of identical or substitutable data. Moreover, the data itself may not constitute a properly defined market, but instead may constitute only one of many inputs that affect the quality of a product or service. Also, large platforms such as Google, Facebook and Amazon, do not "monopolize" data, even if they have amassed large amounts of data. Indeed,	The Section has previously commented that there should be no presumption that "big data" leads to market power, because: • Data are often replicable. • Data may not be a properly defined market but rather an input. • Data may not be monopolizable.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		due to the unique features of data, data may not be a "monopolizable" asset.	
		Australia: Comments on the ACCC's Preliminary Report on Digital Platforms (February 15, 2019)	
		With respect to competition analysis, the Section submits that data is an asset that should not be treated any differently from any other asset that may be analyzed as part of the review of any merger, except perhaps for a greater likelihood that the industry in which the asset is used will be characterized by dynamic competition.	

Appendix 2:

Big Data

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
1.	Is access to big data a source of market power? Does it create competitive advantages?	European Commission: Comments on the Commission's Request for Input on the Evolution of Competition Policy in Light of Digitization of the Economy (December 18, 2018) Whether there is a competitive advantage associated with access to a large volume of data will depend on the specific market at issue and particular set of facts. It is important to analyze data-related questions on a case-by-case basis and to focus enforcement on credible evidence that a transaction or particular competitive practices have harmed or likely would harm competition on the merits. In the Section's experience, insufficient work has been done to link concerns about the aggregation of data with competitive harms in non-data markets. Israel: Comments on the Antitrust Authority Consultation on Competition Issues in the Digital Economy (October 31, 2018) Data has always been an important input factor for companies, both in technology-based industries and in more traditional sectors. As with any input factor, access can be a concern in certain situations. Data are generally replicable, and one firm's collection of data may not preclude another's collection of identical or substitutable data. Data itself may not constitute a properly defined market, but instead may constitute only one of many inputs that affect the quality of a product or service.	The Section in the past commented on the inadequacy of the presumption that big data, alone, would create competitive advantages. Key comments include: • Access to big data should not be presumed to create market power or any competitive advantage. • Big data should not be treated differently from any other input factor (therefore, it may or may not be a source of market power). • It is necessary to carry out a case-by-case analysis. Recommended Approach: Access to big data, alone, should not be presumed to create competitive advantages. Whether control of a particular type of data allows exclusion of competition will depend on the specific markets at issue. Competition authorities should carefully analyze what (if any) competitive advantages a firm may enjoy by the mere possession of a data set. The focus should be on the actual competitive effects, such as the creation and strengthening of barriers to competition and market foreclosure.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		Many data sets have a very short shelf-life, considering that: (i) big data often needs to be constantly updated (this is known as the "velocity" of data), and; (ii) new technologies employ constantly evolving types of data. Often, the value of data is less in its possession, and more in the tools that the firm develops to analyze and apply the data. United States: Comments in Advance of the FTC Hearings on	
		Competition and Consumer Protection in the 21st Century (August 20, 2018)	
		The question for competition analysis is whether data is a monopolizable asset – an asset over which the exercise of market power is possible.	
		Generally, data can easily be replicated, and not so easily controlled.	
		In the markets in which data are sold, buyers have plenty of alternatives – subject of course to privacy regulations. The sale of "big data" has become big business.	
		Canada: Comments Regarding the Canadian Competition Bureau's Big Data and Innovation Draft Discussion Paper (November 16, 2017)	
		The Section believes there should not be a presumption that big data leads to market power.	
		Data are generally replicable: one firm's collection of data generally does not preclude another's collection of identical or substitutable data.	
2.	Does the aggregation of data create barriers to entry?	European Commission: Comments on the Commission's Request for Input on the Evolution of Competition Policy in Light of Digitization of the Economy (December 18, 2018)	The Section's comments are connected to the first "common issue" identified above. In general, the Section highlighted the inadequacy of the presumption that big data, alone, would create barriers to entry. Key comments include:
		Many types of useful data are readily available and not subject to the control of any particular source.	The mere possession of data should not be treated as a barrier to entry.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		A well-recognized characteristic of most data is minimal cost of reproduction and/or sharing (however, proprietary technology can be used to artificially raise barriers to sharing data). Multiple entities can often collect and use the same data without raising foreclosure concerns. Shelf-life for data may be short. Even if a company currently has the largest dataset, much of that data may become obsolete relatively quickly. Israel: Comments on the Antitrust Authority Consultation on Competition Issues in the Digital Economy (October 31, 2018) Treating the mere possession of data (without more) as a barrier to competition could have a significant chilling effect on innovation. Canada: Comments Regarding the Canadian Competition Bureau's Big Data and Innovation Draft Discussion Paper (November 16, 2017) In some situations, there is a potential for firms to use big data to raise entry barriers and foreclose competition. Treating big data as a barrier to entry could chill the incentive to acquire proprietary information that makes competitors more efficient and consumers better served.	 Some characteristics of big data indicate that its possession should not be presumed to create barriers to entry: (i) many types of data are readily available and replicable; (ii) multiple entities can often collect and use the same set of data without foreclosure concerns; (iii) data can quickly become obsolete. It is necessary to carry out a case-by-case analysis. Recommended Approach: The mere possession of data should not be treated as a barrier to entry. However, in some circumstances, there is a potential for firms to use big data to raise entry barriers and foreclose competition. Treating the mere possession of data as a barrier to competition could have a significant chilling effect on innovation.
3.	Are there specific concerns related to data collected by online platforms?	European Commission: Comments on the Commission's Request for Input on the Evolution of Competition Policy in Light of Digitization of the Economy (December 18, 2018) While online platforms may be one source for the collection of consumer data, there are many possible sources, and consumer data is only a subset of the universe of business data. For example, governments provide a wide variety of data (for their	The Section has commented in the past on specific concerns involving big data and online platforms, with focus on network effects. Recommended Approach: The access of data collected by an online platform will not necessarily lead to specific competition concerns. An analysis of network effects is needed to assess foreclosure risks related to the collection of data by an online platform.

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		own purposes or under compulsion of law or regulation) to the public free of charge. An analysis of network effects is needed to assess whether a potential competitor can effectively compete with a platform simply by purchasing data from a third party, as that data may grow stale unless continually refreshed.	
		Canada: Comments Regarding the Canadian Competition Bureau's Big Data and Innovation Draft Discussion Paper (November 16, 2017)	
		Network effects are also a potentially important consideration in data-intensive markets. Network effects can deliver significant value to consumers and to society by improving quality and efficiency. On the other hand, network effects may in certain circumstances enable platforms to foreclose competition in a manner that ultimately harms consumers. The collection and use of data as part of offering a zero-priced product may be already governed or influenced, at least in part, by consumer protection laws.	
		Israel: Comments on the Antitrust Authority Consultation on Competition Issues in the Digital Economy (October 31, 2018)	
		Platforms also compete both with each other in accumulating data and on secondary data markets. Data generated by a given platform may often be acquired independently from various alternate avenues, including by purchase from data brokers; development of a new application; government databases; or the aggregation of various distinct data sets.	
4.	What kind of antitrust remedies are available to address the (potential) issues caused by the advantages connected to the access to big	European Commission: Comments on the Commission's Request for Input on the Evolution of Competition Policy in Light of Digitization of the Economy (December 18, 2018)	Most of the Section's past comments on this topic highlight that the potential remedies involving mandatory sharing of data should be assessed very carefully by the competition authorities, as they may have undesirable effects. Key comments include:

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	data? What are the risks associated with such remedies?	Legally mandated data access, data sharing or data pooling involves significant administrative costs. Given the significant investment many firms make in collecting data, and the importance of such data to their competitiveness, a requirement to share such data with competitors could create a significant disincentive to continuing innovation. This disincentive to innovate must therefore be balanced with whatever pro-competitive forces may be created through enforced sharing of data. Israel: Comments on the Antitrust Authority Consultation on Competition Issues in the Digital Economy (October 31, 2018) There may be less incentive to develop a collection of data if it is likely that the collection will be subject to forced sharing. Requiring a firm to supply its rival can actually reduce competition by "lessen[ing] the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities." Finally, compelling competitors to negotiate access to each other's inputs "may facilitate the supreme evil of antitrust: collusion." Enforcers should focus on whether the deal creates or enhances entry barriers or otherwise enhances consumer lock-in. To the extent remedies are required to offset anticompetitive effects, those remedies should be narrowly tailored to redressing the perceived harm. Canada: Comments Regarding the Canadian Competition Bureau's Big Data and Innovation Draft Discussion Paper (November 16, 2017) The Section notes that competition law enforcement institutions are well-advised to adopt a degree of caution in the face of claims that any particular resource or asset held by a firm is an	 Legally mandated data access, data sharing or data pooling involves significant administrative costs. There may be less incentive to develop a collection of data if it is likely that the collection will be subject to forced sharing. Mandatory sharing may also cause enhanced risks of cartelization. It is necessary to carry out a case-by-case analysis. Recommended Approach: To the extent remedies are required to offset anticompetitive effects connected to the control of a set of data, those remedies should be narrowly tailored to specifically address the perceived harm. In case of an antitrust intervention, competition authorities must ensure that: (i) feasible remedies to address the specific concerns exist; and (ii) those remedies do not pose their own prohibitive costs or other risks to the competitive process. Care must be taken to ensure that any such remedy does not lead to worse competitive outcomes, whether due to a chilling effect on incentives to innovate or due to the increased risk of collusion that information sharing presents.

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		"essential input," or that even if essential, a mandatory sharing or access regime is justified. The U.S. Supreme Court has recognized the dangers of mandatory sharing – including enhanced risks of cartelization – which may render such a "cure" worse than any "disease" associated with an individual firm's control of a market through information it has obtained in the course of its own operations.	
5.	Are the traditional antitrust tools adequate/sufficient to deal with big data concerns?	European Commission: Comments on the Commission's Request for Input on the Evolution of Competition Policy in Light of Digitization of the Economy (December 18, 2018) While many have suggested that there is no basis for concerns that the well-accepted tools of competition analysis will fail to provide useful conclusions when applied to cases involving data, that position is not unanimous. Although traditional competition law tools can be difficult to apply to competitive factors that are difficult to quantify, this phenomenon is not limited to digital markets. The Section suggests careful study of this issue to determine whether alternative tests may be employed. India: Comments on Proposed Amendments and Revisions to India's Competition Act and Related Rules and Regulations (December 6, 2018) With respect to competition analysis, the Section submits data is an asset that should not be treated any differently from any other asset that may be analyzed as part of the review of any merger, except perhaps for a greater likelihood that the industry in which the asset is used will be characterized by dynamic competition.	 In the past, the Section has acknowledged that the application of traditional antitrust tools to new issues imposed by data-driven economies may be challenging. However, in general, the traditional tools are sufficient to address such issues. Key comments include: Although traditional competition law tools can be difficult to apply to competitive factors that are difficult to quantify, this phenomenon is not limited to digital markets. In general, traditional analytical approaches are adequate to assess the aggregation and supply of data in the modern economy, and no new presumptions or standards are needed specifically for analyzing the competitive effects of access to data. However, the analysis should take into account unique aspects of some data-based markets. Recommended Approach: Access to data, alone, is not a unique antitrust phenomenon that would justify new analytical tools or approaches by competition authorities. Existing tools are generally sufficient to address the eventual scenarios in which big data presents a legitimate threat to competition. Such tools, however, may have to be adapted in order to adequately address the unique features of data-driven markets.

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		<u>Israel: Comments on the Antitrust Authority Consultation on Competition Issues in the Digital Economy</u> (October 31, 2018)	
		The Section is of the view that, in general, traditional analytical approaches are adequate to assess the aggregation and supply of data in the modern economy, and no new presumptions or standards are needed specifically for analyzing the competitive effects of access to data in the technological sector.	
		At the same time, that analysis should take into account unique aspects of some data-based markets, such as the fact that consumers may pay for a firm's services by creating and providing rights to the use of their personal data or other non-quantifiable assets, rather than with currency. To the extent that traditional tools rely primarily on an analysis of monetary costs and prices, those tools must be adapted to analyze these so-called "free" services.	
		The Section respectfully submits that well-established approaches to defining markets remain largely applicable to technology industries	
		The various avenues available to attain and utilize data sets, as well as the difficulties surrounding the assessment of the competitive value of a given data set, make it inadvisable to adopt presumptions or other approaches that treat data differently than other important input factors.	
		Canada: Comments Regarding the Canadian Competition Bureau's Big Data and Innovation Draft Discussion Paper (November 16, 2017)	
		The existing competition laws and the judicial precedents interpreting them, in the Section's view, can generally be applied to the use of big data analytics or algorithms to fix, manipulate or control market prices. <u>United States: Comments in Advance of the FTC Hearings on Competition and Consumer Protection in the 21st Century</u>	

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		(August 20, 2018) While the current antitrust and competition laws provide the Commission with dynamic tools with which to analyze the use and sale of data, it is important that the Commission remain engaged in this sector.	

Appendix 3:

Merger Issues

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
1.	Proposals to Revise Notification Thresholds to capture potentially competitively-significant technology sector deals that would otherwise be missed	Germany: Comments on the First Draft Bill of the German Ministry of Economics and Energy for the 9th amendment of the Act Against Restraints of Competition (August 15, 2016) Bill proposed revisions to merger notification thresholds in the high tech sector. Issues: Thresholds limited to overall transaction value and worldwide sales require the notification and review of a significant number of transactions with no material nexus to the jurisdiction, and which are unlikely to raise competitive concerns in the jurisdiction. Local nexus notification thresholds based on "activity in the jurisdiction," e.g., if users in the jurisdictions make use of products or services offered by the undertaking, rely on subjective criteria that are difficult to discern and may extend jurisdiction over mergers unduly. Recommendations and Rationales: The Section supports benchmarking thresholds against international standards – particularly those established by the ICN and OECD. Merger review thresholds based on transaction value are clear and objective, but to meet international best practice need to be coupled with thresholds that ensure a material local nexus to the jurisdiction. A significant local nexus threshold is particularly important when the transaction value test is based on worldwide value and is likely to capture a significant number of transactions.	General Merger Threshold Standards: The Section supports benchmarking thresholds against international standards – particularly those established by the ICN and OECD. Merger review thresholds based on transaction value are clear and objective, but to meet international best practice need to be coupled with thresholds that ensure a material local nexus to the jurisdiction. A transaction value threshold, by itself, is unsuitable to determine whether a transaction will impact a specific jurisdiction. A significant local nexus threshold is particularly important when the transaction value test is based on worldwide value and is likely to capture a significant number of transactions. Local Nexus Tests: Local nexus tests should be clear, understandable, and based on objectively quantifiable criteria such as assets and sales (turnover). The Section recommends against introducing additional complexity into the notification assessment by imposing different rules for different sectors of the economy. The Section cautions that it may be challenging to develop and apply industry-specific threshold criteria, e.g., based on number of active users, in a manner that would ensure that they meet international norms of objectivity and materiality. Whereas, a criterion based on something other than sales or assets could be considered, the criterion would need to be sufficiently specific as to the definition and measurement of the information and its applicability across industries to ensure materiality and objectivity, which has proved challenging to develop.

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		Local nexus tests should be clear, understandable, and based on objectively quantifiable criteria such as assets and sales (turnover). A criterion based on something other than sales or assets could be considered. However, the criterion would need to be sufficiently specific as to the definition and measurement of the information and its applicability across industries to ensure materiality and objectivity, which has proved challenging to develop. Thresholds based on market share or potential effects on competition are not objectively quantifiable and are better evaluated further into the merger review process. As an alternative to revising thresholds, the competition agency could be empowered to review proposed mergers of concern that are not subject to notification, thereby bifurcating jurisdiction from reportability. This could be coupled with a voluntary notification system that would enable parties to mergers that pose antitrust risk to obtain legal certainty while bringing potentially problematic transactions to the attention of the enforcement agency. Suggest that residual jurisdiction be available for only a limited duration after the merger; the OECD notes that most jurisdictions can challenge mergers for up to one year following the completion of a transaction. Section recommend guidance on the types of transactions that will be subject to residual jurisdiction. European Commission: Comments on the Evaluation of Procedural and Jurisdictional Aspects of EU Merger Control (January 13, 2017) Issues: The Section does not perceive a merger enforcement gap with respect to digital mergers. EUMR current turnover-based thresholds capture, such high-value transactions in the digital economy, and if a transaction falls below the EUMR's	Thresholds based on market share or potential effects on competition are not objectively quantifiable and are better evaluated further into the merger review process. **Residual Jurisdiction as a Possible Alternative**: As an alternative to revising thresholds, the competition agency could be empowered to review proposed mergers of concern that are not subject to notification, thereby bifurcating jurisdiction from reportability. This could be coupled with a voluntary notification system that would enable parties to mergers that pose antitrust risk to obtain legal certainty while bringing potentially problematic transactions to the attention of the enforcement agency. The absence of a deadline or time limit for such reviews would subject all non-notifiable transactions to considerable uncertainty as to whether a review will be initiated. Suggest that residual jurisdiction be available for only a limited duration after the merger; the OECD notes that most jurisdictions can challenge mergers for up to one year following the completion of a transaction. In the Section's view, a one-year time limit for instituting a review following the closing of a transaction would be an appropriate and proportional period for undertaking reviews of non-notifiable transactions, as it strikes the right balance between the public and private interests (avoids unduly chilling or delaying beneficial investments and still may allow for effective relief). Section recommends guidance on the types of transactions that will be subject to residual jurisdiction.

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		thresholds, the referral system serves as an effective mechanism to bring relevant cross-border transactions into the Commission's merger review process.	
		A merger notification threshold based on a proposed deal-size threshold combined with a "likely to produce a measurable impact within the EEA" criterion, does not meet international standards for a clear, objective local nexus requirement.	
		An alternative proposal to develop industry-specific criteria to ensure a local nexus raises considerable issues.	
		Recommendations/Rationales: The acquisition of a nascent technology company or pipeline pharmaceutical supplier may not portend any clear anticompetitive effects at the time the transaction would be reviewed, due to the emerging nature of the target. The Commission's competition enforcement authority, together with its sector inquiry powers, appear to provide a more suitable means for examining any potential anti-competitive effects arising from such transactions than <i>ex ante</i> mandatory merger notification and review. Should the Commission decide to pursue additional threshold tests, the Section strongly supports benchmarking them against international standards, <i>e.g.</i> , ICN, OECD.	
		The Section recommends that such thresholds incorporate local nexus requirements and be based on clear and objective criteria—based, for example, on sales or assets, to ensure that only transactions with a material impact on the jurisdiction are subject to merger notification. A transaction value threshold, by itself, is unsuitable to determine whether a transaction will impact a specific jurisdiction.	
		The Section recommends uniform merger thresholds across sectors and markets.	
		The Section cautions that it may be challenging to develop and apply industry-specific threshold criteria, e.g., based on number	

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		of active users, in a manner that would ensure that they meet international norms of objectivity and materiality. Section also suggests certain EU-specific approaches as an alternative to revised notification thresholds, <i>i.e.</i> , (i) introducing any new threshold as an additional referral standard, rather than as a threshold test, or (ii) expanding the European Competition Network's procedures to provide for consultation on merger cases under review at national level that may raise cross-border	
		implications. France: Comments on the Competition Authority's Consultation on Modernizing and Simplifying the French Merger Control Law (November 30, 2017)	
		Issue: The Consultation asks whether: (i) thresholds should be varied depending on the sector of activity; and (ii) a market share threshold should be reintroduced, although it notes that this would raise the problem of having to define the relevant market <i>ex ante</i> .	
		The Consultation explores the introduction of an alternative notification threshold based on transaction value that would apply only if the target were "active to a considerable extent" in France.	
		The Consultation suggests an alternative: combining mandatory notification with potential <i>ex post</i> (own initiated) intervention by the Authority.	
		Recommendation/Rationale: The Section recommends against introducing additional complexity into the notification assessment by imposing different rules for different sectors of the economy.	
		The Section recommends against the reintroduction of a market- share based filing threshold, citing international best practice recommendations that mandatory notification thresholds should	

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		be based on objectively quantifiable criteria, such as assets and sales or turnover, and that market share-based tests and other criteria that are inherently subjective and potentially factintensive are not appropriate for making the initial determination as to whether a transaction must be notified.	
		The Section recognizes that a transaction-value threshold can be an appropriate merger notification threshold, but that it must be coupled with additional tests and exemptions to ensure an appropriate local nexus.	
		The Section strongly recommends that, if a transaction-value threshold is introduced, the local nexus test be based on objective and clear criteria to ensure that only transactions with a material impact on the jurisdiction are subject to merger notification.	
		The Section recognizes that a residual jurisdiction system has several benefits but recommend that the authority consider providing explicit guidance on the types of transactions that will be subject to <i>ex post</i> review.	
		The Section suggests that residual jurisdiction be available for only a limited duration after the merger to limit the uncertainty of the potential for <i>ex post</i> review.	
		The Section suggests that the agency consider incorporating voluntary filings by parties whose transactions may not reach mandatory filing thresholds but may raise competition concerns to enable parties to mergers that pose antitrust risk to obtain legal certainty, while bringing potentially problematic transactions to the attention of the enforcement agency.	
		France: Comments Regarding the French Competition Authority's Consultation on Modernizing and Simplifying the French Merger Control Law (September 28, 2018)	
		Issues: Authority considering imposing a time limit of between 6 months and two years on the Authority's ability to exercise its	

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
2.	Merger Analysis: General	residual jurisdiction under any new <i>ex post</i> merger control system. Recommendations: In the Section's view, the absence of a deadline or time limit for such reviews would subject all non-notifiable transactions to considerable uncertainty as to whether a review will be initiated. In the Section's view, a one-year time limit for instituting a review following the closing of a transaction would be an appropriate and proportional period for undertaking reviews of non-notifiable transactions, as it strikes the right balance between the public and private interests (avoids unduly chilling or delaying beneficial investments and still may allow for effective relief). Israel: Comments on the Antitrust Authority Consultation on Competition Issues in the Digital Economy	The Section believes that clear standards for evaluating mergers are
	General	Competition issues in the Digital Economy (October 31, 2018) Issue: Antitrust review of transactions involving technology companies might miss combinations that although they do not increase concentration today, "could alter the future because of the growth potential of the companies involved." Recommendation/Rationale: There is no need for a special rule for mergers involving technology firms. The same fact-based economic scrutiny that is used for analyzing transactions in other sectors of the economy is sufficiently flexible to identify transactions that are likely to significantly harm competition in the technology sector as well. As with mergers and acquisitions in other parts of the economy, a decision to block a transaction involving technology firms should be grounded in careful economic analysis of the totality of the facts, showing that a transaction is likely to substantially lessen competition in the foreseeable future.	very important. There is no need for a special rule for mergers involving technology firms. The same fact-based economic scrutiny that is used for analyzing transactions in other sectors of the economy is sufficiently flexible to identify transactions that are likely to significantly harm competition in the technology sector as well. As with mergers and acquisitions in other parts of the economy, a decision to block a transaction involving technology firms should be grounded in careful economic analysis of the totality of the facts, showing that a transaction is likely to substantially lessen competition in the foreseeable future. Although merger analysis is necessarily predictive, the technology industry provides good examples of the difficulty in accurately predicting future developments, suggesting a need for limits on speculation about future developments. The Section urges caution when analyzing nascent markets and the effects of recent or potential entry.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		Although merger analysis is necessarily predictive, the technology industry is a good example of the difficulty in accurately predicting future developments, suggesting a need for limits on speculation about future developments. The Section urges the IAA to proceed cautiously when analyzing nascent markets and the effects of recent or potential entry.	The Section recognizes that some typical merger tests and standards may be difficult to apply in data-driven markets, <i>e.g.</i> , the hypothetical monopolist test cannot be applied where the price is zero. The Section encourages additional reflection and guidance on how agencies will evaluate non-price elements of competition in merger reviews as well as how the hypothetical monopolist test might be transposed in the non-price digital context.
		Canada: Comments Regarding the Canadian Competition Bureau's Big Data and Innovation Draft Discussion Paper (November 16, 2017)	
		Issue: The Paper raises the possibility that certain traditional tests and standards applied in the merger context may be difficult to apply in data-driven markets.	
		Recommendation: The Section believes that clear standards for evaluating mergers are very important.	
		Some typical merger tests and standards may be difficult to apply in data-driven markets, <i>e.g.</i> , the hypothetical monopolist test cannot be applied where the price is zero because a "small but significant and non-transitory increase in price" is meaningless in such a setting.	
		The Section encourages the provision of additional guidance on how the agency will evaluate non-price elements of competition in merger reviews.	
		United States: Comments in Advance of the FTC Hearings on Competition and Consumer Protection in the 21st Century (August 20, 2018)	
		A framework for analyzing combinations between firms that may implicate concerns about non-price competition should be considered as well as how the hypothetical monopolist test might be transposed in the non-price digital context.	

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
2a.	Merger Analysis: Market Definition and Multi- Sided Markets	United States: Comments in Advance of the FTC Hearings on Competition and Consumer Protection in the 21st Century (August 20, 2018) Consider whether to move away from the traditional SSNIP test in some contexts towards an analytical approach that focuses on non-price measures of consumer benefits, e.g., time spent online. Multi-sided markets: With regard to multi-sided markets, conduct that might appear anticompetitive if focusing on one side of the market might be viewed as benign or procompetitive when all sides are taken into account. Traditional tools for market definitions, such as SSNIPs and critical loss tests, if applied to only one side can be off if there are significant, positive demand feedbacks. If demand externalities are small or one-sided, analyzing each side separately may be appropriate. As in the Amex decision, where sufficiently strong network effects exist, courts and enforcement agencies should consider the entire platform. As part of the study of these issues, the Section recommends that the agency analyze how to determine if substantial indirect network effects exist and how traditional economic tools should be modified where the analysis of more than one market is required. For example: Do certain markets allow for a composite price approach? Do platforms raise unique issues with regard to market entry, e.g., tipping? A platform's market position should not be presumed as durable nor should it be presumed that large and growing platforms will prevent competing platforms from entering.	[Whereas the ABA has not directly addressed market contestability in its comments related to merger analysis, it seems advisable to cover with respect to dynamic technology markets.] The Section provides that the agencies might consider whether to move away from the traditional SSNIP test in some contexts towards an analytical approach that focuses on non-price measures of consumer benefits. Multi-sided markets: Conduct that might appear anticompetitive if focusing on one side of the market might be viewed as benign or procompetitive when all sides are taken into account. Traditional tools for market definitions, such as SSNIPs and critical loss tests, if applied to only one side can be off if there are significant, positive demand feedbacks, see e.g., U.S. Amex decision, in which the agencies were required to consider the entire platform. If demand externalities are small or one-sided, however, analyzing each side separately may be appropriate. A platform's market position should not be presumed as durable nor should it be presumed that large and growing platforms will prevent competing platforms from entering. As part of the study of these issues, the Section recommends that agencies analyze how to determine if substantial indirect network effects exist and how traditional economic tools should be modified where the analysis of more than one market is required.
2b.	Merger Analysis: Loss of Innovation / Potential Competition	European Commission: Comments on the Commission's Request for Input on the Evolution of Competition Policy in Light of Digitization of the Economy (December 18, 2018)	General Approach Digitization of the economy does not give rise to any new or unique concerns in relation to loss of innovation- nor potential competition-based theories of harm.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		Issue: In digital merger cases, is there scope to apply theories of harm based on a loss of innovation and/or loss of "potential competition" more often, and if, so, would this require updating the EC's tools? Recommendations/Rationales: Digitization of the economy does not give rise to any new or unique concerns in relation to loss of innovation- nor potential competition-based theories of harm. The Section cautions against developing sector-specific theories of harm, as they may inadvertently chill competition by deterring procompetitive transactions. As certain new tools and concepts are developed to assess innovation and potential competition, further guidance on how they are to be applied would be helpful, including in markets where innovation may be less susceptible to measurement based on patents. United States: Comments in Advance of the FTC Hearings on Competition and Consumer Protection in the 21st Century (August 20, 2018) Recommendations/Rationale: Theories of potential competition carry significant evidentiary challenges, particularly in dynamic markets where a new technology has been introduced. Predicting the future competitive pressures that potential competitors may place on legacy technology may be difficult. While there is a well-established doctrine of potential competition that likely remains both a sufficient and appropriate tool for analyzing competitive effect of an acquisition of a firm that may be a nascent competitive threat, it would be helpful to clarify both the situations raising concerns about potential competition effects and the factual evidence that used to evaluate these concerns.	The Section cautions against developing sector-specific theories of harm, as they may inadvertently chill competition by deterring procompetitive transactions. As certain new tools and concepts are developed to assess innovation and potential competition, further guidance on how they are to be applied would be helpful. Potential Competition and Technology Markets: Theories of potential competition carry significant evidentiary challenges, particularly in dynamic markets where a new technology has been introduced. Predicting the future competitive pressures that potential competitors may place on legacy technology may be difficult. While there is a well-established doctrine of potential competition that likely remains both a sufficient and appropriate tool for analyzing competitive effect of an acquisition of a firm that may be a nascent competitive threat, it would be helpful to clarify both the situations raising concerns about potential competition effects and the factual evidence that used to evaluate these concerns. Points From Prior Comments on Potential Competition Analysis that might be considered with regard to the Technology Markets: A merger resulting in increasing the scale required for entry is problematic only in the relatively unusual case where it will shield the merging firms from efficient and effective new entry. A merger involving a potential entrant is unlikely to harm competition unless: the relevant market is highly concentrated (i.e., already characterized by single firm or collective dominance); but for the merger, the potential competitor was likely to enter in the near term; entry by the firm would significantly increase competition; and, there are no or few other potential entrants also likely to enter in the near term; entry by the firm would significantly increase competition; and, there are no or few other potential entrants also likely to enter in the near term; entry by the firm would significantly increase competition.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		Ireland: Comments on the Irish Competition Authority's Public Consultation on Merger Guidelines (October 30, 2013)	
		Issue: The proposed guidelines provided that a merger that discouraged effective entry by increasing the minimum size needed to enter the market eliminated an important potential competitor.	
		Recommendation: The Section suggested that a merger's resulting in increasing the scale required for entry is problematic only in the relatively unusual case where it will shield the merging firms from efficient and effective new entry.	
		Germany: Comments on the Bundeskartellamt's Draft Guidance on Substantive Merger Control (September 21, 2011)	
		Issue: Guidance covers potential competitors (see ¶¶ 70-71).	
		Recommendations/Rationale: The Draft Guidance might be revised to note that a merger involving a potential entrant is unlikely to harm competition unless the relevant market is highly concentrated (<i>i.e.</i> , already characterized by single firm or collective dominance), the potential competitor was likely to enter in the near term, entry by the firm would significantly increase competition, and there are no or few other potential entrants also likely to enter in the near term that would have a similar impact on competition. Guidance also could be revised to clarify the standard of proof that must be met to show that the potential competitor would have entered the market but for the merger.	

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
2c.	Merger Analysis: Competition considerations related to Big Data	India: Comments on Proposed Amendments and Revisions to India's Competition Act and Related Rules and Regulations (December 6, 2018) Issue: The amendments raise privacy and competition considerations related to big data. The merger-specific recommendation, noted below, is found within this broader discussion. Recommendation: Data should not be treated any differently from any other asset that may be analyzed as part of the review of any given merger, except perhaps for a stronger anticipation (as with most dynamic markets) that the industry in which the asset is used will be characterized by dynamic competition. [NB: The Israel Antitrust Authority Consultation On Competition Issues In The Digital Economy (October 31, 2018) has an excellent discussion of data and competition analysis, however, because it is not merger specific, it is merely noted here, to ensure that it is summarized in the appropriate outline section.]	Data should not be treated differently from any other asset that may be analyzed as part of the review of any given merger, except perhaps for a stronger anticipation (as with most dynamic markets) that the industry in which the asset is used will be characterized by dynamic competition.
3.	Vertical mergers	Argentina: Comments Regarding the Proposed Revisions to the Argentine Merger Control Guidelines (September 1, 2017) Recommendation/Rationale: Efficiencies are a common driver of vertical mergers (including conglomerate mergers where the primary concern is potential competition between the merging parties) and any analysis of competitive concerns arising from vertical mergers should give appropriate weight to this rationale.	Combining businesses operating at separate levels can intensify interbrand competition, <i>e.g.</i> , through more efficient coordination on design, production or R&D and the elimination of double marginalization and can translate to consumer benefits. Efficiencies are a common driver of vertical mergers (including conglomerate mergers where the primary concern is potential competition between the merging parties) and any analysis of competitive concerns arising from vertical mergers should give appropriate weight to this rationale. The Section notes the need to consider the potential risk of foreclosure in vertical mergers. Where one party supplies to or purchases from a competitor of the other, there is a risk that a vertical merger will create incentives to discriminate against rivals, foreclosing access to inputs

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		United States: Comments in Advance of the FTC Hearings on Competition and Consumer Protection in the 21st Century (August 20, 2018) It is long understood that combining businesses operating at separate levels can intensify interbrand competition, e.g., through more efficient coordination on design, production or R&D and the elimination of double marginalization and can translate to consumer benefits. The Section recognizes the continued need to consider the potential risk of foreclosure in vertical mergers. Where one party supplies to or purchases from a competitor of the other, there is a risk that a vertical merger will create incentives to discriminate against rivals, foreclosing access to inputs or customers that were previously available at lower costs or on better terms. Recognizing the recent growth economic literature on these issues and new judicial precedents, the FTC should review its vertical merger policies and provide guidance to business.	or customers that were previously available at lower costs or on better terms. Recognizing the recent growth in economic literature on these issues, the agency (FTC) should review its vertical merger policies and provide guidance to business.
4.	Merger Remedies	India: Comments on Proposed Amendments and Revisions to India's Competition Act and Related Rules and Regulations (December 6, 2018) Merger remedies should be proportional and used to effectively restore or preserve competition, protect competition generally rather than to determine market outcomes, and there should be a close nexus between the remedy and the theory of harm in each particular case. While a preference for structural remedies often is expressed by competition law regulators, the Section cautions against the adoption of an overly narrow view of the circumstances in which behavioral remedies can be effective as well as a potential lack of flexibility in considering behavioral remedies. While behavioral remedies may certainly be more complex than structural remedies in some cases, they are important in	Merger Remedies Generally: Merger remedies should be proportional and used to effectively restore or preserve competition, protect competition generally rather than to determine market outcomes, and there should be a close nexus between the remedy and the theory of harm in each particular case. Structural and Behavioral Remedies: While a preference for structural remedies often is expressed by competition agencies, the Section cautions against the adoption of an overly narrow view of the circumstances in which behavioral remedies can be effective as well as a potential lack of flexibility in considering behavioral remedies. While behavioral remedies may certainly be more complex than structural remedies in some cases, they can be important to

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		transactions where they obviate the need to divest assets that likely would generate efficiency gains in the hands of the merged firm. Chile: Comments on the Chilean Fiscalia Nacional Económica's Draft Guidelines on Jurisdiction in Respect of Concentrations and Draft Guidelines on Merger Remedies (May 24, 2017) Behavioral undertakings that modify or constrain the conduct of merged firms can be useful in addressing competitive concerns in certain situations that are not limited to vertical transactions, and are sometimes used in conjunction with, or instead of, structural remedies. "Quasi-structural" or "semi-structural" measures such as changes to contracts that exist between competitors, removal of interlocking directors, and licensing arrangements, may provide effective remedies in certain situations. Where intangible assets or intellectual property such as patents are needed by both the divested business and the retained business, the divested business might be adequately protected with a non-exclusive license rather than an outright transfer of the asset. United States: Comments in Advance of the FTC Hearings on Competition and Consumer Protection in the 21st Century (August 20, 2018) Antitrust and business communities could benefit substantially from more comprehensive guidance on the Commission's views concerning the circumstances when structural remedies may be necessary to remedy harm from vertical mergers. The FTC should consider evaluating these issues in the context of the findings of its Merger Remedies study, which concluded that its remedies addressing vertical mergers were successful, notwithstanding the lack of any structural remedy. The Section is unaware of any contrary findings.	transactions where they obviate the need to divest assets that likely would generate efficiency gains in the hands of the merged firm. Behavioral undertakings that modify or constrain the conduct of merged firms can be useful in addressing competitive concerns in certain situations that are not limited to vertical transactions, and are sometimes used in conjunction with, or instead of, structural remedies. "Quasi-structural" or "semi-structural" measures such as changes to contracts that exist between competitors, removal of interlocking directors, and licensing arrangements, may provide effective remedies in certain situations. Where intangible assets or intellectual property such as patents are needed by both the divested business and the retained business, the divested business might be adequately protected with a non-exclusive license rather than an outright transfer of the asset. The antitrust and business communities could benefit substantially from more comprehensive guidance on the agency's views concerning the circumstances when structural remedies may be necessary to remedy harm from vertical mergers, recognizing historic, successful experience with behavioral remedies. Data-related remedies: Remedies involving legally mandated data access, data sharing or data pooling could create significant disincentives to continuing innovation. The disincentive to innovate must therefore be balanced with whatever pro-competitive forces may be created through the proposed data access remedy.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		European Commission: Comments on the Commission's Request for Input on the Evolution of Competition Policy in Light of Digitization of the Economy (December 18, 2018)	
		While not merger specific, the Comment raises the risks to dynamic competition inherent in the types of antitrust remedies available to address data "bottleneck" concerns, <i>i.e.</i> , legally mandated data access, data sharing or data pooling.	
		The Section identifies that these remedies involve significant administrative costs and note that given the significant investment many firms make in collecting data, and the importance of such data to their competitiveness, a requirement to share such data with competitors could create a significant disincentive to continuing innovation. The disincentive to innovate must therefore be balanced with whatever procompetitive forces may be created through the proposed data access remedy.	
5.	Minority Shareholdings and Common Ownership	European Commission: Comments on the Consultation on Possible Improvements to the EU Merger Regulation (September 20, 2013) Issue: Whether the EUMR should be amended to introduce filing	Filing Requirements for Minority Shareholdings: The Section recommends against the introduction of filing requirements for minority shareholdings involving non-controlling structural links. Experience in the United States shows that non-controlling structural
		requirements for minority shareholdings involving non-controlling structural links. Recommendations: The Section recommends avoiding changes to the EUMR that would introduce filing requirements for minority shareholdings involving non-controlling structural links. The proposed changes would increase legal uncertainty for, and overall regulatory burden on, companies doing business in Europe and could make such minority shareholdings a less attractive investment opportunity.	links do not pose a serious competitive threat that cannot otherwise be addressed by other antitrust enforcement tools. In the Section's view, where a non-controlling structural link does not confer de facto control or joint or negative control (e.g., through competitively significant veto powers), the level of influence that the acquiring firm can exercise on the acquired firm's competitive decisions is typically lower and much less likely to raise competitive concerns. Accordingly, notification of such shareholdings does not appear to justify burdensome pre-consummation notification and/or waiting requirements.
		attractive investment opportunity.	If the agency ultimately desires a notification, the Section strongly recommends a voluntary filing system (in the EU context) plus a

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		Experience in the United States shows that non-controlling structural links do not pose a serious competitive threat that cannot otherwise be addressed by other antitrust enforcement tools. In the Section's views, where a non-controlling structural link does not confer de facto control or joint or negative control (e.g., through competitively significant veto powers), the level of influence that the acquiring firm can exercise on the acquired firm's competitive decisions is typically lower and much less likely to raise competitive concerns. Accordingly, notification of such shareholdings does not appear to justify burdensome pre-consummation notification and/or waiting requirements. Should the Commission decide otherwise, the Section strongly recommends a voluntary filing system plus a detailed Commission notice with guidance about circumstances when structural links could make a filing advisable. United States: Comments in Advance of the FTC Hearings on Competition and Consumer Protection in the 21st Century (August 20, 2018) Given the nascent stage of the empirical literature regarding common ownership, radical policy changes in the area would be premature at this time. Instead, the FTC should evaluate whether FTC studies could enrich the ongoing debate consistent with the importance of evidence-based policy reform. The Comment also cites to the U.S. Note submitted to the OECD on common ownership by institutional investors and its impact on competition.	detailed guidance about circumstances when structural links could make a filing advisable. Common Ownership: Given the nascent stage of the empirical literature regarding common ownership, the Section believes that radical policy changes in the area would be premature at this time. Instead, further studies could enrich the ongoing debate consistent with the importance of evidence-based policy reform.

Appendix 4:

Exclusionary Conduct

No.	Common Issues	Comments on Draft Laws and Regulations Other ABA Publications EC and U.S. Reports and Public Hearings	Key Comments and Recommended Approach
1.	When is a particular online platform dominant?	Argentina: Comments on the Draft Guidelines for the Analysis of Cases of Abuse of Dominance Issued by the Argentinian Comision Nacional de Defensa de la Competencia (November 2, 2018) Definition of dominant position: Section 5 of the Act states that a dominant position is defined by the lack of "substantial competition." Section 6 requires consideration of three factors to establish the existence of a dominant position: (i) competition from substitute goods or services to those offered by the undertaking, (ii) the presence of barriers to entry or expansion due to regulatory restrictions, and (iii) whether the undertaking has the ability to unilaterally influence prices or to restrict supply or demand and the degree to which competitors can counteract this power. European Commission: Report from the Commission to the Council and the European Parliament – Final Report on the Ecommerce Sector Inquiry (October 5, 2017) The results of the e-commerce sector inquiry confirm that the growth of e-commerce over the last decade had a significant impact on companies' distribution strategies and customer behavior the ability to compare prices of products across several online retailers leads to increased price competition affecting both online and offline sales. alternative online distribution models such as online marketplaces have made it easier for retailers to access customers.	Recommended Approach: Dominant Position A dominant position is found only where there is lack of competition and alternative sources. Competition on E-Commerce Competition from off-line distribution: A huge share of on-line sales is not sufficient to demonstrate that an online platform is dominant. Online distribution nearly always competes with brick-and-mortar stores. This competition can preclude any platform from being dominant, even if there is only one. Competition from manufacture websites: In e-commerce for goods, manufacturers normally sell through multiple channels, often including their own websites. These sites potentially prevent a platform from being dominant. Competition from dissimilar websites: Websites that provide different services can nevertheless provide substantial competition to each other (e.g., Amazon and Google Shopping). In addition, brick-and-mortar retailers are also e-tailers. They can prevent an online platform from being dominant.

No.	Common Issues	Comments on Draft Laws and Regulations Other ABA Publications EC and U.S. Reports and Public Hearings	Key Comments and Recommended Approach
2.	Monopoly leveraging and lock-in concerns	European Commission: Comments on the Commission's Request for Input on the Evolution of Competition Policy in Light of Digitization of the Economy (Dec. 18, 2018) Monopoly leveraging U.S. antitrust law does not recognize a standalone offense of monopoly leveraging. Absent an anticompetitive agreement, the unilateral use of monopoly power in one market to gain an advantage in a second market is unlawful only if the conduct maintains or poses a dangerous probability of creating monopoly power in the second market. Other forms of alleged "leveraging," like so-called technological ties, can represent an efficient form of product integration or product enhancement that benefits consumers and is therefore procompetitive. Accordingly, the Section recommends a case-by-case approach to allegations of leveraging. Lock-in Concerns Similarly, "lock-in" is not by itself an antitrust violation under U.S. law. Although a "lock-in" could be evidence of market power, it could also arise in markets characterized by network externalities, switching costs or other sources that cannot be attributed to any abusive or unlawful behavior by the firm that is advantaged by the "lock-in."	 The Section in the past recognized that monopoly leveraging and "lock-in" are not by themselves an antitrust violation, and that authorities should carefully examine the need for remedies. Key comments include: Monopoly leveraging is only unlawful if the conduct maintains or poses a dangerous probability of creating monopoly power in the second market. Enforcement should be restricted to exclusionary conduct that creates dominance (or a dangerous probability thereof) in the "leveraged" market. Lock-in effects are not always related to market power. In both cases, authorities should carefully examine remedies requiring mandatory sharing or access to networks, data, or other valuable competitive resources where, absent exceptional circumstances, the costs involved and risks to innovation may not justify such relief absent unusually strong evidence of procompetitive benefit. Recommended Approach: Monopoly leveraging and lock-in should only be considered unlawful when there is both monopoly power and anticompetitive conduct. In a leveraging scenario involving a monopolist, US law finds no violation unless monopoly is threated in the second market as well. The EU and other jurisdictions find abuse of a dominant position in the first market when competition is merely distorted in the second market. When a jurisdiction adopts this view in the digital economy, an infringement can be found in many scenarios in which a firm seeks to monetize is assets and punishing monetization can dampen innovation and dynamic platform competition.

No.	Common Issues	Comments on Draft Laws and Regulations Other ABA Publications EC and U.S. Reports and Public Hearings	Key Comments and Recommended Approach
		European Commission: Speech by Johannes Laitenbeger – Vertical Restraints, Digital Marketplaces, and Enforcement Tools (ICN Annual Conference, March 22, 2018) Google Shopping case The Commission found that Google had abused its dominant position through the more favorable treatment of its comparison shopping service The issue was that Google did not subject its comparison shopping service to the same algorithm and the same demotion mechanism as rivals The decision concluded that Google's comparison shopping service gained significant traffic at the expense of its rivals. It did so not on the merits, but because, irrespective of its relevance to a particular query, it was systematically positioned at the top of Google's general search results whilst rivals were demoted. Google foreclosed competition and reduced choice and innovation. The abuse is a classical leveraging abuse where a dominant company gives its own product in an adjacent market an illegal advantage. It is based on a detailed analysis of effects.	
3.	Predatory pricing	Argentina: Comments on the Draft Guidelines for the Analysis of Cases of Abuse of Dominance Issued by the Argentinian Comision Nacional de Defensa de la Competencia (November 2, 2018) General comments on predatory pricing: Although U.S. law treats predatory pricing as anticompetitive in certain circumstances, it has approached predatory pricing carefully. Price remains "the very essence of competition," so low prices are generally a boon to consumers, even when they result in losses by another individual competitor, and, without more, do not harm the competitive process or consumers. The	In general, practitioners have been skeptical in what regards predatory pricing as an anticompetitive conduct. In the past, the Section has commented on the need to prove an actual harm to the competitive process or consumers. Key comments include: • Predatory pricing schemes must allow the predator to eventually raise prices to above competitive levels in the future. • The Section recommends the use of well understood cost-based tests. Recommended Approach: Price-cost tests for online platforms. An online platform may sell thousands of items, so the first issue in applying a price-cost test is

No.	Common Issues	Comments on Draft Laws and Regulations Other ABA Publications EC and U.S. Reports and Public Hearings	Key Comments and Recommended Approach
		Section recommends the use of well understood cost-based tests that may help enterprises internally determine whether their pricing conduct is likely to be considered an abuse of dominance. Predatory pricing schemes must allow the predator to eventually raise prices to above competitive levels in the future. Competition laws protect the competitive process, not individual competitors. Recoupment by the predating firm through the subsequent imposition of anticompetitively high price is what causes consumer harm, not the below-cost pricing itself. **United States: FTC Hearing 3 - Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFN** (October 17, 2018) The need to consider the two-side characteristic of platforms is clear in predatory pricing. Platforms often sell to one group at a loss and make their money on the other side. Those are denoted the subsidy side and the money in the vernacular. In rule of reason cases, there is always the fundamental issue of whether there's a significant impact on competition.	over which items the price-cost comparison should be made. This issue was presented, for example, by Amazon's pricing of best-selling books. It is certainly wrong to apply a price-cost test to any arbitrary product grouping. The proper grouping may be the range of products carried by the alleged prey. Promotional pricing. It is well recognized that not all below-cost pricing is predatory. Various forms of promotions, limited in scope, are not treated as predatory pricing. This probably is not different in the digital economy than the old economy. Evaluating the likelihood of long-term consumer harm. Failing a price-cost test simply extends the analysis. The U.S. has a recoupment requirement. The EU rejects that but undertakes much the same inquiry in requiring long-term consumer harm. Both look to conditions of entry and whether low price in the long term can be reasonably expected to product high prices in the longer term.
4.	Exclusive dealing-style restraints (restraints on using other distribution channels)	European Commission: Report from the Commission to the Council and the European Parliament – Final Report on the E-commerce Sector Inquiry (October 5, 2017) Selective distribution may facilitate the implementation and monitoring of certain vertical restraints that may raise competition concerns and require scrutiny. EC: more than half of the manufacturers require in their selective distribution agreements, for at least part of their products, the operation of a brick and mortar shop by retailers, thereby excluding pure online players from the distribution of the concerned products.	In general, it is agreed among competition authorities that this type of restraints is not per-se illegal. They may however impair competition. Recommended Approach: Pure exclusives (with respect to online distribution). One class of restraints grants an exclusive with respect only to online distribution. If other distribution channels compete with online distribution, these restraints might be incapable of harming competition, and of course, they can be procompetitive even if other channels do not compete. A key question is whether the exclusivity was imposed by the platform. Pure exclusives with manufacturer websites exempted. If a manufacturer competes with an otherwise exclusive online

No.	Common Issues	Comments on Draft Laws and Regulations Other ABA Publications EC and U.S. Reports and Public Hearings	Key Comments and Recommended Approach
		Certain requirements to operate at least one brick and mortar shop without any apparent link to distribution quality and/or other potential efficiencies may require further scrutiny in individual cases. **ABA** The Antitrust Source: **Understanding Richard Posner on Exclusionary Conduct, by Steven C. Salop** (October 2018) When exclusive dealing or other conduct does succeed, it generally will only delay entry because of the need for two-level entry, not deter entry permanently. However, for new economy markets, Posner recognizes that network effects and economies of scale may deter entry, despite the high rates of innovation. Exclusive dealing, tying, and vertical integration can protect monopolies by raising barriers to entry that significantly delay entry.	distributor, competition might or might not serve consumer interests. It might depend largely on how free each is to compete as it pleases. Note that "manufacturer" includes a service supplier, as in hotels or airlines. Bans on the use of specific websites for distribution. One form of restraint like exclusive dealing is a very limited ban, for example on distribution through specified sites. Such restraints can be procompetitive.
5.	Most-favored-nation-style restraints (restraints on pricing in other channels)	United States: FTC Hearing 3 – Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFN (October 17, 2018) An MFN on a regular market would essentially link the prices between different customers of the same seller. In contrast, with a platform MFN, on a multi-sided market, the MFN clause between one platform and a supplier links the prices for the same customer, buying the same product, from different outlets (usually competing platforms). MFN clauses in platforms are said to be closer to pricematching guarantees. In terms of the theory of harm, it may have to do with: (i) collusion between platforms; (ii) market foreclose to other platforms.	In general, it is agreed among competition authorities that this type of restraints is not per-se illegal. They may however impair competition. Recommended Approach: Restraints on pricing on manufacturer web sites or promotion by the sites. A dominant platform might enter into an agreement with manufacturers that limit competition from manufacturer sites but preventing the manufacturer sites from undercutting the platform on price. Such a restraint also keeps the manufacturer from steering business to its site in the usual way by offering lower prices. Such a restraint might entrench the dominance of a platform. Restraints on pricing to, or through, other websites, or on their price promotion. When distribution goes through multiple channels, some coordination among them likely is needed. A manufacturer might seek to prevent one channel from taking too much business

No.	Common Issues	Comments on Draft Laws and Regulations Other ABA Publications EC and U.S. Reports and Public Hearings	Key Comments and Recommended Approach
		It is necessary to determine the effects of the clauses on a clearly identified theory of harm (for instance, in relation to interbrand competition and/or intrabrand competition).	from another to avoid the disappearance of the latter channel. Such restraints are apt to be procompetitive. Restraints on price advertising. A weakened form of the foregoing restraints is a restraint that prohibits only certain ways of publicizing offerings. Such a restraint can limit business diversion from one channel to another and thus maintain harmony among the channels.

Appendix 5:

Algorithms and Artificial Intelligence

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
1.	Tacit or express collusion through algorithms	Canada: Comments Regarding the Canadian Competition Bureau's Big Data and Innovation Draft Discussion Paper (November 16, 2017) The Bureau states that big data does not alter the core elements of a cartel case; the offence is still rooted in the agreement itself. The Section's view is that existing competition laws and judicial precedents interpreting them can generally be applied to the use of big data analytics or algorithms to fix, manipulate or control market prices. In this sense, there would be two scenarios involving algorithms under the reach of competition law: (i) firms agree to collude and create/use an algorithm to effectuate the terms of their agreement; and (ii) a single firm creates a pricing algorithm which is then adopted by the consent of the market participants ("hub-and-spoke"). There would be two scenarios that extend beyond the reach of competition law: (i) multiple firms unilaterally adopt algorithms that continually monitor and adjust to market changes ("predictable agents"); and (ii) aided by artificial intelligence, algorithms effectively engage in autonomous decision-making. Big data and algorithmic pricing may raise important competition policy issues that the Canadian Parliament may wish to address in the near future.	Algorithm pricing can enhance competition by facilitating rapid response to changing competitive conditions and customer demand. On the other hand, the use of algorithms may facilitate collusion and make cartels more stable. Literature on the topic 182 shows that there are two scenarios involving algorithms that would be under the reach of competition law: (i) firms collude through the use of an algorithm; and (ii) a "hub-and-spoke," where a firm uses a pricing algorithm that is then adopted by other competitors or competitors outsource their pricing to the same third-party. There would also be two scenarios that would extend beyond the reach of competition law: (i) the "predictable agent," where competitors unilaterally adopt algorithms that continually monitor and adjust to market changes; and (ii) algorithms are aided by artificial intelligence, resulting in autonomous decision-making. Absent agreements and concerted action, independent adoption of pricing algorithms may be beyond the reach of antitrust law, even if they make interdependent pricing more likely.

¹⁸² See Maurice E. Stucke & Ariel Ezrachi, How Pricing Bots Could Form Cartels and Make Things More Expensive, HARVARD BUS. REV. (Oct. 27, 2016), available at https://hbr.org/2016/10/how-pricing-bots-could-form-cartels-and-make-things-more-expensive.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		United States: Comments in Advance of the FTC Hearings on Competition and Consumer Protection in the 21st Century (August 20, 2018)	
		Algorithm pricing can enhance competition by facilitating rapid response to changing competitive conditions and customer demand. On the other hand, the use of algorithms may facilitate collusion and make cartels more stable. Absent agreements and concerted action, independent adoption of pricing algorithms may be beyond the reach of antitrust law, even if they make interdependent pricing more likely. E.I. duPont de Nemours & Co. v. FTC, 729 F.2d 128 (2d Cir. 1984) teaches that unilateral conduct can be labeled "unfair" under Section 5 of the FTC Act only if there is evidence of "anticompetitive intent or purpose" or "the absence of an independent legitimate business reason." It may be useful for the FTC to review under what circumstances, if any, Section 5 could be used to challenge the use of these technologies that anticompetitively raise prices without clear evidence of an agreement among competitors.	
		United States: FTC Hearing 7 – Competition and Consumer Protection Issues of Algorithms, Artificial Intelligence, and Predictive Analytics (November 13-14, 2018)	
		In the first scenario, humans collude, and they use algorithms to help perfect their collusion.	
		The second scenario is hub and spoke, when multiple competitors are outsourcing their pricing to the same third-party vendor. There is evidence of an agreement, and you can look at possibly intent evidence to then determine what the likely anticompetitive effects might be.	
		In the third scenario, "predictable agent," each firm unilaterally decides to use a price optimization algorithm. And the industry-	

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		wide adoption of this algorithm helps foster what we call tacit algorithmic collusion. In the fourth scenario, each company utilizes a price optimization algorithm, through machine learning. The algorithms then all determine that the profitable outcome is tacit collusion.	
		European Commission: Comments on the Commission's Request for Input on the Evolution of Competition Policy in Light of Digitization of the Economy (December 18, 2018)	
		Question on how do we ensure that AI technology is as competitive as possible?	
		While the AI sector has unique characteristics that may require consideration of new regulation, it should not necessitate a change in the Commission's antitrust enforcement of existing laws and regulations.	
		The Section recommends against developing new sector- specific policies for AI because a well-intentioned effort to increase competition further may actually chill it, to the detriment of European consumer and businesses, especially small and emerging businesses.	
2.	Conscious parallelism as a result of the use of algorithms and AI	<u>Canada: Comments Regarding the Canadian Competition</u> <u>Bureau's Big Data and Innovation Draft Discussion Paper</u> (November 16, 2017)	Big data and algorithmic pricing may combine to allow conscious parallelism to function more frequently and effectively, which may generate deadweight losses.
		Canadian Competition laws do not apply to consciously parallel conduct in the absence of an agreement or arrangement between competitors. The Section commends the Bureau for raising this issue in the Paper and for clarifying that current enforcement policies will continue to reflect Canada's historical approach under its current competition laws.	On the other hand, sophisticated pricing algorithms, supported by large datasets, may reduce market transparency though the use of individualized pricing, individualized promotions, and real-time or near-real time pricing, reducing the risk of conscious parallelism. The Section recommends the authorities continue to evaluate these developments closely. Absent agreements and concerted action, independent adoption of pricing algorithms is just conscious parallelism.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		Big data and algorithmic pricing may combine to allow conscious parallelism to function more frequently and effectively, which may generate deadweight losses. On the other hand, sophisticated pricing algorithms, supported by large datasets, may reduce market transparency though the	
		use of individualized pricing, individualized promotions, and real-time or near-real time pricing, reducing the risk of conscious parallelism.	
		The Section recommends that the Bureau continue to evaluate these developments closely.	
		<u>United States: FTC Hearing 7 – Competition and Consumer Protection Issues of Algorithms, Artificial Intelligence, and Predictive Analytics</u> (November 13-14, 2018)	
		If there isn't an agreement between competitors, then algorithms have the capacity to allow competitors to observe more quickly, match prices more quickly and maybe more effective than other types of observation capabilities that companies have had available to them in the past.	
		Without the underlying agreement, it's still parallel conduct, parallel pricing, which is not illegal under antitrust frameworks. And something enforcers have made clear is that independent action is still parallel.	

Appendix 6:

Privacy and Data Security Laws

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
1.	Cross-border Data Transfers and Data Localization Restrictions	European Commission: Comments on the European Commission's Public Consultation on Building the European Data Economy (April 26, 2017) Real Burden Created by Localization Requirements: Data localization requirements can impair competition It also may impede or prevent the development of new capabilities, technologies, or services. Small and medium-sized enterprises and could become less efficient and competitive in the global marketplace (e.g. cannot enjoy cloud tech) Certain requirements may be impractical for businesses that operate using complex server architectures with interlocking data sets, such as social networks and other global service providers. Consumers could lose control over the portability of their data and the ability to choose between service providers. Recommended Approach: Data localization requirements should be permitted only where they are demonstrably necessary to achieve a legitimate privacy and security objective that could not be achieved by less restrictive means. Alternative solutions will often satisfy the goals for which localization is proposed. For localization restrictions to assure public accessibility and/or supervision of legal authorities, the objective could be achieved by closer and more effective cooperation between Member States	The Section in the past commented on burdens created by localization and cross border data transfer requirements and potential negative effects of such requirements. Specific comments include: • Data transfer and related data localization requirements are not necessary for, and are indeed unrelated to, privacy protection or security concerns. • Data localization requirements can impair competition and may raise barriers to entry for cross-border competitors. • It also may impede or prevent the development of new capabilities, technologies, or services. It could be impractical for businesses that operate using complex server architectures with interlocking data sets. • In reality, the security if data depends on the administrative, physical, and technical safeguards that are put in place to protect the confidentiality, integrity, and availability of the data. Recommended Approach: Data localization requirements should be permitted only where they are demonstrably necessary to achieve a legitimate privacy and security objective that could not be achieved by less restrictive means, and only apply to a limited set of entities, if they can be justified. With respect to cross border data transfer requirements, it is reasonable to require data controllers to take responsibility for ensuring that the data is protected, by contract or otherwise. But it is important to create a flexible framework, which could evolve to take account of technological developments, increased global data flows and the interest of global entities.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		Data localization requirements should be applied principally to critical information infrastructure ("CII") operators.	
		India: Comments on the White Paper on a Data Protection Framework for India (January 31, 2018)	
		Data transfer and related data localization requirements are not necessary for, and are indeed unrelated to, privacy protection or security concerns.	
		They raise barriers to entry for cross-border competitors.	
		In reality, the security if data depends on the administrative, physical, and technical safeguards that are put in place to protect the confidentiality, integrity, and availability of the data.	
		India: Comments on the Personal Data Protection Bill 2018 (September 27, 2018)	
		It is recommended that drop the cross-border data transfers and data localization restrictions from the Bill.	
		This would provide the Bill with a more flexible framework, which could evolve to take account of technological developments, increased global data flows and the interest of global entities considering doing business in India.	
2.	Extraterritorial Application of the Data Protection Law	India: Comments on the White Paper on a Data Protection Framework for India (January 31, 2018)	The Section in the past recommended a limited approach to extraterritoriality, which was contained in the 1995 Data Protection Directive and the current E-Privacy Directive of EU. The Section's
		The key issues are to ensure that the law permits companies to predict whether it will apply to them, and to ensure that its application is consistent with general principles of international jurisdiction. Recommended that India adopt the longstanding approach to extraterritoriality contained in the 1995 Data Protection Directive and the current E-Privacy Directive of EU.	 comments on GDPR's approach include: If GDPR approach is adopted, suggest that the limitations on the two-prong test ("offering goods or services" and "monitoring the behavior") be considered from the recitals in GDPR and EU common law. "Monitoring" implies that the controller has a specific purpose in mind for the collection and subsequent reuse of the relevant data about an individual's behavior with the EU.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		If GDPR approach is adopted, suggest that the limitations on the two-prong test ("offering goods or services" and "monitoring the behavior"). India: Comments on the Personal Data Protection Bill 2018 (September 27, 2018) The current provisions seek to replicate Article 3 of the GDPR but they do not include the limiting recitals (or the EU common law principles that undergird those terms). ABA urges the drafter to conform to the entirety of the GDPR's approach - including its recitals and common law underpinning - rather than the current incomplete statement of the GDPR. European Commission: Comments on the European Data Protection Board Guidelines 3/2018 on the Territorial Scope of the GDPR (January 17, 2019) EU Controller Using A Processor Not Subject to GDPR: Disagree that Article 28(1) of the GDPR requires a controller to impose a general obligation on a processor not subject to the GDPR. EDPB should provide further guidance on the circumstances in which an EU controller should impose Article 28 (1) obligations on processors not in the EU. Applicability of Article 3(2)(a) to B2B Services: Article 3(2)(a) should apply only in circumstances where it is envisaged that the services will be provided directly to data subjects, and not where the services will be provided only to the firms that those data subjects represent. Monitoring the Behavior: Agree that the use of the word 'monitoring' implies that the controller has a specific purpose in mind for the collection and	Article 28(1) of the GDPR does not mean that a controller is required to impose a general obligation on a processor not subject to the GDPR to comply with the obligations of processors under the GDPR. Recommended Approach: The key issues are to ensure that the law permits companies to predict whether it will apply to them, and to ensure that its application is consistent with general principles of international jurisdiction. Clear guidance should be provided to explain what activities of data controllers would trigger the application of the law. Clear guidance should be provided to explain what will make a service provider subject to the law and limit the obligations that a data controller should impose on service providers that are not located in the jurisdiction.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		subsequent reuse of the relevant data about an individual's behavior with the EU. However, some activities listed in the Guidelines may not be considered that could trigger jurisdiction under the GDPR. • Behavioral Advertisement: Overbroad to assert that all "behavioral advertising" would necessarily trigger jurisdiction under the GDPR. • Geo-location Activities: GDPR should not apply if a geolocation analysis that offers a data subject who happens to be in a particular location a particular offer based solely on location, without storing that location or otherwise profiling the data subject. It is recommended that the guidelines explicitly specify that the detailed bulleted list (p.18) is suggestive, not definitive.	
3.	Scope of Personal Data	India: Comments on the White Paper on a Data Protection Framework for India (January 31, 2018) Personal Data: ABA supports the India White Paper's tentative conclusion to apply the GDPR's definition of "personal data," but suggest that the concept of "reasonable linking" be applied in addition to the GDPR's definition. Anonymization/Pseudonomization: Suggested that the concept of "reasonable efforts" be included when define whether data has been anonymized or pseudonomized. Sensitive Personal Data: The key to define "sensitive data" for India is to determine areas that are sensitive in the life of Indian data subjects. U.S. definitions, which have been based on specific cases, are generally based on predictions of actual harm if data is compromised. ABA suggested that India considers this fact-based approach (based on predictions of actual harm).	The Section in the past commented on the definition of "personal data" and generally recommend the GDPR definition of "personal data." Additional comments include: • The concept of "reasonable efforts" is recommended to be included when define whether data has been anonymized or pseudonomized. • The key to define "sensitive data" is to determine areas that are sensitive in the life of data subjects. Recommended Approach: An approach similar to GDPR and the U.S. FTC privacy framework—focusing on the means reasonably likely to be used to identify the natural personal and refer to relevant factors (e.g. cost/time required for identification)—is recommended. Similarly, the "reasonable efforts" approach should be included when defining whether data has been anonymized or pseudonomized and thus is no longer considered as personal data. The key to define "sensitive data" is to determine areas that are sensitive in the life of data subjects.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		India: Comments on the Personal Data Protection Bill 2018 (September 27, 2018) It is recommended that India consider an approach similar to GDPR and the U.S. FTC privacy framework - focusing on the means reasonably likely to be used to identify the natural personal to whom the data relates and refer to relevant factors (e.g. cost/time required for identification).	
4.	Breach Notification	India: Comments on the White Paper on a Data Protection Framework for India (January 31, 2018) Controllers to report security incidents "without unreasonable delay" will help to ensure that competent bodies receive prompt notice, while providing controllers with sufficient time to conduct a proper review of the security incident and mitigate any potential threats to the data subjects. India: Comments on the Personal Data Protection Bill 2018 (September 27, 2018) The Bill should be amended to state a standard for when notification is appropriate. Notification of significant data breaches shall be made "without unreasonable delay."	The Section's comments on breach notification focused on the timing of the notification, including (i) that the security incidents shall be reported to competent bodies "without unreasonable delay;" and (ii) a clear standard for the notification timeframe shall be provided. Recommended Approach: Notification of significant data breaches shall be made "without unreasonable delay." However, data controllers should be provided with sufficient time to conduct a proper review of the security incident and mitigate any potential threats to the data subjects. Clear guidance should be provided to data controllers and their service providers located outside of the jurisdiction regarding their reporting obligations.
5.	Consent/Notice/Processing Grounds	India: Comments on the White Paper on a Data Protection Framework for India (January 31, 2018) Consent and Other Processing Basis: A strict reliance on consent as a basis for processing can create issues. Implicit or opt-out consent is commonly used in online services and mobile applications. Rejecting legitimate interest as a basis could negatively impact the online and mobile markets.	The Section commented on consent and other processing basis and the approach toward notice in the past. It considered that a strict reliance on consent as a basis for processing can create issues. Recommended Approach: Rejecting legitimate interest and other non-consent based processing grounds (such as performance of contract) could negatively impact the online and mobile markets. Regulators should ensure that the compliance costs are minimal, fair, and proportional to the data controllers' size and revenue.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		Notice: Data controllers may be incentivized to develop effective notices through increased activity by industry trade groups, market leaders, consumers' rights groups or others that may be in a position to encourage sound data privacy practices. Data protection authority to also explore other non-enforcement measures that may relieve the burden on regulators and encourage market participants to bring value to consumers. A consent dashboard may be feasible assuming the compliance costs are minimal, fair, and proportional to the data controllers' size and revenue. India: Comments on the Personal Data Protection Bill 2018 (September 27, 2018) The proposed reasonable purpose approach shall include a balancing test that takes into account the interests of the controller, the effects on rights of the data subject, the public interest, etc. Make more explicit that "contractual necessity" is a basis of implied consent.	
6.	Processing for Purpose of Public Interest	India: Comments on the Personal Data Protection Bill 2018 (September 27, 2018) It is recommended that such processing be limited to purposes related to national security, counterterrorism and the investigation of serious crimes.	Recommended Approach: It is recommended that processing for the purpose of public interest be limited to purposes related to national security, counterterrorism and the investigation of serious crimes.
7.	Automated Decision Making and Profiling	India: Comments on the White Paper on a Data Protection Framework for India (January 31, 2018) India: Comments on the Personal Data Protection Bill 2018 (September 27, 2018) Any disclosure of the logic behind automated decisions should be subject to the protection of intellectual property rights so as to protect the ability of businesses to innovate and compete.	Recommended Approach Any disclosure of the logic behind automated decisions should be subject to the protection of intellectual property rights so as to protect the ability of businesses to innovate and compete.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
8.	Data Subject Right (Right to be Forgotten)	India: Comments on the White Paper on a Data Protection Framework for India (January 31, 2018) The right to be forgotten, should be implemented as a set of principles recognizing individuals' ability to cause the deletion of their personal information from digital memory where appropriate, rather than as an overriding personal right that may conflict with the need of some data controllers to maintain that data in certain circumstances. Overly broad terms could have unintended consequences, including: Denial of individual benefits Denial of an individual's ability to enforce legal rights Facilitating illegal activities Endangering health and safety Impeding the advancement of legal defenses India: Comments on the Personal Data Protection Bill 2018 (September 27, 2018) Reiterate that a principle-based approach would provide a vehicle for balancing individuals' interest in limiting permanent use of their data with the legitimate needs of those to whom they provided their data in the first place.	The Section commented on data subject rights (in particular, right to be forgotten) in the past and recommend a more balanced approach. Recommended Approach: It is important to provide a vehicle for balancing individuals' interest in limiting permanent use of their data with the legitimate needs of business. The right to be forgotten should not be defined overly broadly, as it may have unintended consequences.
9.	Accountability/Fines	India: Comments on the White Paper on a Data Protection Framework for India (January 31, 2018) Strict Liability: Recommend the application of a negligence standard that would require individuals to prove that the data controller did not act reasonably under the circumstances. If strict liability provisions are adopted, such provisions should be narrowly circumscribed and limited to data processing activities that are likely to cause actual, material harm to the individual.	 The Section's past comments related to strict liability include: If strict liability provisions are adopted, such provisions should be narrowly circumscribed and limited to data processing activities that are likely to cause actual, material harm to the individual. Joint and several liability would result in unjust treatment of innocent data transferors and transferees. It is unnecessary and overly burdensome to require by law that data controllers take out insurance policies to meet their potential liabilities under the data protection law. Penalties should be effective, proportionate, and have a deterrent effect.

No.	Common Issues	Comments on Draft Laws and Regulations	Key Comments and Recommended Approach
		Joint and Several Liability: Joint and several liability would result in unjust treatment of innocent data transferors and transferees. India's data protection framework should exclude joint and several liability, or at least narrowly circumscribe its application to instances in which two or more parties both caused damage to the individual. Insurance: It is unnecessary and overly burdensome to require by law that data controllers take out insurance policies to meet their potential liabilities under the data protection law. Penalties: Penalties should be effective, proportionate, and have a deterrent effect. Linking penalties to a high percentage of total worldwide turnover of the defaulting data controller in the preceding year could be disproportionate and excessively punitive. It is recommended that India provide discretion to the adjudicating authority to determine when a fine is appropriate and, if so, what amount should be assessed. It is also recommended that civil penalties should increase according to the relative seriousness of the violation. India: Comments on the Personal Data Protection Bill 2018 (September 27, 2018) It is recommended that the Bill be amended to add additional factors when imposing civil monetary penalties focusing on the responsibility of, and actions taken by, the data fiduciary or data processor; the degree of their cooperation with the Data Protection Authority; and the categories of personal data affected. It is also recommended that the Bill be amended to narrowly circumscribe and specifically define potential infringements that constitute criminal offenses. Individual criminal liability for corporate offenses should be removed from the Bill.	Linking penalties to a high percentage of total worldwide turnover of the defaulting data controller in the preceding year could be disproportionate and excessively punitive. Recommended Approach: It is unnecessary and overly burdensome to require by law that data controllers take out insurance policies to meet their potential liabilities under the data protection law. Penalties should be effective, proportionate, and have a deterrent effect. Linking penalties to a high percentage of total worldwide turnover of the defaulting data controller in the preceding year could be disproportionate and excessively punitive.