

COMPETITION AND MONOPOLY:

SINGLE-FIRM CONDUCT UNDER SECTION 2 OF THE SHERMAN ACT

U.S. DEPARTMENT OF JUSTICE



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EXECUTIVE SUMMARY

INTRODUCTION

The U.S. antitrust laws reflect a national commitment to the use of free markets to allocate resources efficiently and to spur the innovation that is the principal source of economic growth. Section 2 of the Sherman Act plays a unique role in U.S. antitrust law by prohibiting single-firm conduct that undermines the competitive process and thereby enables a firm to acquire, credibly threaten to acquire, or maintain monopoly power.

Competition and consumers are best served if section 2 standards are sound, clear, objective, effective, and administrable. After more than a century of evolution, section 2 standards have not entirely achieved these goals, and there has been a vigorous debate about the proper standards for evaluating unilateral conduct under section 2. In June 2006, the Department of Justice (Department) and the Federal Trade Commission (FTC) began a series of wide-ranging hearings relating to unilateral conduct under section 2. The hearings encompassed twenty-nine separate panels and were conducted over the course of an entire year. Academics, businesspeople, and antitrust practitioners presented a broad array of views.

This report synthesizes views expressed at the hearings, in extensive scholarly commentary, and in the jurisprudence of the Supreme Court and lower courts. It reflects the Department's enforcement policy and is intended to make progress toward the goal of sound, clear, objective, effective, and administrable standards for analyzing single-firm conduct under section 2.

CHAPTER 1: Overview

Chapter 1 provides an overview of section 2 and its application. This overview explains that the purpose of section 2 is to prevent conduct that harms the competitive process, while not discouraging aggressive competition, whether that aggressive competition is from monopolists or other competitors. Chapter 1 also articulates and elaborates on basic principles that have emerged from court decisions and commentary:

1. Single-firm conduct comes within the scope of section 2 only if the firm possesses, or is likely to achieve, monopoly power.
2. Section 2 does not prohibit the mere possession or exercise of monopoly power.
3. Acquiring or maintaining monopoly power through conduct harming the competitive process should be condemned.
4. Section 2 protects the competitive process but not individual competitors.
5. Distinguishing beneficial competitive conduct from harmful exclusionary or predatory conduct often is difficult.
6. Section 2 standards should prevent conduct that harms the competitive process, but should avoid overly broad prohibitions that suppress legitimate competition.
7. Section 2 standards should be understandable and clear to businesspeople and judges and must account for the possibility of error and administrative costs in their application.

CHAPTER 2: Monopoly Power

Chapter 2 addresses the meaning and identification of monopoly power.

Meaning of a Dominant Market Share. A dominant market share typically is a prerequisite for the possession of monopoly power, but it is only a starting point for determining whether a competitor possesses monopoly power. Competitive conditions must be such that the competitor can persistently charge prices well above competitive levels without substantial erosion of its dominant position through the expansion of incumbent rivals or the entry of new competitors. Where courts have found monopoly power—as opposed to market power—the defendant’s market share has been at least fifty percent and typically substantially higher.

When a firm has maintained a market share in excess of two-thirds for a significant period and the Department concludes that market conditions likely would prevent the erosion of its market position in the near future, the Department will presume that the firm possesses monopoly power absent convincing evidence to the contrary.

Market Definition. Defining the market involves an assessment of likely substitution by customers in response to an exercise of monopoly power. This assessment can be problematic in a monopoly-maintenance case because the threshold issue is whether the defendant already possesses, and hence already is exercising, monopoly power. It is important in those cases not to evaluate substitution possibilities at the prevailing monopoly price, but it is difficult to evaluate substitution possibilities at hypothetical prices significantly below prevailing levels. The Department views direct evidence of anticompetitive effects as useful but normally not sufficient by itself to demonstrate monopoly power in the absence of a defined antitrust market.

CHAPTER 3: General Conduct Standards

Chapter 3 initially discusses the importance of an appropriate framework that structures the analysis, including an efficient allocation of burdens of production and proof in litigation. The plaintiff should have the initial burden of

establishing that challenged conduct harms the competitive process and therefore has a potentially anticompetitive effect. If plaintiff carries that burden, defendant should have the opportunity to proffer and substantiate a procompetitive justification for the challenged conduct. If defendant does so, plaintiff then should have the burden of establishing that the challenged conduct is anticompetitive under the applicable standard. This allocation can enable courts to resolve cases more quickly and efficiently.

Turning to the general tests, the Department does not believe that any one test works well in all cases and encourages the development of conduct-specific tests and safe harbors, which are discussed in subsequent chapters. The five general tests discussed in the chapter are:

Effects-Balancing. Although focusing analysis on the effect on consumer welfare is appropriate, the Department does not believe that using an effects-balancing test as a general standard under section 2 is likely to maximize consumer welfare. The Department believes that it is better for long-run economic growth and consumer welfare not to incur the costs and errors from attempting to quantify and precisely balance procompetitive and anticompetitive effects as required under this test.

Profit-Sacrifice. The Department believes that a profit-sacrifice test that asks whether conduct is more profitable in the short run than other less-exclusionary conduct the firm could have undertaken raises serious concerns of enforcement error and administrability and should not be the test for section 2 liability. The Department believes that a firm should not be liable for failure to maximize its profits.

No-Economic-Sense. The Department finds the no-economic-sense test useful, among other things, as a counseling device to focus businesspeople on the reasons for undertaking potentially exclusionary conduct. At the same time, the Department does not believe that a trivial benefit should protect conduct that is significantly harmful to consumers and the

competitive process. Therefore, the Department does not believe that this test should serve as the general standard under section 2.

Equally Efficient Competitor. The Department finds it useful to ask in pricing cases whether conduct would exclude an equally efficient competitor. In non-pricing cases, that inquiry does not readily lead to administrable rules, and, even in pricing cases, there is difficulty in comparing the efficiency of two firms doing different things. Accordingly, the Department does not believe that this test should be the general standard for liability under section 2.

Disproportionality. In the absence of an applicable conduct-specific test, the Department believes that conduct should be unlawful under section 2 if its anticompetitive effects are shown to be substantially disproportionate to any associated procompetitive effects. While also subject to valid criticism, the test focuses on the consumer-welfare goals of antitrust and represents the best combination of effectiveness and administrability (including the need to avoid chilling beneficial competition) of the general tests identified to date.

CHAPTER 4: Predatory Pricing

Chapter 4—the first chapter addressing a specific category of potentially exclusionary conduct—focuses on predatory pricing. In 1993 the Supreme Court held that a plaintiff alleging predatory pricing must show that the defendant cut prices below an appropriate measure of its costs and had a dangerous probability of recouping its investment in below-cost prices. While acknowledging that above-cost pricing can sometimes be exclusionary, the Court held that attempting to identify such instances would harm beneficial price competition. The Department believes that the Court’s holding is consistent with promoting competition and consumer welfare under section 2.

Measure of Cost. The courts have not settled on an appropriate measure of cost for evaluating predatory-pricing claims. Consistent

with the thinking expressed in case law, the Department concludes that the appropriate measure of cost should identify loss-creating sales that could force an equally efficient rival out of the market and that such a measure should be administrable by businesses and the courts.

In most cases, the best cost measure likely will be average avoidable cost. This measure of cost includes fixed costs to the extent that they were incurred only because of the predatory strategy, for example, as a result of expanding capacity to enable the predatory sales. When an increment to a defendant’s output associated with the predatory strategy cannot be identified, the best cost measure typically is average variable cost. The Department does not favor the use of average variable cost in general because it does not focus on the predatory scheme itself and does not indicate as reliably whether the firm might be losing money to achieve anticompetitive ends.

Recoupment. The Department believes that the recoupment requirement is an important reality check in assessing predatory-pricing allegations. Without a dangerous probability that the investment in below-cost prices will be recouped through later supracompetitive pricing, below-cost prices most likely reflect nothing more than intense price competition that is in the interests of consumers. In some cases, focusing first on recoupment may avoid difficult issues in comparing prices with costs. The Department believes that recoupment outside the relevant market may be relevant in some cases.

Predatory Bidding. In 2007 the Supreme Court applied its two-part test for predatory pricing to predatory bidding. The Court reasoned that, in important respects, predatory bidding is the mirror image of predatory pricing and therefore that the same sort of analysis is required to avoid chilling procompetitive conduct. The Department supports the Court’s ruling and analysis.

CHAPTER 5: Tying

Chapter 5 discusses various forms of tying—selling a product only on the condition that the buyer also purchase a second product. Examples of tying include contractual restrictions on future purchases of consumable complements to a durable good, the simultaneous sale of two or more products only in a bundle, and linking two products technologically.

In some circumstances, tying can allow a competitor with monopoly power over one product to acquire monopoly power in a tied product or to maintain its monopoly in the tying product. Those circumstances, however, are limited.

In many others, tying can promote efficiency and benefit consumers through a reduction in production or distribution costs. It also can be used to price discriminate, which generally does not create or maintain monopoly power. Consequently, the Department believes that the historical hostility of the law to tying is unjustified. In particular, the qualified rule of per se illegality applicable to tying is inconsistent with the Supreme Court's modern antitrust decisions and should be abandoned.

Tying in the form of technologically linking products is an area where enforcement intervention poses a particular risk of harming consumers more than it helps them in the long run. Technological tying often efficiently gives consumers features they want and judicial control of product design risks chilling innovation. This form of tying, therefore, should be condemned only in exceptional cases, such as when integrating two separate products serves no purpose other than to disadvantage competitors and harms the competitive process.

CHAPTER 6: Bundled and Loyalty Discounts

Chapter 6 considers two particular pricing practices: bundled discounts and loyalty discounts.

Bundled Discounts. When a defendant's rivals can effectively compete on a bundle-to-

bundle basis, bundled discounting is much like single-product price cutting, and the practice is best analyzed as predatory pricing.

When a defendant's rivals cannot compete bundle-to-bundle, discounts or rebates work more like tying, and a different analysis is appropriate. In those circumstances, the Department believes a cost-based safe harbor for bundled discounting, in which an imputed price for the item (or items) in the bundle potentially subject to competition is computed by allocating to that item (or items) the entire discount or rebate received by a customer, is appropriate. The rationale of this safe harbor is that an equally efficient competitor that does not sell all the items in the bundle would not be excluded if this imputed price exceeds an appropriate measure of a defendant's cost.

Bundled discounting failing this safe harbor is not necessarily anticompetitive and should not be presumed to be so. Rather, a plaintiff should be required to demonstrate that the practice has harmed the competitive process or likely would do so if allowed to continue. If the defendant demonstrates that the practice has a procompetitive explanation, it should be condemned only if plaintiff demonstrates a substantially disproportionate anticompetitive harm.

Loyalty Discounts. Chapter 6 also considers single-product loyalty discounts. Single-product loyalty discounts often are procompetitive, but they can be anticompetitive under certain limited circumstances. The Department is inclined to treat this practice as predatory pricing and therefore consider the discounting lawful unless the seller's revenues are less than an appropriate measure of its costs. This approach is administrable, guards against chilling legitimate discounting, and is especially appropriate if the seller's rivals can reasonably compete for the entirety of a customer's purchases.

When a significant portion of a customer's purchases are not subject to meaningful competition, the Department recognizes the possibility that single-product loyalty discounts

might produce an anticompetitive effect even though the discounted price over all of a customer's purchases exceeds the seller's cost. Accordingly, the Department believes that further study of the real-world impact of the practice is necessary before concluding that standard predatory-pricing analysis is appropriate in all cases.

CHAPTER 7: Unilateral, Unconditional Refusals to Deal with Rivals

Chapter 7 discusses unilateral, unconditional refusals by firms with monopoly power to deal with their rivals. Such refusals can include refusing to sell inputs, license intellectual property rights, or share scarce resources. In certain decisions, the Supreme Court held that such refusals violated section 2, but the Court's most recent decision on this subject took a very cautious approach. Compelling access to inputs, property rights, or resources undoubtedly can enhance short-term price competition, but doing so can do more harm than good to the competitive process over the longer term.

The Department agrees with the Court that forcing a competitor with monopoly power to deal with rivals can undermine the incentive of either or both to innovate. The Department also agrees with the Court that judges and enforcement agencies are ill-equipped to set and supervise the terms on which inputs, property rights, or resources are provided. Thus, the Department concludes that antitrust liability for mere unilateral, unconditional refusals to deal with rivals should not play a meaningful role in section 2 enforcement.

CHAPTER 8: Exclusive Dealing

Chapter 8 addresses the practice of exclusive dealing. Exclusive dealing can enhance efficiency by aligning the incentives of trading partners, by preventing free riding, and in other ways. Exclusive dealing also can undermine the competitive process by, for example, barring smaller competitors from efficient distribution channels and denying them the

ability to operate at efficient scale.

The Department believes that exclusive-dealing arrangements foreclosing less than thirty percent of existing customers or effective distribution should not be illegal. The Department does not believe that the legality of an exclusive-dealing arrangement should be determined solely by the explicit duration of the contract or agreement. When a firm with lawful monopoly power utilizes exclusive dealing, the Department will examine whether the exclusive dealing contributed significantly to maintaining monopoly power and whether alternative distribution channels allow competitors to pose a real threat to the monopoly before potentially imposing liability.

CHAPTER 9: Remedies

Chapter 9 focuses on remedies in section 2 cases. Implementing effective remedies is key to section 2 enforcement.

Equitable Remedies. Section 2 equitable remedies should terminate a defendant's unlawful conduct, prevent its recurrence, and re-establish the opportunity for competition. And they should do so without imposing undue costs on the court or the parties, without unnecessarily chilling legitimate competition, and without undermining incentives to invest and innovate. This often is a daunting challenge.

The Department believes that prohibiting a defendant from engaging in specific acts, defined by clear and objective criteria, is the proper remedy if it would be effective. In some circumstances, however, re-establishing the opportunity for competition requires the imposition of additional affirmative obligations on defendant. Structural remedies, including various forms of divestiture, may be appropriate if there is a clear, significant causal connection between defendant's monopoly power and the unlawful acts. Radical restructuring of the defendant, however, is appropriate only if there is no other way to achieve the remedial goals and the determination is made that such restructuring

would likely benefit consumers.

Monetary Remedies. The Department believes that further consideration of appropriate monetary damages and penalties for section 2 violations may be useful.

CHAPTER 10: International Perspective

Chapter 10 offers an international perspective. Over one hundred nations have antitrust laws, nearly all including provisions on single-firm exclusionary conduct, but there are significant differences among various countries' laws, legal institutions, and enforcement policies. With increasingly globalized markets, the diversity of competition regimes has raised concerns. Firms doing business globally, when confronted with, for example, a product-design decision, may be pushed to conform to the rules of the most restrictive jurisdiction. Certain types of remedies, such as mandatory disclosures of intellectual property, also have global impacts.

The Department and the FTC have addressed the challenges posed by multi-jurisdictional enforcement against single-firm exclusionary conduct in several ways. They have entered into bilateral cooperation agreements with seven countries and the European Communities. They actively participate in several international organizations, such as the International Competition Network and the Organisation for Economic Co-Operation and Development. And they provide technical assistance to nations in the early stages of adopting and implementing antitrust laws. The Department will continue to explore ways of strengthening cooperation with counterparts in other jurisdictions and increasing convergence on sound enforcement policies.

CONCLUSION

The Department believes that the hearings advanced the debate with respect to the appropriate legal standards for single-firm conduct under section 2 of the Sherman Act. The Department hopes that this report will contribute to the public debate in this complex

but important area, and that it makes progress toward the goal of sound, clear, objective, effective, and administrable standards for analyzing single-firm conduct. The Department, of course, will continue to review the legal and economic scholarship in this area, to learn from its own investigations and cases, to consult with other enforcement officials, and to engage in the public dialogue over how best to advance that goal in the future.

INTRODUCTION

The U.S. antitrust laws embody a commitment to preserving free markets unfettered by unreasonable restraints of trade. Free markets are the most effective means for allocating resources to their highest valued uses and maximizing consumer welfare. Competition sharpens firms' incentives to cut costs and improve productivity and stimulates product and process innovation. Competition necessarily results in some firms losing while others succeed. That risk creates a vibrant and dynamic rivalry that maximizes economic growth.

The antitrust laws protect this competitive process. Section 2 of the Sherman Act prohibits a firm from illegally acquiring or maintaining a monopoly in any market. This prohibition represents a key component of U.S. antitrust enforcement. Unlike section 1 of the Sherman Act or section 7 of the Clayton Act, section 2 specifically targets single-firm conduct by firms with monopoly power or a dangerous probability of attaining such power. Firms possessing monopoly power can reduce output and charge higher prices than would prevail under competitive conditions and thereby harm consumers.

Section 2 enforcement is an area of great debate within the antitrust world today. Legal and economic scholarship has revealed that many single-firm practices once presumed to violate section 2 can create efficiencies and benefit consumers. At the same time, there is a greater appreciation for the potential harm from excessive restrictions on single-firm conduct, particularly harm to innovation, which is the most important source of economic growth. These developments cause some to question whether certain unilateral conduct

should be per se lawful, whether penalties for section 2 violations should be reduced, and even whether section 2 should be repealed.

Others, however, contend that certain potentially anticompetitive practices may be more prevalent, or at least more theoretically possible, than earlier scholarship suggested. In addition, some suggest that certain characteristics of today's markets, for example, the increasing emergence of network effects, make timely and effective section 2 enforcement even more important than in the past.

This debate led the Department of Justice (Department) and the Federal Trade Commission (FTC) in June 2006 to embark on a year-long series of joint hearings—involving 29 panels and 119 witnesses—to study issues relating to enforcement of section 2 against single-firm conduct.¹ The hearings covered a wide range of topics. Some were broad, such as the sessions on monopoly power, remedies, and international issues. Others focused more narrowly on specific conduct, including predatory pricing and bidding, tying, bundled and single-product loyalty discounts, refusals to deal with rivals, and exclusive dealing. Four of the sessions—held in Berkeley, California, and Chicago, Illinois—were devoted to hearing the views of business representatives.

The sessions included current and former antitrust enforcement officials from the United States and abroad, leading academic

¹ The hearing record, including transcripts of the hearings, presentations, written statements from various panelists, and public comments, is available on the Department's website for the hearings: http://www.usdoj.gov/atr/public/hearings/single_firm/sfchearing.htm.

economists and legal scholars, antitrust law practitioners, and representatives of the business community.² In addition, the Department and the FTC requested and received comments from lawyers, economists, the business community, consumers, academics, and other interested parties.

The Department expected that the section 2 hearings would help inform its enforcement efforts. In addition, the Department, along with the FTC, plays an important role in the United States as an advocate of sound competition law and policy before courts and in consultation with government agencies and legislatures. The Department fulfills this role by participating as *amicus curiae* in important antitrust cases, issuing guidelines and other policy statements, and conducting workshops on a wide variety of important antitrust issues. The hearings on section 2 unilateral-conduct standards are an important example of these broader efforts to ensure the law achieves its objective of maximizing economic growth by protecting the competitive process and consumer welfare.

There was consensus at the hearings and the Department agrees that firms with, or seeking to acquire, monopoly power can act in ways that should be condemned because they harm competition and consumers. There also was consensus regarding the need for sound, clear, objective, effective, and administrable rules enabling businesses to conform their behavior to the law and affording them a degree of certainty in their planning.

The Department approached this report by analyzing the extensive hearing record in the context of relevant case law and scholarship, with the objectives of clarifying the analytical framework for assessing the legality of single-firm conduct under section 2 and providing enhanced guidance to courts, antitrust counselors, and the business community. The report is divided into ten chapters.

Chapter 1 discusses the importance of

section 2 and explicates the principles that guide section 2 enforcement.

Chapter 2 addresses monopoly power, exploring topics such as the definition of monopoly power, proof of monopoly power, and the role of market share, including market-share safe harbors, presumptions, and limitations.

Chapter 3 discusses the importance of a framework for legal analysis and examines several general tests that commentators have proposed for evaluating section 2 claims.

Chapters 4–8 explore individual categories of conduct that have been challenged under section 2 and, where appropriate, recommend specific tests to be applied and specific factors to be considered.

Chapter 4 discusses predatory pricing and bidding.

Chapter 5 discusses tying.

Chapter 6 examines bundled and single-product loyalty discounts.

Chapter 7 analyzes unilateral, unconditional refusals to deal with rivals.

Chapter 8 addresses exclusive dealing.

Chapter 9 deals with the critical subject of remedies, identifying remedial goals and examining the benefits and costs of different remedies.

Chapter 10 addresses issues raised by the proliferation of antitrust regimes throughout the world and how U.S. federal enforcement agencies, international organizations, and others are attempting to ameliorate conflicts and seek convergence in the competitive analysis of single-firm conduct.

The Department remains committed to vigilant and sound enforcement of section 2 and to the development and application of sound, clear, objective, effective, and administrable tests. Such tests can provide businesses guidance that will more effectively deter violations. They also enhance enforcement efforts by reducing the time and expense of litigating alleged violations and justifying strong remedies when violations are proved.

Where appropriate, the Department has set

² A list of the participants in the hearings, along with their affiliations at the time of their participation, is provided in the Appendix.

out “safe harbors” to create certainty for businesses and encourage procompetitive activity. In other areas, the Department has articulated specific standards that should be applied. In still other areas, the Department has identified issues for further study and evaluation. In all cases, the central tenets that the law is intended to protect competition and that enforcement decisions are to be based on sound facts and economics will continue to guide the Department.

The Department thanks the hearing panelists and those who submitted public comments for the contribution of their expertise and time to this project. The Department also thanks the University of Chicago Graduate School of Business and the Competition and Policy Center, the Berkeley Center for Law and Technology, and the Haas School of Business at the University of California at Berkeley for hosting sessions of the hearings.

Finally, the Department acknowledges and thanks the extraordinary efforts of the staff at the Antitrust Division and the FTC in planning, organizing, and conducting the hearings and in analyzing the extensive record.³ Without their dedicated efforts, neither the hearings nor this report would have been possible.

³ While the Department is grateful to the many FTC personnel for their contributions throughout the process, the Department remains solely responsible for the contents of this report.

CHAPTER 1

SINGLE-FIRM CONDUCT AND SECTION 2 OF THE SHERMAN ACT: AN OVERVIEW

This chapter provides an overview of section 2 and its application to single-firm conduct. Part I describes the elements of the primary section 2 offenses—monopolization and attempted monopolization. Part II discusses the purpose of section 2 and the important role it plays in U.S. antitrust enforcement. Part III identifies key enforcement principles that flow from the U.S. experience with section 2.

I. The Structure and Scope of Section 2

Section 2 of the Sherman Act makes it unlawful for any person to “monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations”¹

Section 2 establishes three offenses, commonly termed “monopolization,” “attempted monopolization,” and “conspiracy to monopolize.”² Although this report and most of the legal and economic debate focus specifically on the two forms of monopolization—monopoly acquisition and monopoly maintenance—much of the discussion applies to the attempt offense as well.³

A. Monopolization

At its core, section 2 makes it illegal to

acquire or maintain monopoly power through improper means. The long-standing requirement for monopolization is both “(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.”⁴

Monopolization requires (1) monopoly power and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.

Regarding the first element, it is “settled law” that the offense of monopolization requires “the possession of monopoly power in the relevant market.”⁵ As discussed in chapter 2, monopoly power means substantial market power that is durable rather than fleeting—market power being the ability to raise prices profitability above those that would be charged in a competitive market.⁶

But, as the second element makes clear, “the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive conduct.”⁷ Such conduct often is described as “exclusionary” or “predatory” conduct. This element includes both conduct used to acquire a monopoly unlawfully and conduct used to maintain a

¹ 15 U.S.C. § 2 (2000).

² See, e.g., 1 SECTION OF ANTITRUST LAW, AM. BAR ASS’N, ANTITRUST LAW DEVELOPMENTS 225, 317 (6th ed. 2007).

³ The conspiracy to monopolize offense addresses concerted action directed at the acquisition of monopoly power, *see generally id.* at 317–22, and is largely outside the scope of this report because the hearings focused on the legal treatment of unilateral conduct.

⁴ *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966).

⁵ *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004).

⁶ See *infra* Chapter 2, Part II.

⁷ *Trinko*, 540 U.S. at 407 (emphasis omitted).

monopoly unlawfully. A wide range of unilateral conduct has been challenged under section 2, and it often can be difficult to determine whether the conduct of a firm with monopoly power is anticompetitive.

B. Attempted Monopolization

Section 2 also proscribes “attempt[s] to monopolize.”⁸ Establishing attempted monopolization requires proof “(1) that the defendant has engaged in predatory or anticompetitive conduct with (2) a specific intent to monopolize and (3) a dangerous probability of achieving monopoly power.”⁹ It is “not necessary to show that success rewarded [the] attempt to monopolize;”¹⁰ rather, “when that intent and the consequent dangerous probability exist, this statute, like many others and like the common law in some cases, directs itself against the dangerous probability as well as against the completed result.”¹¹

Attempted monopolization requires (1) anticompetitive conduct, (2) a specific intent to monopolize, and (3) a dangerous probability of achieving monopoly power.

The same principles are applied in evaluating both attempt and monopolization claims.¹² Conduct that is legal for a monopolist is also legal for an aspiring monopolist.¹³ But conduct that is illegal for a monopolist may be legal for a firm that lacks monopoly power

because certain conduct may not have anticompetitive effects unless undertaken by a firm already possessing monopoly power.¹⁴

Specific intent to monopolize does not mean “an intent to compete vigorously;”¹⁵ rather, it entails “a specific intent to destroy competition or build monopoly.”¹⁶ Some courts have criticized the intent element as nebulous and a distraction from proper analysis of the potential competitive effects of the challenged conduct.¹⁷ One treatise concludes that “‘objective intent’ manifested by the use of prohibited means should be sufficient to satisfy the intent component of attempt to monopolize”¹⁸ and that “consciousness of wrong-doing is not itself important, except insofar as it (1) bears on the appraisal of ambiguous conduct or (2) limits the reach of the offense by those courts that improperly undervalue the power component of the attempt offense.”¹⁹

The “dangerous probability” inquiry requires consideration of “the relevant market and the defendant’s ability to lessen or destroy

¹⁴ *United States v. Dentsply Int’l, Inc.*, 399 F.3d 181, 187 (3d Cir. 2005) (“Behavior that otherwise might comply with antitrust law may be impermissibly exclusionary when practiced by a monopolist.”); 3A PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶ 806e (2d ed. 2002).

¹⁵ *Spectrum Sports*, 506 U.S. at 459; see also AREEDA & HOVENKAMP, *supra* note 14, ¶ 805b1, at 340 (“There is at least one kind of intent that the proscribed ‘specific intent’ clearly cannot include: the mere intention to prevail over one’s rivals. To declare that intention unlawful would defeat the antitrust goal of encouraging competition . . . which is heavily motivated by such an intent.” (footnote omitted)).

¹⁶ *Times-Picayune Publ’g Co. v. United States*, 345 U.S. 594, 626 (1953).

¹⁷ See, e.g., *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, 881 F.2d 1396, 1402 (7th Cir. 1989) (Easterbrook, J.) (“Intent does not help to separate competition from attempted monopolization and invites juries to penalize hard competition. . . . Stripping intent away brings the real economic questions to the fore at the same time as it streamlines antitrust litigation.”).

¹⁸ AREEDA & HOVENKAMP, *supra* note 14, ¶ 805b2, at 342.

¹⁹ *Id.* ¶ 805a, at 339–40.

⁸ 15 U.S.C. § 2 (2000).

⁹ *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993).

¹⁰ *Lorain Journal Co. v. United States*, 342 U.S. 143, 153 (1951).

¹¹ *Spectrum Sports*, 506 U.S. at 455 (quoting *Swift & Co. v. United States*, 196 U.S. 375, 396 (1905)).

¹² See SECTION OF ANTITRUST LAW, *supra* note 2, at 307 (“The same principles used in the monopolization context to distinguish aggressive competition from anticompetitive exclusion thus apply in attempt cases.”).

¹³ *Olympia Equip. Leasing Co. v. W. Union Tel. Co.*, 797 F.2d 370, 373 (7th Cir. 1986) (Posner, J.) (citing 3 PHILLIP E. AREEDA & DONALD F. TURNER, *ANTITRUST LAW* ¶ 828a (1978)).

competition in that market.”²⁰ In making these assessments, lower courts have relied on the same factors used to ascertain whether a defendant charged with monopolization has monopoly power,²¹ while recognizing that a lesser quantum of market power can suffice.²²

II. The Purpose of Section 2 and Its Important Role in Sound Antitrust Enforcement

The statutory language of section 2 is terse. Its framers left the statute’s centerpiece – what it means to “monopolize” – undefined, and the statutory language offers no further guidance in identifying prohibited conduct.²³ Instead, Congress gave the Act “a generality and adaptability comparable to that found to be desirable in constitutional provisions”²⁴ and “expected the courts to give shape to the statute’s broad mandate by drawing on the

common-law tradition”²⁵ in furtherance of the underlying statutory goals.

Section 2 serves the same fundamental purpose as the other core provisions of U.S. antitrust law: promoting a market-based economy that increases economic growth and maximizes the wealth and prosperity of our society. As the Supreme Court has explained:

The Sherman Act was designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade. It rests on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality and the greatest material progress²⁶

Section 2 achieves this end by prohibiting conduct that results in the acquisition or maintenance of monopoly power, thereby preserving a competitive environment that gives firms incentives to spur economic growth. Competition spurs companies to reduce costs, improve the quality of their products, invent new products, educate consumers, and engage in a wide range of other activity that benefits consumer welfare. It is the process by which more efficient firms win out and society’s limited resources are allocated as efficiently as possible.²⁷

Section 2 also advances its core purpose by ensuring that it does not prohibit aggressive competition. Competition is an inherently dynamic process. It works because firms strive to attract sales by innovating and otherwise seeking to please consumers, even if that means rivals will be less successful or never materialize at all. Failure – in the form of lost sales, reduced profits, and even going out of business – is a natural and indeed essential part of this competitive process. “Competition is a

²⁰ *Spectrum Sports*, 506 U.S. at 456.

²¹ See, e.g., *United States v. Microsoft Corp.*, 253 F.3d 34, 81 (D.C. Cir. 2001) (en banc) (per curiam) (“Defining a market for an attempted monopolization claim involves the same steps as defining a market for a monopoly maintenance claim”); SECTION OF ANTITRUST LAW, *supra* note 2, at 312–17 (cataloging factors considered by courts, including, most importantly, market share and barriers to entry).

²² See, e.g., *Rebel Oil Co. v. Atl. Richfield Co.*, 51 F.3d 1421, 1438 (9th Cir. 1995) (“[T]he minimum showing of market share required in an attempt case is a lower quantum than the minimum showing required in an actual monopolization case.”); SECTION OF ANTITRUST LAW, *supra* note 2, at 312.

²³ 15 U.S.C. § 2 (2000); see also 3 AREEDA & HOVENKAMP, *supra* note 14, ¶ 632, at 49 (“[T]he question whether judicial intervention under §2 requires more than monopoly is not answered by the words of the statute.”); ROBERT H. BORK, *THE ANTITRUST PARADOX* 57 (1978) (“The bare language of the Sherman Act conveys little”); Frank H. Easterbrook, *Vertical Arrangements and the Rule of Reason*, 53 ANTITRUST L.J. 135, 136 (1984) (“The language of the Sherman Act governs no real cases.”); Thomas E. Kauper, *Section Two of the Sherman Act: The Search for Standards*, 93 GEO. L.J. 1623, 1623 (2005) (“Over its 114-year history, Section Two of the Sherman Act has been a source of puzzlement to lawyers, judges and scholars, a puzzlement derived in large part from the statute’s extraordinary brevity.” (footnote omitted)).

²⁴ *Appalachian Coals, Inc. v. United States*, 288 U.S. 344, 360 (1933).

²⁵ *Nat’l Soc’y of Prof’l Eng’rs v. United States*, 435 U.S. 679, 688 (1978).

²⁶ *N. Pac. Ry. Co. v. United States*, 356 U.S. 1, 4 (1958).

²⁷ See 2B PHILLIP E. AREEDA ET AL., ANTITRUST LAW ¶ 402 (3d ed. 2007). See generally WILLIAM W. LEWIS, *THE POWER OF PRODUCTIVITY: WEALTH, POVERTY, AND THE THREAT TO GLOBAL STABILITY* 13–14 (2004).

ruthless process. A firm that reduces cost and expands sales injures rivals—sometimes fatally.”²⁸ While it may be tempting to try to protect competitors, such a policy would be antithetical to the free-market competitive process on which we depend for prosperity and growth.

Likewise, although monopoly has long been recognized as having the harmful effects of higher prices, curtailed output, lowered quality, and reduced innovation,²⁹ it can also be the outcome of the very competitive striving we prize. “[A]n efficient firm may capture unsatisfied customers from an inefficient rival,” and this “is precisely the sort of competition that promotes the consumer interests that the Sherman Act aims to foster.”³⁰ Indeed, as courts and enforcers have in recent years come to better appreciate, the prospect of monopoly profits may well be what “attracts ‘business acumen’ in the first place; it induces risk taking that produces innovation and economic growth.”³¹ Competition is ill-served by insisting that firms pull their competitive punches so as to avoid the degree of marketplace success that gives them monopoly power or by demanding that winning firms, once they achieve such

power, “lie down and play dead.”³²

Section 2 thus aims neither to eradicate monopoly itself, nor to prevent firms from exercising the monopoly power their legitimate success has generated, but rather to protect the process of competition that spurs firms to succeed. The law encourages all firms—monopolists and challengers alike—to continue striving. It does this by preventing firms from achieving monopoly, or taking steps to entrench their existing monopoly power, through means incompatible with the competitive process.

III. Principles that Have Guided the Evolution of Section 2 Standards and Enforcement

The history of section 2 reflects an ongoing quest to align the statute’s application with the underlying goals of the antitrust laws. Consistent with the law’s common-law character, courts have interpreted the Sherman Act’s broad mandate differently over time and have revisited particular section 2 rules in response to advances in economic learning, changes in the U.S. economy, and experience with the application of section 2 to real-world conduct. Today, a consensus—as reflected in both judicial decisions³³ and the views of a broad cross-section of commentators—exists on at least seven core principles regarding section 2, each of which is discussed in the sections that follow:

- Unilateral conduct is outside the purview of section 2 unless the actor possesses

²⁸ Ball Mem’l Hosp., Inc. v. Mut. Hosp. Ins., Inc., 784 F.2d 1325, 1338 (7th Cir. 1986) (Easterbrook, J.).

²⁹ See, e.g., Standard Oil Co. of N.J. v. United States, 221 U.S. 1, 52 (1911) (citing the danger that a monopoly will “fix the price,” impose a “limitation on production,” or cause a “deterioration in quality of the monopolized article”); Sherman Act Section 2 Joint Hearing: Empirical Perspectives Session Hr’g Tr. 13, Sept. 26, 2006 [hereinafter Sept. 26 Hr’g Tr.] (Scherer) (observing that reluctance to “cannibalize the rents that they are earning on the products that they already have marketed” may make monopolists “sluggish innovators”); Sherman Act Section 2 Joint Hearing: Welcome and Overview of Hearings Hr’g Tr. 25, June 20, 2006 [hereinafter June 20 Hr’g Tr.] (Barnett) (identifying as “a major harm of monopoly” the possibility that a monopolist may not feel pressure to innovate).

³⁰ Copperweld Corp. v. Independence Tube Corp., 467 U.S. 752, 767 (1984).

³¹ Verizon Commc’ns, Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004); see also June 20 Hr’g Tr., *supra* note 29, at 25–27 (Barnett).

³² Goldwasser v. Ameritech Corp., 222 F.3d 390, 397 (7th Cir. 2000).

³³ Underscoring the degree of consensus on many antitrust matters today, the Justices of the Supreme Court have shown remarkable agreement in recent antitrust matters. The aggregate voting totals for the twelve antitrust cases decided over the past decade show ninety-one votes in favor of the judgment and only thirteen in dissent. Even more striking, and directly relevant to this report, all three cases addressing claims under section 2 were decided without dissent. See *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 127 S.Ct. 1069 (2007); *Trinko*, 540 U.S. 398; *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128 (1998).

monopoly power or is likely to achieve it.

- The mere possession or exercise of monopoly power is not an offense; the law addresses only the anticompetitive acquisition or maintenance of such power (and certain related attempts).
- Acquiring or maintaining monopoly power through assaults on the competitive process harms consumers and is to be condemned.
- Mere harm to competitors—without harm to the competitive process—does not violate section 2.
- Competitive and exclusionary conduct can look alike—indeed, the same conduct can have both beneficial and exclusionary effects—making it hard to distinguish conduct that should be deemed unlawful from conduct that should not.
- Because competitive and exclusionary conduct often look alike, courts and enforcers need to be concerned with both underdeterrence and overdeterrence.
- Standards for applying section 2 should take into account the costs, including error and administrative costs, associated with courts and enforcers applying those standards in individual cases and businesses applying them in their own day-to-day decision making.

A. The Monopoly-Power Requirement

Section 2's unilateral-conduct provisions apply only to firms that already possess monopoly power or have a dangerous probability of achieving monopoly power. This core requirement's importance as a basic building block of section 2 application to unilateral conduct should not be overlooked. Among other things, this requirement ensures that conduct within the statute's scope poses some realistic threat to the competitive process, and it also provides certainty to firms that lack monopoly power (or any realistic likelihood of attaining it) that they need not constrain their vigorous and creative unilateral-business

strategies out of fear of section 2 liability.³⁴

As the Supreme Court explained in its 1984 *Copperweld* decision, because "robust competition" and "conduct with long-run anticompetitive effects" may be difficult to distinguish in the single-firm context, Congress had authorized "scrutiny of single firms" only where they "pose[d] a danger of monopolization."³⁵ The application of the monopoly-power requirement is discussed in detail in chapter 2 of the report.

B. The Anticompetitive-Conduct Requirement

Section 2 prohibits acquiring or maintaining (and in some cases attempting to acquire) monopoly power only through improper means.³⁶ As long as a firm utilizes only lawful means, it is free to strive for competitive success and reap the benefits of whatever market position (including monopoly) that success brings, including charging whatever price the market will bear. Prohibiting the mere possession of monopoly power is inconsistent with harnessing the competitive process to achieve economic growth.

Nearly a century ago, in *Standard Oil*, one of the Supreme Court's first monopolization cases, the Court observed that the Act does not include "any direct prohibition against monopoly in the concrete."³⁷ The Court thus rejected the United States's assertion that section 2 bars the attainment of monopoly or monopoly power regardless of the means and instead held that without unlawful conduct, mere "size, aggregated capital, power and volume of business are not monopolizing in a legal sense."³⁸

United States v. Aluminum Co. of America re-emphasized *Standard Oil*'s distinction between the mere possession of monopoly and unlawful

³⁴ See John Vickers, *Market Power in Competition Cases*, 2 EUR. COMPETITION J. 3, 12 (2006).

³⁵ 467 U.S. at 768.

³⁶ See *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993); *United States v. Grinnell*, 384 U.S. 563, 570–71 (1966).

³⁷ 221 U.S. 1, 62 (1911).

³⁸ *Id.* at 10; see also *id.* at 62.

monopolization as a key analytical concept.³⁹ Writing for the Second Circuit, Judge Hand reasoned that, simply because Alcoa had a monopoly in the market for ingot, it did “not follow” that “it [had] ‘monopolized’” the market: “[I]t may not have achieved monopoly; monopoly may have been thrust upon it.”⁴⁰ The court determined that mere “size does not determine guilt” under section 2 and that monopoly can result from causes that are not unlawful, such as “by force of accident” or where a market is so limited it can profitably accommodate only one firm.⁴¹ Further, the court observed that monopoly can result from conduct that clearly is within the spirit of the antitrust laws. Where “[a] single producer may be the survivor out of a group of active competitors, merely by virtue of his superior skill, foresight and industry,” punishment of that producer would run counter to the spirit of the antitrust laws: “The successful competitor, having been urged to compete, must not be turned upon when he wins.”⁴²

Twenty years after *Alcoa*, and more than fifty years after *Standard Oil*, the Supreme Court articulated in *Grinnell*⁴³ what remains the classic formulation of the section 2 prohibition. Drawing from *Alcoa*, the Court condemned “the willful acquisition or maintenance of [monopoly] power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.”⁴⁴

C. Assaults on the Competitive Process Should Be Condemned

Competition has long stood as the touchstone of the Sherman Act. “The law,” the Supreme Court has emphasized, “directs itself not against conduct which is competitive, even severely so, but against conduct which unfairly tends to destroy competition itself.”⁴⁵ The

Sherman Act rests on “a legislative judgment that ultimately competition will produce not only lower prices, but also better goods and services.”⁴⁶ Section 2 stands as a vital safeguard of that competitive process. As Assistant Attorney General Thomas O. Barnett emphasized at the commencement of the hearings, “individual firms with . . . monopoly power can act anticompetitively and harm consumer welfare.”⁴⁷ Firms with ill-gotten monopoly power can inflict on consumers higher prices, reduced output, and poorer quality goods or services.⁴⁸ Additionally, in certain circumstances, the existence of a monopoly can stymie innovation.⁴⁹ Section 2 enforcement saves

458 (1993).

⁴⁶ *Nat’l Soc’y of Prof’l Eng’rs v. United States*, 435 U.S. 679, 695 (1978). As an important corollary, it is now generally accepted that section 2 may not be enforced to achieve other ends, such as the protection of certain kinds of enterprises or the furtherance of environmental, social, or other interests. *See generally* RICHARD A. POSNER, *ANTITRUST LAW* vii–x (2d ed. 2001). That is not to say that these other interests are not important—they are—but they should be addressed through other tools, not the antitrust laws.

⁴⁷ June 20 Hr’g Tr., *supra* note 29, at 35 (Barnett); *see also id.* at 9 (Majoras) (stressing that “private actors can and do distort competition” and that “halting conduct that goes beyond aggressive competition to distorting it is vital to promoting vigorous competition and maximizing consumer welfare”).

⁴⁸ *See, e.g.,* DENNIS W. CARLTON & JEFFREY M. PERLOFF, *MODERN INDUSTRIAL ORGANIZATION* 94–99 (4th ed. 2005); POSNER, *supra* note 46, at 9–32; Andrew I. Gavil, *Exclusionary Distribution Strategies by Dominant Firms: Striking a Better Balance*, 72 *ANTITRUST L.J.* 3, 33 (2004).

⁴⁹ *See, e.g.,* Sept. 26 Hr’g Tr., *supra* note 29, at 13 (Scherer) (stating that “firms in dominant positions are almost surely sluggish innovators”); Sherman Act Section 2 Joint Hearing: Refusals to Deal Panel Hr’g Tr. 55, July 18, 2006 [hereinafter July 18 Hr’g Tr.] (Salop) (“Monopolists have weaker innovation incentives than competitors.”); AREEDA ET AL., *supra* note 27, ¶ 407; Peter C. Carstensen, *False Positives in Identifying Liability for Exclusionary Conduct: Conceptual Error, Business Reality, and Aspen*, 2008 *WIS. L. REV.* 295, 306 (arguing that “a monopolist has no incentive to support technological innovation that could undermine its dominant position in the market” and “having sunk investments in existing technology, it may well delay or refuse to pursue work on new technology until it has accounted for its past investments”); *cf.* POSNER, *supra*

³⁹ 148 F.2d 416 (2d Cir. 1945) (Hand, J.).

⁴⁰ *Id.* at 429.

⁴¹ *Id.* at 429–30.

⁴² *Id.* at 430.

⁴³ 384 U.S. 563 (1966).

⁴⁴ *Id.* at 571.

⁴⁵ *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447,

consumers from these harms by deterring or eliminating exclusionary conduct that produces or preserves monopoly.

A number of panelists stated that section 2 is essential to preserving competition.⁵⁰ They noted that the threat of anticompetitive conduct is real, “far from an isolated event” in the words of one.⁵¹ Section 2 enforcement has played a vital role in U.S. antitrust enforcement for a century.⁵² From the seminal case against Standard Oil in 1911,⁵³ through litigation resulting in the break-up of AT&T,⁵⁴ to the present-day enforcement in high-technology industries with the *Microsoft* case,⁵⁵ government enforcement of section 2 has benefitted U.S. consumers. Private cases brought under

section 2 by injured parties are also important to U.S. businesses and consumers. Equally important, the potential for significant injunctive relief and damages awards provides strong incentives for firms to refrain from engaging in the types of conduct prohibited by the statute.

D. Protection of Competition, Not Competitors

The focus on protecting the competitive process has special significance in distinguishing between lawful and unlawful unilateral conduct. Competition produces injuries; an enterprising firm may negatively affect rivals’ profits or drive them out of business. But competition also benefits consumers by spurring price reductions, better quality, and innovation. Accordingly, mere harm to competitors is not a basis for antitrust liability. “The purpose of the [Sherman] Act,” the Supreme Court instructs, “is not to protect businesses from the working of the market; it is to protect the public from the failure of the market.”⁵⁶ Thus, preserving the rough-and-tumble of the marketplace ultimately “promotes the consumer interests that the Sherman Act aims to foster.”⁵⁷

The Supreme Court has underscored this basic principle repeatedly over the past several decades. In 1984, it observed in *Copperweld* that the type of “robust competition” encouraged by the Sherman Act could very well lead to injury to individual competitors.⁵⁸ Accordingly, the Court stated that, without more (i.e., injury to competition), mere injury to a competitor is not in itself unlawful under the Act.⁵⁹ In so stating, the Court cited its 1977 decision in *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.* for the proposition that the antitrust laws “were enacted for ‘the protection of competition, not competitors.’”⁶⁰

note 46, at 20 (explaining that “it is an empirical question whether monopoly retards or advances innovation”).

⁵⁰ See, e.g., Sherman Act Section 2 Joint Hearing: Business Testimony Hr’g Tr. 12, Feb. 13, 2007 [hereinafter Feb. 13 Hr’g Tr.] (Balto) (“Antitrust enforcement in the generic drug industry is essential.”); Sherman Act Section 2 Joint Hearing: Business Testimony Hr’g Tr. 133, Jan. 30, 2007 [hereinafter Jan. 30 Hr’g Tr.] (Haglund) (“The application of Section 2 to [regional forest product, fishing, and agricultural] markets is important”); *id.* at 159–60 (Dull) (“The antitrust laws have an important role in policing the conduct of firms who would seek to take control of those interconnections so as to eliminate competition and thus harm consumers.”).

⁵¹ Feb. 13 Hr’g Tr., *supra* note 50, at 58 (Skitol); see also Jan. 30 Hr’g Tr., *supra* note 50, at 158 (Dull) (“Obtaining control of key interfaces through anticompetitive means, or using control of key interfaces to extend a dominant position in one market into other markets, is a real danger in our industry.”).

⁵² Other provisions of the antitrust laws can play a role in preventing the formation or preservation of monopoly, as when section 7 of the Clayton Act is enforced against mergers to monopoly, or section 1 of the Sherman Act is enforced against certain market-allocation agreements. But section 2 uniquely allows antitrust enforcers to reach conduct engaged in unilaterally by a firm that has achieved, or dangerously threatens to achieve, monopoly power.

⁵³ 221 U.S. 1 (1911).

⁵⁴ *United States v. AT&T*, 552 F. Supp. 131 (D.D.C. 1982), *aff’d mem. sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

⁵⁵ *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (en banc) (per curiam).

⁵⁶ *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 458 (1993).

⁵⁷ *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 767 (1984).

⁵⁸ *Id.* at 758.

⁵⁹ See *id.* at 767–68.

⁶⁰ *Id.* at 767 n.14 (quoting *Brunswick Corp. v. Pueblo*

A year after *Copperweld*, in a decision that it subsequently referred to as being “at or near the outer boundary of § 2 liability,”⁶¹ the Court, in *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, found that a firm operating three of four mountain ski areas in Aspen, Colorado, violated section 2 by refusing to continue cooperating with a smaller rival in offering a combined four-area ski pass.⁶² The Court considered the challenged conduct’s “impact on consumers and whether it [had] impaired competition in an unnecessarily restrictive way.”⁶³

In a 1993 decision, the Court re-emphasized the importance of focusing on competition, rather than competitors. In *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, the Court commented on the elements of a predatory-pricing claim, noting that, even where facts “indicate that below-cost pricing could likely produce its intended effect on the target, there is still the further question whether it would likely injure competition in the relevant market.”⁶⁴ In particular, the *Brooke Group* recoupment requirement was a logical outgrowth of the Court’s concern with protecting competition, not competitors. Absent the possibility of recoupment through supracompetitive pricing, there can be no injury to competition: “That below-cost pricing may impose painful losses on its target is of no moment to the antitrust laws if competition is not injured.”⁶⁵

Bowl-O-Mat, Inc., 429 U.S. 477, 488 (1977) (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962))) (emphasis in original).

⁶¹ *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 409 (2004).

⁶² 472 U.S. 585, 606, 610 (1985).

⁶³ *Id.* at 605; see also *id.* at 605 n.32 (“‘[E]xclusionary’ comprehends at the most behavior that not only (1) tends to impair the opportunities of rivals, but also (2) either does not further competition on the merits or does so in an unnecessarily restrictive way.” (quoting *AREEDA & TURNER*, *supra* note 13, ¶ 626b, at 78)). The Court found that the evidence supported the jury’s finding that “consumers were adversely affected by the elimination” of the four-area ski pass. 472 U.S. at 606.

⁶⁴ 509 U.S. 209, 225 (1993).

⁶⁵ *Id.* at 224.

Again, in its 1998 decision in *NYNEX*, the Court reaffirmed that Sherman Act liability requires harm to the competitive process, not simply a competitor.⁶⁶ Discon alleged that NYNEX and related entities had violated the Sherman Act by engaging in an unlawful fraudulent scheme that injured Discon and benefitted one of Discon’s competitors. While conceding that NYNEX’s scheme “hurt consumers by raising telephone service rates,” the Court found that any consumer injury “naturally flowed not so much from a less competitive market” for certain services as from “the exercise of market power that is lawfully in the hands of a monopolist . . . combined with a deception worked upon the regulatory agency that prevented the agency” from controlling that exercise of monopoly power.⁶⁷ The Court explained that a Sherman Act “plaintiff . . . must allege and prove harm, not just to a single competitor, but to the competitive process, *i.e.*, to competition itself.”⁶⁸

E. Distinguishing Competitive and Exclusionary Conduct Is Often Difficult

Courts and commentators have long recognized the difficulty of determining what means of acquiring and maintaining monopoly power should be prohibited as improper. Although many different kinds of conduct have been found to violate section 2, “[d]efining the contours of this element . . . has been one of the most vexing questions in antitrust law.”⁶⁹ As

⁶⁶ 525 U.S. 128, 139 (1998). While the Court focused its analysis on the section 1 claim, it stated that the section 2 claim in the case could not survive unless the challenged conduct harmed the competitive process. *Id.* at 139–40.

⁶⁷ *Id.* at 136 (emphasis in original).

⁶⁸ *Id.* at 135.

⁶⁹ SECTION OF ANTITRUST LAW, *supra* note 2, at 241; see also *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) (en banc) (per curiam) (“Whether any particular act of a monopolist is exclusionary, rather than merely a form of vigorous competition, can be difficult to discern: the means of illicit exclusion, like the means of legitimate competition, are myriad. The challenge for an antitrust court lies in stating a general rule for distinguishing between exclusionary acts, which reduce social welfare, and competitive acts, which increase it.”); ANTITRUST MODERNIZATION

Judge Easterbrook observes, “Aggressive, competitive conduct by any firm, even one with market power, is beneficial to consumers. Courts should prize and encourage it. Aggressive, exclusionary conduct is deleterious to consumers, and courts should condemn it. The big problem lies in this: competitive and exclusionary conduct look alike.”⁷⁰

The problem is not simply one that demands drawing fine lines separating different categories of conduct; often the *same conduct* can both generate efficiencies and exclude competitors.⁷¹ Judicial experience and advances

COMM’N, REPORT AND RECOMMENDATIONS 81 (2007), available at http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf (“How to evaluate single-firm conduct under Section 2 poses among the most difficult questions in antitrust law.”); Sherman Act Section 2 Joint Hearing: Loyalty Discounts Session Hr’g Tr. 110, Nov. 29, 2006 (Muris) (stating that “the scope and meaning of exclusionary behavior remains . . . very poorly defined”); July 18 Hr’g Tr., *supra* note 49, at 21 (Pitofsky) (identifying “the definition of exclusion under Section 2 . . . as about the toughest issue[] that an antitrust lawyer is required to face today”); June 20 Hr’g Tr., *supra* note 29, at 12 (Majoras) (“[I]t is difficult to distinguish between aggressive procompetitive unilateral conduct and anticompetitive unilateral conduct.”); Susan A. Creighton et al., *Cheap Exclusion*, 72 ANTITRUST L.J. 975, 978 (2005) (“Much of the ‘long, and often sorry, history of monopolization in the courts’ has been devoted to attempting to provide an answer to the question at the center of the Supreme Court’s formulation—that is, when is monopolizing conduct ‘anticompetitive.’” (footnote omitted)); Timothy J. Muris, *The FTC and the Law of Monopolization*, 67 ANTITRUST L.J. 693, 695 (2000) (“Much of the monopolization case law struggles with the question of when conduct is, or is not, exclusionary.”); Mark S. Popofsky, *Defining Exclusionary Conduct: Section 2, the Rule of Reason, and the Unifying Principle Underlying Antitrust Rules*, 73 ANTITRUST L.J. 435, 438 (2006) (“Over a century since the Sherman Act’s passage, and some forty years since the Supreme Court held that Section 2 condemns the ‘willful’ acquisition or maintenance of monopoly power, great uncertainty persists as to the test for liability under Section 2 of the Sherman Act.” (footnote omitted)).

⁷⁰ Frank H. Easterbrook, *When Is It Worthwhile to Use Courts to Search for Exclusionary Conduct?*, 2003 COLUM. BUS. L. REV. 345, 345.

⁷¹ June 20 Hr’g Tr., *supra* note 29, at 17 (Majoras); see also Sept. 26 Hr’g Tr., *supra* note 29, at 20 (Froeb) (“[M]echanisms with opposing effects usually appear in a single kind of behavior.”); June 20 Hr’g Tr., *supra* note

in economic thinking have demonstrated the potential procompetitive benefits of a wide variety of practices that were once viewed with suspicion when engaged in by firms with substantial market power. Exclusive dealing, for example, may be used to encourage beneficial investment by the parties while also making it more difficult for competitors to distribute their products.⁷²

When a competitor achieves or maintains monopoly power through conduct that serves no purpose other than to exclude competition, such conduct is clearly improper. There also are examples of conduct that is clearly legitimate, as when a firm introduces a new product that is simply better than its competitors’ offerings. The hard cases arise when conduct enhances economic efficiency or reflects the kind of dynamic and disruptive change that is the hallmark of competition, but at the same time excludes competitors through means other than simply attracting consumers. In these situations, distinguishing between vigorous competition by a firm with substantial market power and illegitimate forms of conduct is one of the most challenging puzzles for courts, enforcers, and antitrust practitioners.

F. Concern with Underdeterrence and Overdeterrence

Experience with section 2 enforcement teaches the importance of correctly distinguishing between aggressive competition and actions that exclude rivals and harm the competitive process. Some basic boundaries are provided by the law’s requirements that the conduct harm “competition itself,”⁷³ that it be

29, at 29 (Barnett) (“The difficulty lies in cases . . . that have the potential for both beneficial cost reductions, innovation, development, integration, and at the same time potentially anticompetitive exclusion.”); A. Douglas Melamed, *Exclusionary Conduct Under the Antitrust Laws: Balancing, Sacrifice, and Refusals to Deal*, 20 BERKELEY TECH. L.J. 1247, 1249 (2005) (“In the vast majority of cases, exclusion is the result of conduct that has both efficiency properties and the tendency to exclude rivals.”).

⁷² See generally Benjamin Klein, *Exclusive Dealing as Competition for Distribution “On the Merits,”* 12 GEO. MASON L. REV. 119 (2003); *infra* Chapter 8, Part III.

⁷³ *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447,

“willful,”⁷⁴ and that it not be “competition on the merits,”⁷⁵ but these maxims offer insufficient guidance to be of much use in many of the hard cases.⁷⁶ Failure to make proper distinctions will either unnecessarily perpetuate a monopoly harming consumers or disrupt the dynamic process of competition that is so vital to economic growth and prosperity.

It is important to distinguish correctly between aggressive competition and actions that exclude rivals and harm the competitive process.

Standards of section 2 liability that underdeter not only shelter a single firm’s exclusionary conduct, but also “empower other dominant firms to adopt the same strategy.”⁷⁷ They thereby “seriously undermine Section 2’s vitality as a shield that guards the competitive process.”⁷⁸ And “because it can be so difficult for courts to restore competition once it has been lost, the true cost of exclusion to consumer welfare – and its benefit to dominant firms – are

likely to be understated.”⁷⁹

Standards of section 2 liability that overdeter risk harmful disruption to the dynamic competitive process itself. Being able to reap the gains from a monopoly position attained through a hard-fought competitive battle, or to maintain that position through continued competitive vigor, may be crucial to motivating the firm to innovate in the first place. Rules that overdeter, therefore, undermine the incentive structure that competitive markets rely upon to produce innovation.⁸⁰ Such rules also may sacrifice the efficiency benefits associated with the competitive behavior.

Importantly, rules that are overinclusive or unclear will sacrifice those benefits not only in markets in which enforcers or courts impose liability erroneously, but in other markets as well. Firms with substantial market power typically attempt to structure their affairs so as to avoid either section 2 liability or even having to litigate a section 2 case because the costs associated with antitrust litigation can be extraordinarily large. These firms must base their business decisions on their understanding of the legal standards governing section 2, determining in advance whether a proposed course of action leaves their business open to antitrust liability or investigation and litigation. If the lines are in the wrong place, or if there is uncertainty about where those lines are, firms will pull their competitive punches unnecessarily, thereby depriving consumers of the benefits of their efforts.⁸¹ The Supreme

459 (1993).

⁷⁴ *United States v. Grinnell Corp.*, 384 U.S. 563, 570 (1966).

⁷⁵ *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 223 (1993).

⁷⁶ As commentators note, for example, the *Grinnell* standard provides little concrete guidance, either to the lower courts or to businesses attempting to conform their conduct to the requirements of section 2, because virtually all conduct—both “good” and “bad”—is undertaken “willfully.” See, e.g., SECTION OF ANTITRUST LAW, *supra* note 2, at 242 (“Courts have not been able to agree, however, on any general standard beyond the highly abstract *Grinnell* language, which has been criticized as not helpful in deciding concrete cases.”); Einer Elhauge, *Defining Better Monopolization Standards*, 56 STAN. L. REV. 253, 261 (2003) (noting that the *Grinnell* standard is difficult to apply because “[i]t seems obvious that often firms willfully acquire or maintain monopoly power precisely through business acumen or developing a superior product” and it is difficult to conceive “of cases where a firm really has a monopoly thrust upon it without the aid of any willful conduct”).

⁷⁷ Carstensen, *supra* note 49, at 321.

⁷⁸ Gavil, *supra* note 48, at 5.

⁷⁹ *Id.* at 39.

⁸⁰ See *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407–08 (2004).

⁸¹ See, e.g., Jan. 30 Hr’g Tr., *supra* note 50, at 36 (Heiner) (“[T]here have been cases . . . where decisions were made not to include particular features that would have been valuable to consumers based at least in part on antitrust advice.”); *id.* at 95 (Hartogs) (identifying a risk that a lack of clear rules on loyalty discounts and bundled pricing may cause firms not “to always choose what may be the most price friendly, consumer friendly result”); *id.* at 96 (Skitol) (“There are lots of situations I find where a client has in mind doing X, Y, Z with its consumables, which would be of significant consumer value, would enhance the product, and it looks great. But because of *Kodak* and all of the law that’s built up

Court has consistently emphasized the potential dangers of overdeterrence. The Court's concern about overly inclusive or unclear legal standards may well be driven in significant part by the particularly strong chilling effect created by the specter of treble damages and class-action cases.⁸² Many hearing panelists reiterated this concern.⁸³

around it, this is problematic . . .").

⁸² See *Bus. Elecs. Corp. v. Sharp Elecs. Corp.*, 485 U.S. 717, 728 (1988) (expressing concern regarding a rule that likely would cause manufacturers "to forgo legitimate and competitively useful conduct rather than risk treble damages and perhaps even criminal penalties"); *Roundtable Discussion: Antitrust and the Roberts Court*, ANTITRUST, Fall 2007, at 8, 11 (roundtable participant stating that "the Court continues to endorse arguments made by the government and by defendants that treble-damages over-incentivize antitrust cases"). See generally *Trinko*, 540 U.S. at 414 ("The cost of false positives counsels against an undue expansion of § 2 liability."); *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993); *id.* at 458 (stating that "this Court and other courts have been careful to avoid constructions of § 2 which might chill competition, rather than foster it"); *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 594 (1986) (stating that mistaken inferences in predatory-pricing cases "are especially costly because they chill the very conduct the antitrust laws are designed to protect"); *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 767-68 (1984) (noting that scrutiny of single firms under the Sherman Act is appropriate only when they pose a danger of monopolization, an approach that "reduces the risk that the antitrust laws will dampen the competitive zeal of a single aggressive [competitor]"); William E. Kovacic, *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix*, 2007 COLUM. BUS. L. REV. 1, 21 (noting the "wariness of rules that might discourage dominant firms" from "strategies that generally serve to improve consumer welfare" resulting from a "fear that overly restrictive rules will induce a harmful passivity").

⁸³ See, e.g., Sherman Act Section 2 Joint Hearing: Section 2 Policy Issues Hr'g Tr. 45, May 1, 2007 [hereinafter May 1 Hr'g Tr.] (Willig); *id.* at 46 (Jacobson); Feb. 13 Hr'g Tr., *supra* note 50, at 168 (Wark) ("Given the punitive nature of the antitrust laws and the inevitability of private class action litigation, including the prospect of treble damages, defending ourselves in that situation, irrespective of the courage of our convictions, is high-stakes poker indeed."). Moreover, competitors have incentives to use the antitrust laws to impede their rivals. See Sherman Act

G. The Importance of Administrability when Crafting Liability Standards Under Section 2

Courts and commentators increasingly have recognized that section 2 standards cannot "embody every economic complexity and qualification"⁸⁴ and have sought to craft legal tests that account for these limitations. Then-Judge Breyer explained the need for simplifying rules more than two decades ago:

[W]hile technical economic discussion helps to inform the antitrust laws, those laws cannot precisely replicate the economists' (sometimes conflicting) views. For, unlike economics, law is an administrative system the effects of which depend upon the content of rules and precedents only as they are applied by judges and juries in courts and by lawyers advising their clients. Rules that seek to embody every economic complexity and qualification may well, through the vagaries of administration, prove counter-productive, undercutting the very economic ends they seek to serve.⁸⁵

Frequently, courts and commentators dealing with antitrust have employed decision theory,⁸⁶ which articulates a process for

Section 2 Joint Hearing: Misleading and Deceptive Conduct Session Hr'g Tr. 25-28, Dec. 6, 2006 (McAfee) (contending that, among other reasons, private parties bring antitrust claims to "extort[] funds from a successful rival," "chang[e] the terms of a contract," "punish noncooperative behavior," "respond[] to an existing lawsuit," "prevent[] a hostile takeover," and prevent entry); 2 AREEDA ET AL., *supra* note 27, ¶ 348a, at 387 (2d ed. 2000) (cautioning that "a competitor opposes efficient, aggressive, and legitimate competition by its rivals [and therefore] has an incentive to use an antitrust suit to delay their operations or to induce them to moderate their competition").

⁸⁴ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 234 (1st Cir. 1983) (Breyer, J.); see also Kovacic, *supra* note 82, at 36 (noting that both the Chicago and Harvard schools have insisted "that courts and enforcement agencies pay close attention to considerations of institutional design and institutional capacity in formulating and applying antitrust rules").

⁸⁵ *Barry Wright*, 724 F.2d at 234.

⁸⁶ See, e.g., POSNER, *supra* note 46, at ix (observing that "[a]lmost everyone professionally involved in antitrust today" agrees that "the design of antitrust rules should take into account the costs and benefits of

making decisions when information is costly and imperfect.⁸⁷ Decision theory teaches that optimal legal standards should minimize the inevitable error and enforcement costs, considering both the probability and the magnitude of harm from each.⁸⁸

Decision theory identifies two types of error costs. First, there are “false positives” (or Type I errors), meaning the wrongful condemnation of conduct that benefits competition and consumers. The cost of false positives includes not just the costs associated with the parties before the court (or agency), but also the loss of procompetitive conduct by other actors that, due to an overly inclusive or vague decision, are deterred from undertaking such conduct by a fear of litigation.⁸⁹

Second, there are “false negatives” (or Type

individual assessment of challenged practices”); Gavil, *supra* note 48, at 66 (“It is rare today in cases where fundamental questions are raised about the ‘right standard’ that the parties and courts do not assess the[] issues” raised by decision theory.).

⁸⁷ See C. Frederick Beckner III & Steven C. Salop, *Decision Theory and Antitrust Rules*, 67 ANTITRUST L.J. 41, 41–42 (1999) (defining decision theory); Isaac Ehrlich & Richard A. Posner, *An Economic Analysis of Legal Rulemaking*, 3 J. LEGAL STUD. 257, 272 (1974) (applying a decision-theoretic approach to legal rulemaking generally).

⁸⁸ See Ken Heyer, *A World of Uncertainty: Economics and the Globalization of Antitrust*, 72 ANTITRUST L.J. 375, 381 (2005).

⁸⁹ See Feb. 13 Hr’g Tr., *supra* note 50, at 170 (Wark) (in-house counsel reporting that his client had altered its conduct “based not on what we thought was illegal, but on what we feared others might argue is illegal” and that “in these circumstances competition has likely been compromised”); June 20 Hr’g Tr., *supra* note 29, at 55 (Carlton) (“[T]he biggest effect of any antitrust policy is likely to be, not on litigants in litigated cases, but rather, on firms that are not involved in litigation at all but are forced to change their business behavior in contemplation of legal rules.”); Dennis W. Carlton, *Does Antitrust Need to Be Modernized?*, J. ECON. PERSP., Summer 2007, at 155, 159–60 (“[T]he cost of errors must include not only the cost of mistakes on the firms involved in a particular case, but also the effect of setting a legal precedent that will cause other firms to adjust their behavior inefficiently.”); *cf.* May 1 Hr’g Tr., *supra* note 83, at 86 (Jacobson) (stating that the “problem” of overdeterrence “is larger in the eyes of the enforcement community than it is in the real world.”).

II errors), meaning the mistaken exoneration of conduct that harms competition and consumers. As with false positives, the cost of false negatives includes not just the failure to condemn a particular defendant’s anti-competitive conduct but also the loss to competition and consumers inflicted by other firms’ anticompetitive conduct that is not deterred.⁹⁰

It also is important to consider enforcement costs—the expenses of investigating and litigating section 2 claims (including potential claims)—when framing legal tests. Because agency resources are finite, it is important to exercise enforcement discretion to best promote consumer welfare. Enforcement costs include the judicial or agency resources devoted to antitrust litigation, the expenses of parties in litigation (including time spent by management and employees on the litigation as opposed to producing products or services), and the legal fees and other expenses incurred by firms in complying with the law.⁹¹

In structuring a legal regime, it is important to consider the practical consequences of the regime and the relative magnitude and frequency of the different types of errors. If, for example, the harm from erroneously exonerating anticompetitive conduct outweighs the harm from erroneously penalizing procompetitive conduct, then, all other things

⁹⁰ See, e.g., Gavil, *supra* note 48, at 5 (expressing concern that lax section 2 standards may “lead to ‘false negatives’ and under-deterrence, with uncertain, but very likely substantial adverse consequences for . . . nascent competition”); William Kolasky, *Reinvigorating Antitrust Enforcement in the United States: A Proposal*, ANTITRUST, Spring 2008, at 85, 86 (stating that “the risk of false positives is now much less serious than it was, thanks in large part to the Supreme Court’s rulings over the last fifteen years,” and that “if anything, we are now in greater danger of false negatives”).

⁹¹ See Feb. 13 Hr’g Tr., *supra* note 50, at 47 (Stern) (“It’s important to help avoid inadvertent violations and disputes and investigations that end up wasting company time and resources as well as the time and resources of the agencies.”); *id.* at 163 (Wark) (in-house counsel commenting that “it diverts a tremendous amount of management attention and company resources” to defend an antitrust lawsuit); Ehrlich & Posner, *supra* note 87, at 270.

equal, the legal regime should seek to avoid false negatives. Some believe as a general rule that, in the section 2 context, the cost of false positives is higher than the cost of false negatives.⁹² In the common law regime of antitrust law, *stare decisis* inhibits courts from routinely correcting errors or updating the law to reflect the latest advances in economic thinking.⁹³ Some believe that the persistence of errors can be particularly harmful to competition in the case of false positives because “[i]f the court errs by condemning a beneficial practice, the benefits may be lost for good. Any other firm that uses the condemned practice faces sanctions in the name of *stare decisis*, no matter the benefits.”⁹⁴ In contrast, over time “monopoly is self-destructive. Monopoly prices eventually attract entry. . . . [Thus] judicial errors that tolerate baleful practices are self-correcting, while erroneous condemnations are not.”⁹⁵ This self-correcting tendency, however, may take substantial time. As a result, courts and enforcers should be sensitive to the potential that, once created,

some monopolies may prove quite durable, especially if allowed to erect entry barriers and engage in other exclusionary conduct aimed at artificially prolonging their existence.⁹⁶

One manifestation of decision theory in antitrust jurisprudence is the use of rules of *per se* illegality developed by courts. As the Supreme Court has explained, these rules reduce the administrative costs of determining whether particular categories of conduct harm competition and consumer welfare.⁹⁷ *Per se* prohibitions are justified when experience with conduct establishes that it is always or almost always sufficiently pernicious that it should be condemned without inquiry into its actual effects in each case.⁹⁸ Rules of *per se* illegality are not designed to achieve perfection; to the contrary, courts explicitly acknowledge the potential that they could from time to time penalize conduct that does not in fact harm consumer welfare, but the rule is nonetheless warranted so long as false positives are sufficiently rare and procompetitive benefits from conduct deterred by the rules are sufficiently small.

Equally important, if one or the other type of error is relatively rare (and that error is unlikely to result in great harm), the most effective approach to enforcement may be an easy-to-administer bright-line test that reduces uncertainty and minimizes administrative costs. In the antitrust arena, such rules can take the form of safe harbors. Courts have long

⁹² See Kovacic, *supra* note 82, at 36 (“Chicago School and Harvard School commentators tend to share the view that the social costs of enforcing antitrust rules involving dominant firm conduct too aggressively exceed the costs of enforcing them too weakly.”); Sherman Act Section 2 Joint Hearing: Conduct as Related to Competition Hr’g Tr. 23, May 8, 2007 (Rule) (stating that “we as a society, given the way we are organized, should be very concerned about the adverse economic effects, the false positives”).

⁹³ Although the Supreme Court has overturned several long-standing *per se* rules, *see, e.g.*, *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705 (2007) (overturning the *per se* rule against minimum resale price maintenance), it did so only after decades of criticism.

⁹⁴ Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1, 2 (1984); *see also* Thomas C. Arthur, *The Costly Quest for Perfect Competition: Kodak and Nonstructural Market Power*, 69 N.Y.U. L. REV. 1, 18 (1994) (“The principle of *stare decisis* makes obsolete doctrines hard to overrule, even after their economic underpinnings have been discredited. This has been especially true in antitrust.”). *But see* May 1 Hr’g Tr., *supra* note 83, at 89 (Jacobson) (maintaining that false positives are more ephemeral than commonly suggested); *id.* (Krattenmaker) (same).

⁹⁵ Easterbrook, *supra* note 94, at 2–3.

⁹⁶ *See, e.g.*, May 1 Hr’g Tr., *supra* note 83, at 34–35 (Jacobson) (arguing that monopoly may prove enduring absent effective antitrust intervention); Gavil, *supra* note 48, at 39–41 (same).

⁹⁷ *See, e.g.*, *Cont’l T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 50 n.16 (1977) (explaining that *per se* rules “minimize the burdens on litigants and the judicial system”).

⁹⁸ *See* NYNEX Corp. v. Discon, Inc., 525 U.S. 128, 133 (1998) (“[C]ertain kinds of agreements will so often prove so harmful to competition and so rarely prove justified that the antitrust laws do not require proof that an agreement of that kind is, in fact, anticompetitive in the particular circumstances.”); *State Oil Co. v. Khan*, 522 U.S. 3, 10 (1997) (Certain “types of restraints . . . have such predictable and pernicious anticompetitive effects, and such limited potential for procompetitive benefit, that they are deemed unlawful *per se*.”).

recognized the benefits of bright-line tests of legality (also known as safe harbors) when conduct is highly likely to bring consumer-welfare benefits and the threat of anticompetitive harm is remote.⁹⁹ The best known example is the section 2 rule applicable to predatory pricing. Building on *Matsushita*,¹⁰⁰ the Court in *Brooke Group* laid out a two-pronged, objective test for evaluating predatory-pricing claims.¹⁰¹ The Court held that to prevail on a predatory-pricing claim, plaintiff must show that defendant priced below an appropriate measure of its costs and that defendant “had a reasonable prospect, or . . . a dangerous probability, of recouping its investment in below-cost prices.”¹⁰² In *Weyerhaeuser*, the Court recently extended these principles to predatory-bidding claims.¹⁰³

In *Matsushita*, *Brooke Group*, and *Weyerhaeuser*, the Court stressed the importance, in crafting a rule of decision, of taking into account the risks of false positives, the risks of false negatives, and administrability. The Court’s 2004 decision in *Trinko* likewise applies decision-theory principles in crafting section 2 liability rules.¹⁰⁴ In reaching its decision, the Court articulated the same policy concerns with false positives that it had raised in previous section 2 cases. The Court observed that it had been “very cautious” in limiting “the right to refuse to deal with other firms” because enforced sharing “may lessen the incentive for the monopolist, the rival, or both to invest in . . . economically beneficial facilities” and obligates courts to

identify “the proper price, quantity, and other terms of dealing – a role for which they are ill suited.”¹⁰⁵ As the Court further explained:

Against the slight benefits of antitrust intervention here, we must weigh a realistic assessment of its costs Mistaken inferences and the resulting false condemnations “are especially costly because they chill the very conduct the antitrust laws are designed to protect.” The cost of false positives counsels against an undue expansion of § 2 liability.¹⁰⁶

IV. Conclusion

Section 2 enforcement is crucial to the U.S. economy. It is a vexing area, however, given that competitive conduct and exclusionary conduct often look alike. Indeed, the same exact conduct can have procompetitive and exclusionary effects. An efficient legal regime will consider the effects of false positives, false negatives, and the costs of administration in determining the standards to be applied to single-firm conduct under section 2.

⁹⁹ As then-Judge Breyer explained, such rules conceivably may shelter some anticompetitive conduct, but they avoid “authoriz[ing] a search for a particular type of undesirable . . . behavior [that may] end up . . . discouraging legitimate . . . competition.” *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 234 (1st Cir. 1983).

¹⁰⁰ 475 U.S. 574 (1986).

¹⁰¹ 509 U.S. 209, 222, 224 (1993). *See generally infra* Chapter 4, Part I.

¹⁰² *Id.* at 224.

¹⁰³ *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 127 S. Ct. 1069 (2007).

¹⁰⁴ 540 U.S. 398 (2004); *see also* Popofsky, *supra* note 69, at 452 (describing how the Supreme Court used decision theory to decide *Trinko*).

¹⁰⁵ 540 U.S. at 408.

¹⁰⁶ *Id.* at 414 (quoting *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 594 (1986)).

CHAPTER 2

MONOPOLY POWER

I. Introduction

Monopoly power can harm society by making output lower, prices higher, and innovation less than would be the case in a competitive market.¹ The possession of monopoly power is an element of the monopolization offense,² and the dangerous probability of obtaining monopoly power is an element of the attempted monopolization offense.³ As discussed in chapter 1, the mere possession of monopoly power does not violate section 2.⁴

This monopoly-power requirement serves as an important screen for evaluating single-firm liability. It significantly reduces the possibility of discouraging “the competitive enthusiasm that the antitrust laws seek to promote,”⁵ assures the vast majority of competitors that their unilateral actions do not violate section 2, and reduces enforcement costs by keeping many meritless cases out of court and allowing others to be resolved without a trial. Accordingly, it is important to determine when monopoly power exists within the meaning of section 2.

An understanding of monopoly power helps in crafting appropriate antitrust policy towards single-firm conduct. Drawing on lessons from

the hearings, along with existing jurisprudence and economic learning, this chapter discusses the Department’s view on appropriate assessment of monopoly power in enforcing section 2.

II. Market Power and Monopoly Power

Market power is a seller’s ability to exercise some control over the price it charges. In our economy, few firms are pure price takers facing perfectly elastic demand.⁶ For example, the unique location of a dry cleaner may confer slight market power because some customers are willing to pay a little more rather than walk an extra block or two to the next-closest dry cleaner. Economists say the dry cleaner possesses market power, if only to a trivial degree. Virtually all products that are differentiated from one another, if only because of consumer tastes, seller reputation, or producer location, convey upon their sellers at least some degree of market power. Thus, a small degree of market power is very common and understood not to warrant antitrust intervention.⁷

Market power and monopoly power are related but not the same. The Supreme Court has defined market power as “the ability to

¹ See generally 2B PHILLIP E. AREEDA ET AL., ANTITRUST LAW ¶ 403b, at 8 & n.2 (3d ed. 2007); RICHARD A. POSNER, ANTITRUST LAW 9–32 (2d ed. 2001).

² *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966).

³ *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 459 (1993).

⁴ See Chapter 1, Part I(A); see also *Grinnell*, 384 U.S. at 570–71 (requiring improper conduct – as opposed to superior skill, foresight, or industry – as an element of a section 2 violation).

⁵ *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 775 (1984).

⁶ See Sherman Act Section 2 Joint Hearing: Monopoly Power Session Hr’g Tr. 13–14, Mar. 7, 2007 [hereinafter Mar. 7 Hr’g Tr.] (Nelson) (“[I]f you have a differentiated product and thus have a downward-sloping demand curve for your product, you might have some degree of ability to raise prices above costs and you might in that sense have market power . . .”).

⁷ See, e.g., Sherman Act Section 2 Joint Hearing: Conduct as Related to Competition Hr’g Tr. 55, May 8, 2007 [hereinafter May 8 Hr’g Tr.] (Sidak) (“I don’t think that the downward-sloping demand curve itself is a cause for antitrust intervention.”); Dennis W. Carlton, *Market Definition: Use and Abuse*, COMPETITION POL’Y INT’L, Spring 2007, at 3, 7.

raise prices above those that would be charged in a competitive market,”⁸ and monopoly power as “the power to control prices or exclude competition.”⁹ The Supreme Court has held that “[m]onopoly power under § 2 requires, of course, something greater than market power under § 1.”¹⁰ Precisely where market power becomes so great as to constitute what the law deems to be monopoly power is largely a matter of degree rather than one of kind. Clearly, however, monopoly power requires, at a minimum, a substantial degree of market power.¹¹ Moreover, before subjecting a firm to possible challenge under antitrust law for monopolization or attempted monopolization, the power in question is generally required to be much more than merely fleeting; that is, it

must also be durable.¹²

Although monopoly power will generally result in the setting of prices above competitive levels, the desire to obtain profits that derive from a monopoly position provides a critical incentive for firms to invest and create the valuable products and processes that drive economic growth.¹³ For this reason, antitrust law does not regard as illegal the mere possession of monopoly power where it is the product of superior skill, foresight, or industry.¹⁴ Where monopoly power is acquired or maintained through anticompetitive conduct, however, antitrust law properly objects.

Section 2’s requirement that single-firm conduct create or maintain, or present a dangerous probability of creating, monopoly power serves as an important screen for evaluating single-firm liability. Permitting conduct that likely creates at most an ability to exercise a minor degree of market power significantly reduces the possibility of discouraging “the competitive enthusiasm that the antitrust laws seek to promote”¹⁵ and assures the majority of competitors that their unilateral actions will not violate section 2. It also reduces enforcement costs, including costs associated with devising and policing remedies. The costs that firms, courts, and competition authorities would incur in identifying and litigating liability, as well as devising and policing remedies for any and all conduct with the potential to have a minor negative impact on competition for short periods, would almost certainly far outweigh the benefits, particularly if the calculus includes, as it should, the loss of procompetitive activity that would inevitably

⁸ NCAA v. Bd. of Regents of the Univ. of Okla., 468 U.S. 85, 109 n.38 (1984); *see also* Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 27 n.46 (1984) (“As an economic matter, market power exists whenever prices can be raised above levels that would be charged in a competitive market.”); *cf.* DENNIS W. CARLTON & JEFFREY M. PERLOFF, MODERN INDUSTRIAL ORGANIZATION 642 (4th ed. 2005) (noting that a firm has market power “if it is profitably able to charge a price above that which would prevail under competition”); William M. Landes & Richard A. Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937, 939 (1981) (“A simple economic meaning of the term ‘market power’ is the ability to set price above marginal cost.”). The demand curve faced by the perfectly competitive firm is a horizontal line—the market price: the firm can sell as much as it wants at the market price, but it can sell nothing at a price even slightly higher. Consequently, the perfectly competitive firm maximizes its profits by producing up to the point at which its marginal cost equals the market price.

⁹ *United States v. E. I. du Pont de Nemours & Co. (Cellophane)*, 351 U.S. 377, 391 (1956).

¹⁰ *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 481 (1992).

¹¹ *See, e.g.,* *Bacchus Indus., Inc. v. Arvin Indus., Inc.*, 939 F.2d 887, 894 (10th Cir. 1991) (defining monopoly power as “substantial” market power); *Deauville Corp. v. Federated Dep’t Stores, Inc.*, 756 F.2d 1183, 1192 n.6 (5th Cir. 1985) (defining monopoly power as an “extreme degree of market power”); 3A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 801, at 318 (2d ed. 2002) (stating that “the Sherman Act § 2 notion of monopoly power . . . is conventionally understood to mean ‘substantial’ market power”); Landes & Posner, *supra* note 8, at 937 (defining monopoly power as “a high degree of market power”).

¹² *See* AREEDA & HOVENKAMP, *supra* note 11, ¶ 801d, at 323; *see also* *Colo. Interstate Gas Co. v. Natural Gas Pipeline Co. of Am.*, 885 F.2d 683, 695–96 (10th Cir. 1989) (finding a firm lacked monopoly power because its “ability to charge monopoly prices will necessarily be temporary”).

¹³ *See* *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407–08 (2004).

¹⁴ *See, e.g.,* *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966).

¹⁵ *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 775 (1984).

be discouraged in such a system.

III. Identifying Monopoly Power

Monopoly power is conventionally demonstrated by showing that both (1) the firm has (or in the case of attempted monopolization, has a dangerous probability of attaining) a high share of a relevant market and (2) there are entry barriers—perhaps ones created by the firm’s conduct itself—that permit the firm to exercise substantial market power for an appreciable period.¹⁶ Unless these conditions are met, defendant is unlikely to have either the incentive or ability to exclude competition.¹⁷

A. Market Shares

1. Courts Typically Have Required a Dominant Market Share to Infer Monopoly Power

In determining whether a competitor possesses monopoly power in a relevant market, courts typically begin by looking at the firm’s market share.¹⁸ Although the courts

“have not yet identified a precise level at which monopoly power will be inferred,”¹⁹ they have demanded a dominant market share. Discussions of the requisite market share for monopoly power commonly begin with Judge Hand’s statement in *United States v. Aluminum Co. of America* that a market share of ninety percent “is enough to constitute a monopoly; it is doubtful whether sixty or sixty-four percent would be enough; and certainly thirty-three percent is not.”²⁰ The Supreme Court quickly endorsed Judge Hand’s approach in *American Tobacco Co. v. United States*.²¹

Following *Alcoa* and *American Tobacco*, courts typically have required a dominant market share before inferring the existence of monopoly power. The Fifth Circuit observed that “monopolization is rarely found when the defendant’s share of the relevant market is below 70%.”²² Similarly, the Tenth Circuit noted that to establish “monopoly power, lower courts generally require a minimum market share of between 70% and 80%.”²³ Likewise, the Third Circuit stated that “a share significantly larger than 55% has been required to establish prima facie market power”²⁴ and held that a market share between seventy-five percent and eighty percent of sales is “more than adequate to establish a prima facie case of power.”²⁵

It is also important to consider the share levels that have been held insufficient to allow courts to conclude that a defendant possesses monopoly power. The Eleventh Circuit held

the existence of monopoly power is the defendant’s market share.”).

¹⁹ SECTION OF ANTITRUST LAW, AM. BAR ASS’N, MARKET POWER HANDBOOK 19–20 (2005) (footnote omitted).

²⁰ 148 F.2d 416, 424 (2d Cir. 1945).

²¹ See 328 U.S. 781, 813–14 (1946).

²² *Exxon Corp. v. Berwick Bay Real Estates Partners*, 748 F.2d 937, 940 (5th Cir. 1984) (per curiam).

²³ *Colo. Interstate Gas Co. v. Natural Gas Pipeline Co. of Am.*, 885 F.2d 683, 694 n.18 (10th Cir. 1989) (citation omitted).

²⁴ *United States v. Dentsply Int’l, Inc.*, 399 F.3d 181, 187 (3d Cir. 2005).

²⁵ *Id.* at 188.

¹⁶ See *W. Parcel Express v. UPS*, 190 F.3d 974, 975 (9th Cir. 1999); *Am. Council of Certified Podiatric Physicians & Surgeons v. Am. Bd. of Podiatric Surgery, Inc.*, 185 F.3d 606, 622–23 (6th Cir. 1999).

¹⁷ See, e.g., *May 8 Hr’g Tr.*, *supra* note 7, at 46 (Creighton) (noting that “the percentage of the market that you control actually can be helpful as direct evidence regarding how profitable it is likely to be to you, and both your incentives and your ability to enter into some kind of exclusionary conduct”); *Mar. 7 Hr’g Tr.*, *supra* note 6, at 69–71 (Katz); HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY 82–83 (3d ed. 2005); Einer Elhauge, *Defining Better Monopolization Standards*, 56 STAN. L. REV. 253, 336 (2003) (asserting that market share “bears on the ability of the defendant to persuade buyers to agree to exclusionary schemes, the likelihood that those schemes will impair rival efficiency, the profitability to the defendant of impairing rival efficiency, and the relevance of any economies of share the defendant may enjoy from the scheme”).

¹⁸ See, e.g., *U.S. Anchor Mfg., Inc. v. Rule Indus., Inc.*, 7 F.3d 986, 999 (11th Cir. 1993) (“The principal measure of actual monopoly power is market share”); *Movie 1 & 2 v. United Artists Commc’ns, Inc.*, 909 F.2d 1245, 1254 (9th Cir. 1990) (stating that “although market share does not alone determine monopoly power, market share is perhaps the most important factor to consider in determining the presence or absence of monopoly power”); *Weiss v. York Hosp.*, 745 F.2d 786, 827 (3d Cir. 1984) (“A primary criterion used to assess

that a “market share at or less than 50% is inadequate as a matter of law to constitute monopoly power.”²⁶ The Seventh Circuit observed that “[f]ifty percent is below any accepted benchmark for inferring monopoly power from market share.”²⁷ A treatise agrees, contending that “it would be rare indeed to find that a firm with half of a market could individually control price over any significant period.”²⁸

Some courts have stated that it is possible for a defendant to possess monopoly power with a market share of less than fifty percent.²⁹ These courts provide for the possibility of establishing monopoly power through non-market-share evidence, such as direct evidence of an ability profitably to raise price or exclude competitors. The Department is not aware, however, of any court that has found that a defendant possessed monopoly power when its market share was less than fifty percent.³⁰ Thus, as a practical matter, a market share of greater than fifty percent has been necessary for courts to find the existence of monopoly

power.³¹

2. Significance of a Dominant Market Share

A dominant market share is a useful starting point in determining monopoly power. Modern decisions consistently hold, however, that proof of monopoly power requires more than a dominant market share. For example, the Sixth Circuit instructed that “market share is only a starting point for determining whether monopoly power exists, and the inference of monopoly power does not automatically follow from the possession of a commanding market share.”³² Likewise, the Second Circuit held that a “court will draw an inference of monopoly power only after full consideration of the relationship between market share and other relevant characteristics.”³³

A simple example illustrates the “pitfalls in mechanically using market share data” to

²⁶ *Bailey v. Allgas, Inc.*, 284 F.3d 1237, 1250 (11th Cir. 2002).

²⁷ *Blue Cross & Blue Shield United of Wis. v. Marshfield Clinic*, 65 F.3d 1406, 1411 (7th Cir. 1995) (Posner, C.J.); *accord Rebel Oil Co. v. Atl. Richfield Co.*, 51 F.3d 1421, 1438 (9th Cir. 1995) (noting that “numerous cases hold that a market share of less than 50 percent is presumptively insufficient to establish market power” in a claim of actual monopolization); *U.S. Anchor Mfg., Inc. v. Rule Indus., Inc.*, 7 F.3d 986, 1000 (11th Cir. 1993).

²⁸ AREEDA ET AL., *supra* note 1, ¶ 532c, at 250.

²⁹ See *Hayden Publ’g Co., Inc. v. Cox Broad. Corp.*, 730 F.2d 64, 69 n.7 (2d Cir. 1984) (“[A] party may have monopoly power in a particular market, even though its market share is less than 50%.”); *Broadway Delivery Corp. v. UPS*, 651 F.2d 122, 129 (2d Cir. 1981) (“[W]hen the evidence presents a fair jury issue of monopoly power, the jury should not be told that it must find monopoly power lacking below a specified share.”); *Yoder Bros., Inc. v. Cal.-Fla. Plant Corp.*, 537 F.2d 1347, 1367 n.19 (5th Cir. 1976) (rejecting “a rigid rule requiring 50% of the market for a monopolization offense without regard to any other factors”).

³⁰ Cf. *U.S. Anchor Mfg.*, 7 F.3d at 1000 (“[W]e have discovered no cases in which a court found the existence of actual monopoly established by a bare majority share of the market.”).

³¹ This observation does not apply to claims of attempted monopolization. Courts, commentators, and panelists all recognize that situations can exist where “there [is] a dangerous probability that the defendant’s conduct would propel it from a non-monopolistic share of the market to a share that would be large enough to constitute a monopoly for purposes of the monopolization offense.” *Colo. Interstate Gas Co. v. Natural Gas Pipeline Co. of Am.*, 885 F.2d 683, 694 (10th Cir. 1989); see also, e.g., *Rebel Oil*, 51 F.3d at 1438 (“[T]he minimum showing of market share required in an attempt case is a lower quantum than the minimum showing required in an actual monopolization case.”); *Domed Stadium Hotel, Inc. v. Holiday Inns, Inc.*, 732 F.2d 480, 490 (5th Cir. 1984) (holding that “a share of less than the fifty percent generally required for actual monopolization may support a claim for attempted monopolization”); *May 8 Hr’g Tr.*, *supra* note 7, at 46–47 (Creighton); *Mar. 7 Hr’g Tr.*, *supra* note 6, at 154 (Krattenmaker); AREEDA & HOVENKAMP, *supra* note 11, ¶ 807d, at 372 (noting that “[t]he all important consideration is that the alleged conduct must be reasonably capable of creating a monopoly in the defined market. . . . [A] moderate but rising share may pose more ‘dangerous probability’ than would a higher but falling share.”).

³² *Am. Council of Certified Podiatric Physicians & Surgeons v. Am. Bd. of Podiatric Surgery, Inc.*, 185 F.3d 606, 623 (6th Cir. 1999).

³³ *Tops Mkts., Inc. v. Quality Mkts., Inc.*, 142 F.3d 90, 98 (2d Cir. 1998).

measure monopoly power.³⁴ Suppose a large firm competes with a fringe of small rivals, all producing a homogeneous product. In this situation, the large firm's market share is only one determinant of its power over price. Even a very high share does not guarantee substantial power over price for a significant period: if the fringe firms can readily and substantially increase production at their existing plants in response to a small increase in the large firm's price (that is, if the fringe supply is highly elastic), a decision by the large firm to restrict output may have no effect on market prices.³⁵

Even if fringe firms cannot readily and substantially increase production, a firm with a very high market share is still not guaranteed substantial power over price if the quantity demanded decreases significantly in response to a small price increase—in other words, if market demand is highly elastic.³⁶ That is, when demand is elastic, a firm may be unable to raise price without losing so many sales that it will prove to be an unprofitable strategy.³⁷

Instances of high fringe-firm supply elasticity or high industry-demand elasticity are not the only situations where a high market share may be a misleading indicator of monopoly power. In markets characterized by rapid technological change, for example, a high market share of current sales or production may be consistent with the presence of robust competition over time rather than a sign of monopoly power.³⁸ In those situations, any

power a firm may have may be both temporary and essential to the competitive process. Indeed, in the extreme case, "market structure may be a series of temporary monopolies" in a dynamically competitive market.³⁹

Notwithstanding that a high share of the relevant market does not always mean that monopoly power exists, a high market share is one of the most important factors in the Department's examination of whether a firm has, or has a dangerous probability of obtaining, monopoly power. A high share indicates that it is appropriate to examine other relevant factors. In this regard, if a firm has maintained a market share in excess of two-thirds for a significant period and market conditions (for example, barriers to entry) are such that the firm's market share is unlikely to be eroded in the near future, the Department believes that such evidence ordinarily should establish a rebuttable presumption that the firm possesses monopoly power. This approach is consistent with the case law.⁴⁰

Session Hr'g Tr. 11–12, Mar. 8, 2007 [hereinafter Mar. 8 Hr'g Tr.] (Schmalensee) ("In a number of markets marked by rapid technological change, network effects can lead some firms to high shares. If you have a snapshot in which network effects have led to a dominant position, that snapshot is consistent with a world of vigorous Schumpeterian competition, in which the next hot product may displace the leader."); Mar. 7 Hr'g Tr., *supra* note 6, at 78–79 (Katz) (noting that "the R&D capabilities . . . may be much more important than current market shares in terms of understanding innovation").

³⁹ Michael L. Katz, Market Definition, Concentration & Section 2, at 5 (Mar. 7, 2007) (hearing submission).

⁴⁰ See generally 1 SECTION OF ANTITRUST LAW, AM. BAR ASS'N, ANTITRUST LAW DEVELOPMENTS 231 (6th ed. 2007) ("A market share in excess of 70 percent generally establishes a prima facie case of monopoly power, at least with evidence of substantial barriers to entry and evidence that existing competitors could not expand output." (footnotes omitted)); AREEDA & HOVENKAMP, *supra* note 11, ¶ 801a, at 319 ("Although one cannot be too categorical, we believe it reasonable to presume the existence of substantial single-firm market power from a showing that the defendant's share of a well-defined market protected by sufficient entry barriers has exceeded 70 or 75 percent for the five years preceding the complaint."); *supra* notes 20–25 and accompanying text.

³⁴ Landes & Posner, *supra* note 8, at 947; see also *id.* at 944–97.

³⁵ *Id.* at 945–46 n.20.

³⁶ Cf. Jonathan B. Baker & Timothy F. Bresnahan, *Empirical Methods of Identifying and Measuring Market Power*, 61 ANTITRUST L.J. 3, 10 (1992) ("[W]hen industry demand is highly elastic, firms with market power behave similarly to those without market power.").

³⁷ See CARLTON & PERLOFF, *supra* note 8, at 92–93; Landes & Posner, *supra* note 8, at 941–42.

³⁸ See, e.g., May 8 Hr'g Tr., *supra* note 7, at 53–54 (Rule) (stating that as the economy becomes "more dynamic and complex," it "becomes a little more difficult to use the market power and monopoly power market share screen that traditionally we have used"); Sherman Act Section 2 Joint Hearing: Monopoly Power

3. Market-Share Safe Harbor

To give businesses greater certainty in circumstances where significant competitive concerns are unlikely, many panelists supported a market-share safe harbor in section 2 cases, voicing skepticism about how frequently monopoly power would be present when a firm possesses a market share less than Alcoa's "sixty or sixty-four percent" market share.⁴¹ Market shares "can be used to eliminate frivolous antitrust cases, [and] that use can contribute enormous value to society."⁴²

However, other panelists voiced objections to a market-share safe harbor. Market definition can lack precision,⁴³ and it is possible that an incorrect market definition could allow anticompetitive conduct to avoid liability.⁴⁴ Additionally, some assert that, just as firms with large shares may not have monopoly power, firms with relatively small shares can sometimes still harm competition by their unilateral conduct. They thus are concerned that a safe harbor may protect anticompetitive

conduct.⁴⁵

The Department believes that a market-share safe harbor for monopoly — as opposed to market — power warrants serious consideration by the courts. In many decades of section 2 enforcement, we are aware of no court that has found monopoly power when defendant's share was less than fifty percent, suggesting instances of monopoly power below such a share, even if theoretically possible, are exceedingly rare in practice. It is therefore plausible that the costs of seeking out such instances exceed the benefits.

B. Durability of Market Power

The Second Circuit has defined monopoly power as "the ability '(1) to price substantially above the competitive level and (2) to persist in doing so for a significant period without erosion by new entry or expansion.'"⁴⁶ Likewise, other circuit courts have found that firms with dominant market shares lacked monopoly power when their market power was insufficiently durable.⁴⁷

⁴¹ See May 8 Hr'g Tr., *supra* note 7, at 41 (Eisenach) (stating that he is "not opposed in any way to a 75 percent safe harbor or a 70 percent safe harbor"); *id.* at 42 (Rill) (noting that "70 percent sounds reasonable . . . maybe a little higher"); Mar. 7 Hr'g Tr., *supra* note 6, at 216 (Sims) (stating that he might be "very comfortable" with a "70 percent or an 80 percent number"); *id.* at 218 (Bishop) (stating that he "would set the threshold at 70–80 percent"). *But see id.* at 217 (Stelzer) (opposing a market-share safe harbor); *cf. id.* at 218 (Krattenmaker) (supporting market-share safe harbors but deeming a single safe harbor inappropriate for all conduct).

⁴² Carlton, *supra* note 7, at 27.

⁴³ *Cf.* May 8, Hr'g Tr., *supra* note 7, at 44 (Melamed) ("From my experience in counseling, market share-type screens are of limited value because market share depends on market definition, and it is a binary concept and we are often sitting there saying well, gadgets might be in the market with widgets, but they might not be and who knows."); Sherman Act Section 2 Joint Hearing: Section 2 Policy Issues Hr'g Tr. 54, May 1, 2007 [hereinafter May 1 Hr'g Tr.] (Jacobson) (noting that "there are a lot of differentiated products where you do not know where the market definition fight is going to come out").

⁴⁴ *Cf.* Mar. 7 Hr'g Tr., *supra* note 6, at 57–58 (Gilbert); *id.* at 65, 74–76 (Katz).

⁴⁵ See, e.g., May 8 Hr'g Tr., *supra* note 7, at 49 (Pitofsky) ("Let me just say that first of all, I'm not comfortable with safe harbors. I like rebuttable presumptions because there are too many quirky situations. Somebody has 40 percent of the market but everybody else has one percent each."); *id.* at 52 (Sidak) ("Would we infer that there is not a problem because the market share is only 40 percent and that is way below Judge Hand's ALCOA threshold or would we look at a price increase or loss of competitor market share and say that is a more direct set of facts that elucidates what the price elasticity of demand is?").

⁴⁶ AD/SAT v. Associated Press, 181 F.3d 216, 227 (2d Cir. 1999) (quoting 2A AREEDA ET AL., *supra* note 1, ¶ 501, at 90 (2d. ed. 2002) (emphasis in original)); see also United States v. Dentsply Int'l, Inc., 399 F.3d 181, 188–89 (3d Cir. 2005) ("In evaluating monopoly power, it is not market share that counts, but the ability to maintain market share." (quoting United States v. Syufy Enters., 903 F.2d 659, 665–66 (9th Cir. 1990) (emphasis in original))).

⁴⁷ See, e.g., W. Parcel Express v. UPS, 190 F.3d 974, 975 (9th Cir. 1999) (finding that a firm with an allegedly "dominant share" could not possess monopoly power because there were no significant "barriers to entry"); *Colo. Interstate Gas*, 885 F.2d at 695–96 ("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

Panelists agreed that monopoly power is the ability to engage profitably in substantial, sustained supracompetitive pricing. As one panelist noted, the “picture [of monopoly power] that we carry around in our head” is “the sustained charging of a price above marginal cost, maintaining . . . a price substantially above marginal cost.”⁴⁸ Another stressed, “[F]or antitrust to worry about market power . . . it has to be durable.”⁴⁹

“[A] firm cannot possess monopoly power in a market unless that market is also protected by significant barriers to entry.”⁵⁰ In particular, a high market share provides no reliable indication of the potential for rivals to supply market demand. Even when no current rival exists, an attempt to increase price above the competitive level may lead to an influx of competitors sufficient to make that price increase unprofitable.⁵¹ In that case, the firm

monopolization offense.”); *Williamsburg Wax Museum, Inc. v. Historic Figures, Inc.*, 810 F.2d 243, 252 (D.C. Cir. 1987) (finding that a firm did not have monopoly power when a competitor was able to supply customer’s demand within a year); *Borough of Lansdale v. Phila. Elec. Co.*, 692 F.2d 307, 312–14 (3d Cir. 1982) (affirming finding that power company did not have monopoly power when customer could have built its own power line within sixteen months).

⁴⁸ Mar. 7 Hr’g Tr., *supra* note 6, at 32 (White); *see also id.* at 61 (Gilbert); *id.* at 82–83 (Gavil); *id.* at 87 (White) (monopoly power is the ability profitably to charge “a price significantly above marginal cost, sustained for a sustained amount of time . . . how much and for how long, I do not know”); *id.* at 96–97 (Katz).

⁴⁹ Mar. 8 Hr’g Tr., *supra* note 38, at 80 (Lande); *see also AREEDA & HOVENKAMP, supra* note 11, ¶ 801, at 319 (suggesting that “it is generally reasonable to presume that a firm has monopoly power when the firm’s dominant market share has lasted, or will last, for at least five years”).

⁵⁰ *United States v. Microsoft Corp.*, 253 F.3d 34, 82 (D.C. Cir. 2001) (en banc) (per curiam); *see also Harrison Aire, Inc. v. Aerostar Int’l, Inc.*, 423 F.3d 374, 381 (3d Cir. 2005) (“In a typical section 2 case, monopoly power is ‘inferred from a firm’s possession of a dominant share of a relevant market that is protected by entry barriers.’” (quoting *Microsoft*, 253 F.3d at 51)); *cf.* Mar. 7 Hr’g Tr., *supra* note 6, at 139–40 (de la Mano) (stating that “substantial market power” entails “barriers to entry and expansion” that are “significant”).

⁵¹ *See, e.g., 2A AREEDA ET AL., supra* note 1, ¶ 501, at 91 (2d ed. 2002) (“In spite of its literal imprecision, the

lacks monopoly power even though it may currently have a dominant market share.”⁵²

IV. Market Definition and Monopoly Power

The Supreme Court has noted the crucial role that defining the relevant market plays in section 2 monopolization and attempt cases.⁵³ The market-definition requirement brings discipline and structure to the monopoly-power inquiry, thereby reducing the risks and costs of error.

The relevant product market in a section 2 case, as elsewhere in antitrust, “is composed of products that have reasonable interchangeability for the purposes for which they are produced—price, use and qualities considered.”⁵⁴ Thus, the market is defined with regard to demand substitution, which focuses

standard formulation is essentially correct in asking whether the defendant can price monopolistically without prompt erosion from rivals’ entry or expansion.”).

⁵² *See, e.g., United States v. Waste Mgmt., Inc.*, 743 F.2d 976, 983–84 (2d Cir. 1984) (noting that, in a market where entry is easy, a firm that raised price “would then face lower prices charged by all existing competitors as well as entry by new ones, a condition fatal to its economic prospects if not rectified”). *See generally* Franklin M. Fisher, *Diagnosing Monopoly*, Q. REV. ECON. & BUS., Summer 1979, at 7, 23 (noting that “consideration of the role of entry plays a major part in any assessment of monopoly power”).

⁵³ *See Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 459 (1993) (explaining that “the dangerous probability of monopolization in an attempt case . . . requires inquiry into the relevant product and geographic market and the defendant’s economic power in that market”); *United States v. Grinnell Corp.*, 384 U.S. 563, 571 (1966); *Walker Process Equip., Inc. v. Food Mach. & Chem. Corp.*, 382 U.S. 172, 177 (1965) (“Without a definition of that market there is no way to measure [a defendant’s] ability to lessen or destroy competition.”).

⁵⁴ *United States v. E. I. du Pont de Nemours & Co. (Cellophane)*, 351 U.S. 377, 404 (1956); *see also Microsoft*, 253 F.3d at 51–52 (“‘Because the ability of consumers to turn to other suppliers restrains a firm from raising prices above the competitive level,’ the relevant market must include all products ‘reasonably interchangeable by consumers for the same purposes.’” (citation omitted) (quoting *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 218 (D.C. Cir. 1986) and *Cellophane*, 351 U.S. at 395)).

on buyers' views of which products are acceptable substitutes or alternatives.⁵⁵

However, particular care is required when delineating relevant markets in monopolization cases. In merger cases, the antitrust enforcement agencies define markets by applying the hypothetical monopolist paradigm. The Horizontal Merger Guidelines state:

A market is defined as a product or group of products and a geographic area in which it is produced or sold such that a hypothetical, profit-maximizing firm, not subject to price regulation, that was the only present and future producer or seller of those products in that area likely would impose at least a 'small but significant and nontransitory' increase in price, assuming the terms of sale of all other products are held constant.⁵⁶

The Guidelines go on to explain that in implementing this definition, the agencies "use prevailing prices."⁵⁷ In the section 2 context, however, if the inquiry is being conducted after monopoly power has already been exercised, using prevailing prices can lead to defining markets too broadly and thus inferring that monopoly power does not exist when, in fact, it does.⁵⁸

The problem with using prevailing prices to define the market in a monopoly-maintenance case is known as the "Cellophane Fallacy" because it arose in a case involving cellophane, where an issue before the Supreme Court was whether the relevant market was cellophane or

all flexible-packaging materials.⁵⁹ During the relevant period, du Pont produced over seventy percent of the cellophane in the United States.⁶⁰ Cellophane, however, "constituted less than 20% of all 'flexible packaging material' sales."⁶¹ The Court concluded that cellophane's interchangeability with other materials made it part of a broader, flexible-packaging market.

Many have criticized the Court's reasoning because it assessed the alternatives for cellophane after du Pont already had raised its price to the monopoly level, failing to recognize that a firm with monopoly power finds it profitable to raise price — above the competitive level — until demand becomes elastic. Hence, it should not be at all surprising to find that at the monopoly price the firm faces close substitutes and would not be able profitably to raise price further.⁶² "Because every monopolist faces an elastic demand . . . at its profit-maximizing output and price, there is bound to be some substitution of other products for its own when it is maximizing profits, even if it has great market power."⁶³

One panelist suggested using the hypothetical-monopolist paradigm in certain monopoly-acquisition cases, defining the relevant market as of a time before the challenged conduct began and carrying forward the resulting market definition to the present to assess whether the firm possesses

⁵⁵ See Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 ANTITRUST L.J. 129, 132 (2007).

⁵⁶ U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES § 1.0 (1992) (rev. ed. 1997), available at <http://www.usdoj.gov/atr/public/guidelines/hmg.pdf>.

⁵⁷ *Id.* § 1.11. However, the Guidelines recognize that when "premerger circumstances are strongly suggestive of coordinated interaction . . . the Agency will use a price more reflective of the competitive price." *Id.* (footnote omitted).

⁵⁸ See, e.g., Mark A. Glick et al., *Importing the Merger Guidelines Market Test in Section 2 Cases: Potential Benefits and Limitations*, 42 ANTITRUST BULL. 121, 145–49 (1997); Philip Nelson, *Monopoly Power, Market Definition, and the Cellophane Fallacy* 7 (n.d.) (hearing submission).

⁵⁹ *Cellophane*, 351 U.S. at 377.

⁶⁰ *Id.* at 379.

⁶¹ *Id.*

⁶² See, e.g., Landes & Posner, *supra* note 8, at 960–61. See generally George W. Stocking & Willard F. Mueller, *The Cellophane Case and the New Competition*, 45 AM. ECON. REV. 29, 53–54 (1955).

⁶³ Landes & Posner, *supra* note 8, at 961 (footnote omitted); see also, e.g., Lawrence J. White, *Market Power and Market Definition in Monopolization Cases: A Paradigm Is Missing* 7 (Jan. 24, 2007) (hearing submission) ("[A]ll firms — regardless of whether they are competitive or are truly monopolists — will be found to be unable to raise price profitably from currently observed levels, since they will already have established a profit-maximizing price for themselves; and thus this 'test' will fail to separate the true monopolist that does exercise market power from the firm that does not have market power.").

monopoly power.⁶⁴ This suggestion is sound in theory. Unfortunately, however, substantial practical problems may make it difficult to determine consumers' preferences and other relevant factors as of some prior date, thereby impeding the ability to conduct an accurate "but-for" exercise.⁶⁵ Moreover, the market definition as of the pre-conduct time may no longer be relevant because of intervening new product introductions or other significant changes in the marketplace.

An additional problem concerns allegations of monopoly maintenance where the conduct in question allegedly has maintained preexisting monopoly power rather than created that power. One possibility is to apply the hypothetical-monopolist paradigm of the Horizontal Merger Guidelines just as in merger cases, except at the competitive price rather than the prevailing price. However, accurately determining the competitive price is apt to be quite difficult in such cases.

Despite its limitations in the section 2 context, there exists no clear and widely accepted alternative to the hypothetical-monopolist methodology for defining relevant markets.⁶⁶ Some commentators suggest that, for all its limitations, the hypothetical-monopolist paradigm still has value in monopolization cases.⁶⁷ It appropriately focuses

the market-definition process on market-power considerations and thereby helps to avoid ad hoc conclusions regarding the boundaries of the market and the effects of the conduct.

Moreover, and importantly, concerns over the Cellophane Fallacy need not confound market definition in all section 2 cases. Panelists observed that, although there may be no reliable paradigm for defining the relevant market in every case, courts often are able to draw sound conclusions about the relevant market based on the facts and circumstances of the industry.⁶⁸ Furthermore, "[T]he issue in many cases arising under Section 2 of the Sherman Act is whether ongoing or threatened conduct, if left unchecked, would create monopoly power—not whether the defendant already possesses monopoly power."⁶⁹ In particular, *Cellophane* considerations present less of a problem in attempted monopolization cases where monopoly prices are either not yet being charged or where competitive prices were being charged in the not-too-distant pre-conduct past. The Department believes that market definition remains an important aspect of section 2 enforcement and that continued consideration and study is warranted regarding how to appropriately determine relevant markets in this context.

V. Other Approaches to Identifying Monopoly Power

As noted above, courts typically determine whether a firm possesses monopoly power by first ascertaining the relevant market and then examining market shares, entry conditions, and other factors with respect to that market. One important issue is whether plaintiffs should instead be permitted to demonstrate monopoly power solely through direct evidence—for example, proof of high profits⁷⁰—thus

⁶⁴ May 1 Hr'g Tr., *supra* note 43, at 162 (Willig) (stating that "mentally, we can go back to before" the exclusion, and "there is a relevant market that's pertinent for this analysis").

⁶⁵ See Carlton, *supra* note 7, at 20 ("It may sometimes be difficult to figure out the [but-for] benchmark price, though not always.").

⁶⁶ See Mar. 7 Hr'g Tr., *supra* note 6, at 127–28 (Bishop); Nelson, *supra* note 58, at 13 (stating that "there is no 'cookbook' methodology for defining markets" in monopolization cases); White, *supra* note 63, at 15 (stating that the "absence of a generally accepted market definition paradigm is a genuine problem").

⁶⁷ Gregory J. Werden, *Market Delineation Under the Merger Guidelines: Monopoly Cases and Alternative Approaches*, 16 REV. INDUS. ORG. 211, 214–15 (2000) ("[T]he Guidelines' hypothetical monopolist paradigm [can] play a very useful, albeit conceptual, role . . . provid[ing] the critical insight necessary to decide the case without any need to get into the details of their application."); White, *supra* note 63, at 14.

⁶⁸ See Mar. 7 Hr'g Tr., *supra* note 6, at 67–68 (Katz) (stating that market definition is often obvious); *cf. id.* at 51 (Gavil) (noting that defendants did not contest the existence of monopoly power in *LePage's, Inc. v. 3M*, 324 F.3d 141 (3d Cir. 2003) (en banc) and *Conwood Co. v. U.S. Tobacco Co.*, 290 F.3d 768 (6th Cir. 2002)).

⁶⁹ Werden, *supra* note 67, at 212.

⁷⁰ See, e.g., *Broadcom Corp. v. Qualcomm Inc.*, 501

rendering market definition unnecessary. While no court has relied solely on direct evidence to establish monopoly power, one court found direct evidence sufficient to survive summary judgment despite plaintiff's failure "to define the relevant market with precision."⁷¹

A. Direct Evidence of High Profits, Price-Cost Margins, and Demand Elasticity

Relying exclusively on direct evidence of profits to establish monopoly power presents a number of difficult issues.⁷² High accounting profits do not necessarily reflect the exercise of monopoly power. In particular, cost measures are normally available only from reports prepared in conformity with accounting conventions, but economics and accounting have significantly different notions of cost.⁷³ Accounting figures seldom reflect the firm's true economic cost of producing its goods and

services, and accounting rates of return will often differ from true economic rates of return.⁷⁴

For example, determining if a firm is earning an economic profit requires accounting properly for depreciation and the economic replacement cost of the assets the firm is using to generate its income. Yet the information reported by accountants frequently is not designed to measure and accurately reflect those costs.⁷⁵ In addition, determining if a firm is earning a profit reflecting the exercise of monopoly power should take into account the opportunity cost of employing those assets in their current use. Accounting records rarely attempt to make such assessments.

Moreover, available estimates of a firm's capital costs, an important input into calculating a firm's profitability, are generally based on accounting rules that do not account for the riskiness of the investment. If the investment, at the time it was made, was quite risky, a very high accounting rate of return may reflect a modest economic return. More generally, when all relevant economic costs are properly accounted for, what may at first seem to be a supracompetitive return may be no more than a competitive one (or vice versa).⁷⁶

Using price-cost margins, rather than profits, as evidence of monopoly power is also unsatisfactory. Economists have long pointed to a firm's price-cost margin—its price minus its short-run marginal cost, all divided by its price (known as the Lerner index⁷⁷)—as a

F.3d 297, 307 (3d Cir. 2007) ("The existence of monopoly power may be proven through direct evidence of supracompetitive prices and restricted output."); *PepsiCo, Inc. v. Coca-Cola Co.*, 315 F.3d 101, 107 (2d Cir. 2002) (per curiam) (holding that "there is authority to support [the proposition] that a relevant market definition is not a necessary component of a monopolization claim"); *Conwood*, 290 F.3d at 783 n.2 (noting that monopoly power "may be proven directly by evidence of the control of prices or the exclusion of competition" (quoting *Tops Mkts., Inc. v. Quality Mkts., Inc.*, 142 F.3d 90, 97–98 (2d Cir. 1998))).

⁷¹ *Re/Max Int'l, Inc. v. Realty One, Inc.*, 173 F.3d 995, 1016 (6th Cir. 1999) ("[A]lthough the plaintiffs failed to define the relevant market with precision and therefore failed to establish the defendants' monopoly power through circumstantial evidence, there does exist a genuine issue of material fact as to whether the plaintiffs' evidence shows direct evidence of a monopoly, that is, actual control over prices or actual exclusion of competitors.").

⁷² See generally *Baker & Bresnahan*, *supra* note 36, at 5 (noting that problems with accounting profits or mark-ups methodology "loom[s] so large that antitrust today does not rely heavily on profitability measures in making inferences about market power"); Richard Schmalensee, *Another Look at Market Power*, 95 HARV. L. REV. 1789, 1805 (1982) (discussing "serious problems with using profitability to gauge market power").

⁷³ This is not to suggest that financial data lack value for the economic analysis of competition. See *Nelson*, *supra* note 58, at 17.

⁷⁴ See generally George J. Benston, *Accounting Numbers and Economic Values*, 27 ANTITRUST BULL. 161, 162–66 (1982); Franklin M. Fisher & John J. McGowan, *On the Misuse of Accounting Rates of Return to Infer Monopoly Profits*, 73 AM. ECON. REV. 82, 82–84 (1983) (noting that standard accounting treatments of investment and depreciation are inappropriate for determining a firm's economic rate of return).

⁷⁵ See Fisher & McGowan, *supra* note 74.

⁷⁶ See generally *Bailey v. Allgas, Inc.*, 284 F.3d 1237, 1252–55 (11th Cir. 2002); *AREEDA ET AL.*, *supra* note 1, ¶ 516f; Margaret Sanderson & Ralph A. Winter, "Profits" Versus "Rents" in Antitrust Analysis: An Application to the Canadian Waste Services Merger, 70 ANTITRUST L.J. 485, 510–11 (2002).

⁷⁷ See A. P. Lerner, *The Concept of Monopoly and the*

measure of the extent to which the firm is exercising short-run market power.⁷⁸ For some purposes, such as attempting to determine the firm's short-run elasticity of demand at a given price, the measure can have value.

Short-run price-cost margins are not, however, of much use in determining whether a firm has monopoly power. Monopoly power requires that the firm be able profitably to charge prices high enough to earn a supernormal return on its investment. It is not clear how much price must exceed short-run marginal cost before there is monopoly power.⁷⁹ Depending on the size of the firm's fixed costs, even a significant margin between price and short-run marginal cost may be insufficient to earn even a normal return. Indeed, a firm should not be found to possess monopoly power simply because it prices in excess of short-run marginal cost and hence has a high price-cost margin.⁸⁰

In principle, a better measure of margin would be the ratio of price to the firm's long-run marginal cost.⁸¹ Unfortunately, such information, and in particular data allowing accurate adjustments for risk, is unlikely to be available.⁸²

Measurement of Monopoly Power, 1 REV. ECON. STUD. 157, 169 (1934).

⁷⁸ See, e.g., CARLTON & PERLOFF, *supra* note 8, at 93.

⁷⁹ See Dennis W. Carlton, *Does Antitrust Need to be Modernized?*, J. ECON. PERSP., Summer 2007, at 155, 164 ("Since monopolistically competitive firms have some market power in the sense that price exceeds marginal cost, presumably the deviation between price and marginal cost . . . should be significant if it is to expose the firm to antitrust scrutiny. But no consensus exists in the courts or among economists as to how large this deviation should be.").

⁸⁰ See Mar. 7 Hr'g Tr., *supra* note 6, at 13-14 (Nelson); *id.* at 97 (Katz); see also CARLTON & PERLOFF, *supra* note 8, at 93 (distinguishing monopoly from market power on the basis that more than just a competitive profit is earned when a firm with monopoly power optimally sets its price above its short-run marginal cost).

⁸¹ See Werden, *supra* note 67, at 214.

⁸² See generally AREEDA ET AL., *supra* note 1, ¶ 504b, at 123-24; 3 AREEDA & HOVENKAMP, *supra* note 11, ¶ 739e; Werden, *supra* note 67, at 214 (noting that "[i]nferences based on econometrics and first-order conditions allow

Nor does evidence concerning the elasticity of demand for the firm's products establish the existence of monopoly power. Demand elasticity can, to be sure, provide information about the firm's market power.⁸³ For example, a firm with no market power faces infinitely elastic demand.⁸⁴ Sellers of differentiated products, on the other hand, may face a significantly less elastic demand at their profit-maximizing prices. In those cases, they will generally have high price-cost margins and market power. Only rarely, however, will those firms possess monopoly power. As one panelist noted, "[E]lasticities do not help us very much. You cannot tell the difference between a true monopolist and . . . a seller of a differentiated product."⁸⁵ As an indicator of monopoly power, demand elasticities suffer from the same fundamental problem that margins do: neither tell us whether the firm is earning durable, supernormal profits.⁸⁶

In short, direct evidence of a firm's profits, margins, or demand elasticities is not likely to provide an accurate or reliable alternative to the traditional approach of first defining the relevant market and then examining market shares and entry conditions when trying to determine whether the firm possesses monopoly power.

one to determine whether, and even how much, price exceeds short-run marginal cost, but not how much price exceeds long-run marginal cost"); Diane P. Wood, "Unfair" Trade Injury: A Competition-Based Approach, 41 STAN. L. REV. 1153, 1180-81 n.96 (1989) (noting that long-run marginal cost figures "are extremely difficult to calculate in practice").

⁸³ See CARLTON & PERLOFF, *supra* note 8, at 97-99.

⁸⁴ *Id.* at 66.

⁸⁵ Mar. 7 Hr'g Tr., *supra* note 6, at 38 (White); see also May 8 Hr'g Tr., *supra* note 7, at 56 (Muris) (stating that "it is difficult to have simple uses of Lerner indexes and downward sloping demand as measures of anything meaningful").

⁸⁶ Attempts to compare actual with competitive prices suffer from similar infirmities. Determining the competitive price is difficult, as is determining when price so exceeds the competitive level for so long that it amounts to monopoly power rather than just market power. See Carlton, *supra* note 7, at 6-7.

B. Direct Evidence of Anticompetitive Effects

Focusing on anticompetitive effects, such as the reduction of output, may be more useful than focusing on profits, price-cost margins, or demand elasticity. In section 1 cases involving concerted conduct by competitors, courts have held that direct evidence of anticompetitive effects can demonstrate market power.⁸⁷ However, courts have not held expressly that direct evidence of anticompetitive effects can prove monopoly power in section 2 cases. But in several cases, courts have suggested that such an approach would make sense, and a number of panelists agreed.⁸⁸ If a dominant firm's conduct has been demonstrated to cause competitive harm, one could rely simply on that evidence and dispense with the market-definition requirement entirely.

However, there are concerns with taking such an approach. One important concern is that effects evidence, while very valuable, is generally imperfect, and sometimes subject to differing interpretations. For this reason, also requiring a traditional market-definition exercise—incorporating, perhaps, available evidence of alleged effects—likely adds value by strengthening inferences and thereby avoiding potentially costly errors.

The Department agrees with panelists who maintained that an assessment of actual or potential anticompetitive effects can be useful in a section 2 case.⁸⁹ In some circumstances, an

inability to find any anticompetitive effects may serve as a useful screen, enabling courts or enforcement officials to conclude quickly that a section 2 violation is implausible. In other cases, there may be effects evidence strongly suggestive of harm and the existence of a relevant market that has indeed been monopolized.⁹⁰

VI. Conclusion

Monopoly power entails both greater and more durable power over price than mere market power and serves as an important screen for section 2 cases. As a practical matter, a market share of greater than fifty percent has been necessary for courts to find the existence of monopoly power. If a firm has maintained a market share in excess of two-thirds for a significant period and the firm's market share is unlikely to be eroded in the near future, the Department believes that such facts ordinarily should establish a rebuttable presumption that the firm possesses monopoly power. The Department is not likely to forgo defining the

reasonably likely to significantly raise price and/or reduce quality"); *id.* at 40 (White); *id.* at 44–49 (Gavil); *id.* at 63 (Gilbert); *id.* at 114–119 (multiple panelists); Sherman Act Section 2 Joint Hearing: Academic Testimony Hr'g Tr. 90, Jan. 31, 2007 (Bresnahan) ("[Y]ou can gain a lot of clarity about a Section 2 case by bringing the competitive effects and causation arguments to the forefront."); *id.* at 174–76 (Rubinfeld).

⁹⁰ See Mar. 7 Hr'g Tr., *supra* note 6, at 40 (White) ("You have already found the effect. Implicitly, you have said there must be a market there"); *id.* at 63 (Gilbert) ("Too often, I think many of us would agree that the market definition exercise puts the cart in front of the horse. We should be thinking about where are the competitive effects . . . and then let the market definition respond to that rather than defining where the competitive effects are."); *id.* at 114 (Nelson) (stating that "the market definition exercise helps you understand what is going on . . . but that is not to say you have to do it in every case, and there are numerous cases where you may be able to expedite things by going straight to the competitive effects bottom line"). But see *id.* at 117 (Gilbert) ("But I also can sympathize that if we did away with market definition completely, it could be highly problematic in leading to a lot of cases."); *id.* at 195 (White) ("Yes, you ought to look at competitive effects more than we have, but I think there is still going to be a role for market definition.").

⁸⁷ See *FTC v. Ind. Fed'n of Dentists*, 476 U.S. 447, 460–61 (1986) (noting that "'proof of actual detrimental effects, such as reduction of output,' can obviate the need for an inquiry into market power, which is but a 'surrogate for detrimental effects'" (quoting 7 PHILLIP E. AREEDA, ANTITRUST LAW ¶ 1511, at 429 (1986))).

⁸⁸ See *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 307 (3d Cir. 2007); *Conwood Co. v. U.S. Tobacco Co.*, 290 F.3d 768, 783 n.2 (6th Cir. 2002); see also Mar. 7 Hr'g Tr., *supra* note 6, at 39–40 (White) (proposing that analysis of alleged exclusion consider comparison of existing market with exclusion to hypothetical consequences of absence of exclusion); *id.* at 61–63 (Gilbert).

⁸⁹ See, e.g., Mar. 7 Hr'g Tr., *supra* note 6, at 25–26 (Simons) ("[O]ne could argue that the first condition [should be] that the unilateral conduct be such that it is

relevant market or calculating market shares in section 2 monopolization and attempt cases, but will use direct evidence of anticompetitive effects when warranted and will not rely exclusively on market shares in concluding that a firm possesses monopoly power.

CHAPTER 3

GENERAL STANDARDS FOR EXCLUSIONARY CONDUCT

I. Introduction

As discussed in chapter 1, the Supreme Court's description of conduct that violates section 2 in *United States v. Grinnell Corp.* — “the willful acquisition or maintenance of [monopoly] power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident”¹ — provides little useful guidance.² The trial court's instruction to the jury approved in *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, that a refusal to deal with a competitor is lawful if justified by “valid business reasons,”³ has proven similarly unavailing as a source of specific guidance because of uncertainty over what constitutes a valid business reason. Indeed, commentators draw quite different conclusions from that instruction.⁴

While the Supreme Court has established conduct-specific tests for predatory pricing and bidding, it has neither articulated similarly explicit standards for many other types of potentially exclusionary conduct nor adopted a

test applicable to all conduct.⁵ The lower courts also have not settled on either a general test or conduct-specific tests.⁶

Accordingly, there has been increasing focus in recent years on developing more refined tests to determine whether conduct is anticompetitive under section 2. This effort has been informed, in large part, by the following principles set forth in chapter 1:

- Unilateral conduct is outside the purview of section 2 unless the actor possesses monopoly power or is likely to achieve it.
- The mere possession or exercise of monopoly power is not an offense; the law addresses only the anticompetitive acquisition or maintenance of such power (and certain related attempts).
- Acquiring or maintaining monopoly power through assaults on the competitive process harms consumers and is to be condemned.
- Mere harm to competitors — without harm to the competitive process — does not violate section 2.
- Competitive and exclusionary conduct can look alike — indeed, the same conduct can have both beneficial and exclusionary

¹ *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966).

² See, e.g., 1 SECTION OF ANTITRUST LAW, AM. BAR ASS'N, ANTITRUST LAW DEVELOPMENTS 210, 242 (6th ed. 2007) (noting that “the highly abstract *Grinnell* language . . . has been criticized as not helpful in deciding concrete cases”); 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW, ¶ 651b, at 74 (2d ed. 2002) (describing the *Grinnell* formulation as “not helpful” and “sometimes misleading”).

³ 475 U.S. 585, 597 (1985) (quoting trial court).

⁴ See generally Mark S. Popofsky, *Defining Exclusionary Conduct: Section 2, the Rule of Reason, and the Unifying Principle Underlying Antitrust Rules*, 73 ANTITRUST L.J. 435, 439 (2006) (“[A]dvocates of rival Section 2 tests treat *Aspen* as a mirror, reflecting support for their favored doctrine.”).

⁵ See, e.g., *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 409 (2004) (not adopting a specific test and characterizing *Aspen Skiing* as at the outer boundaries of section 2 enforcement without further explanation); *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447 (1993); see also *United States v. Aluminum Co. of America*, 148 F.2d 416 (2d Cir. 1945).

⁶ Compare, e.g., *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883, 903 (9th Cir. 2008) (applying a cost-based test to bundled discounting), with *LePage's Inc. v. 3M*, 324 F.3d 141, 155 (3d Cir. 2003) (en banc) (condemning bundled discounting practices without applying a cost-based test).

effects—making it hard to distinguish conduct that should be deemed unlawful from conduct that should not.

- Because competitive and exclusionary conduct often look alike, courts and enforcers need to be concerned with both underdeterrence and overdeterrence.
- Standards for applying section 2 should take into account the costs, including error and administrative costs, associated with courts and enforcers applying those standards in individual cases and businesses applying them in their own day-to-day decision making.

While there is general consensus that clearer and more predictable standards are desirable, legal scholarship and the record from the hearings suggest far less consensus on what those standards should be.⁷ Some advocate a single test for analyzing all, or substantially all, conduct challenged under section 2, but there is no agreement on what that single test should be.⁸ Others maintain that no unitary test can be

applied to the broad range of conduct that may be subject to challenge under section 2.⁹ Some urge development of specific tests or safe harbors for specific categories of conduct.¹⁰

where “the court would evaluate the likelihood and magnitude of expected consumer benefits or harms based on the information reasonably available at the time that the conduct was undertaken”).

⁹ See, e.g., ANTITRUST MODERNIZATION COMM’N, REPORT AND RECOMMENDATIONS 91 (2007), available at http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf (“Many commentators are skeptical that any one legal standard should be used to evaluate the wide variety of different types of conduct that may be challenged under Section 2.”); May 8 Hr’g Tr., *supra* note 8, at 21 (Rule) (“The problem with the unitary standards is . . . [that] they presume a . . . capability of regulators and enforcers and courts to distinguish efficient from inefficient conduct that just doesn’t exist.”); Sherman Act Section 2 Joint Hearing: Section 2 Policy Issues Session Hr’g Tr. 12, May 1, 2007 [hereinafter May 1 Hr’g Tr.] (McDavid) (recommending that the search for a single standard be abandoned and noting that antitrust is “very fact-specific”); *id.* at 56 (Jacobson) (“I think the consensus today is that there cannot be a single test for all aspects of [section 2] conduct . . .”); Sherman Act Section 2 Joint Hearing: Monopoly Power Session Hr’g Tr. 172, Mar. 7, 2007 (Sims) (stating that there is no consensus for section 2 approaches except to pay attention to the facts); Sherman Act Section 2 Joint Hearing: International Issues Session Hr’g Tr. 15, Sept. 12, 2006 [hereinafter Sept. 12 Hr’g Tr.] (Lowe) (“[O]ne test may not be the final answer to the analysis we need to carry out. There may be several tests which have been proposed which are relevant to a particular case.”); *id.* at 101–02 (Addy) (asserting that “we should [not] expect the kind of detail or precision that some proponents might advocate” and that “there is no Holy Grail”).

¹⁰ See, e.g., Sherman Act Section 2 Joint Hearing: Business Testimony Session Hr’g Tr. 95–96, Feb. 13, 2007 [hereinafter Feb. 13 Hr’g Tr.] (Stern) (stating that meaningful safe harbors that clarify what is clearly legal and not questionable should be developed); Sherman Act Section 2 Joint Hearing: Academic Testimony Session Hr’g Tr. 161–62, Jan. 31, 2007 [hereinafter Jan. 31 Hr’g Tr.] (Gilbert) (advocating different standards for different types of behavior); *id.* at 117 (Bloom) (“[W]e may need more than one test . . . to cover different types of exclusionary conduct.”); *id.* at 130 (Rill) (advocating that conduct safe harbors be developed). *But cf.* Melamed, *supra* note 8, at 384 (contending that different rules for different types of conduct “would be problematic in practice” because “[d]ifferent rules . . . would inevitably invite disputes about how the conduct at issue should be categorized”).

⁷ See, e.g., Sherman Act Section 2 Joint Hearing: Tying Hr’g Tr. 59, Nov. 1, 2006 (Popofsky) (“[T]here is a holy war raging over the appropriate liability standard under Section 2 generally.”); Popofsky, *supra* note 4, at 435 (“The antitrust community is engaged in a renewed debate over the legal test for exclusionary conduct under Section 2 of the Sherman Act.”).

⁸ See, e.g., Sherman Act Section 2 Joint Hearing: Conduct as Related to Competition Hr’g Tr. 31, May 8, 2007 [hereinafter May 8 Hr’g Tr.] (Pitofsky) (advocating a framework whereby “procompetitive justifications” are balanced against “anticompetitive effects”); Einer Elhauge, *Defining Better Monopolization Standards*, 56 STAN. L. REV. 253, 330 (2003) (advocating rules of per se legality and illegality based on monopolist’s efficiency); A. Douglas Melamed, *Exclusive Dealing Agreements and Other Exclusionary Conduct—Are There Unifying Principles?*, 73 ANTITRUST L.J. 375, 389 (2006) (advocating a “test” under which “conduct is anticompetitive if, but only if, it makes no business sense or is unprofitable for the defendant but for the exclusion of rivals and resulting supra-competitive recoupment”); Mark R. Patterson, *The Sacrifice of Profits in Non-Price Predation*, ANTITRUST, Fall 2003, at 37, 43 (stating that “the sacrifice-of-profits test provides a desirable approach both for litigation and business planning”); Steven C. Salop, *Exclusionary Conduct, Effect on Consumers, and the Flawed Profit-Sacrifice Standard*, 73 ANTITRUST L.J. 311, 341 (2006) (proposing a standard

This chapter first discusses the allocation of burdens of production and proof in section 2 cases, an important issue no matter the substantive test adopted. The chapter then turns to five tests that have been proposed as a general standard for assessing whether conduct is anticompetitive under section 2—namely, (1) the effects-balancing test, (2) the profit-sacrifice test, (3) the no-economic-sense test, (4) the equally efficient competitor test, and (5) the disproportionality test.¹¹ The chapter briefly describes the tests and assesses the relative advantages and disadvantages of each against modern Supreme Court section 2 jurisprudence and the principles set forth in chapter 1.

II. Allocation of Burdens of Production and Proof

Regardless of the substantive standard applied, the proper allocation of burdens of production and proof is key to facilitating the efficient resolution of cases that are notoriously complex, time consuming, and expensive.¹² As the Supreme Court has observed, “[P]roceeding to antitrust discovery can be expensive” as it sometimes entails “a potentially massive factual controversy.”¹³ Allocating burdens can enable courts more quickly to dispose of non-meritorious cases and sometimes to identify violations.¹⁴

¹¹ The chapter focuses on five prominent tests, although others have been proposed. See, e.g., Elhauge, *supra* note 8, at 330; Kenneth L. Glazer & Brian R. Henry, *Coercive vs. Incentivizing Conduct: A Way Out of the Section 2 Impasse?*, ANTITRUST, Fall 2003, at 45, 47–48.

¹² See Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1, 17 (1984); Andrew I. Gavil, *Exclusionary Distribution Strategies by Dominant Firms: Striking a Better Balance*, 72 ANTITRUST L.J. 3, 64 (2004).

¹³ *Bell Atl. Corp. v. Twombly*, 127 S. Ct. 1955, 1967 (2007) (quoting *Associated Gen. Contractors of Cal., Inc. v. Carpenters*, 459 U.S. 519, 528 n.17 (1983)); see also, e.g., Feb. 13 Tr., *supra* note 10, at 209 (Sewell) (noting that firms “expend[] an enormous amount of resources, legal resources, trying to figure out” what is illegal under section 2).

¹⁴ See HERBERT HOVENKAMP, *THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION* 108 (2005) (observing that a “staged inquiry is particularly conducive to summary judgment or other early termination of the dispute”).

Excessively lengthy antitrust litigation helps neither businesses nor consumers. As one commentator observed, it can be impossible to obtain effective relief in a matter that drags on for years and years before resolution: “As litigation stretches on—perhaps with no interim relief—the competitive moment that brought forth the rival may be lost, and along with it the prospect of new or improved products and services.”¹⁵ Lengthy litigation of non-meritorious claims can have similarly harmful competitive effects by restraining innovative or efficient conduct.

Noting the costs and complexities of section 2 litigation, several panelists voiced concern about the process of deciding such cases. One panelist stressed the need for a “sound analytical framework” for deciding section 2 claims.¹⁶ Another noted that merely “punt[ing] issues downstream to juries . . . leads to forced settlement because people are risk averse and don’t want to go to trial.”¹⁷ Another expressed the view that pressure to settle can lead to “a lot of hidden false positives . . . particularly in the private cases.”¹⁸

One commentator explains:

To be effective, antitrust rules must be “operative,” i.e., they must work reasonably well in the context of litigation where they are ultimately going to be applied. That means they must be structured to take into account such basic litigation features as due process, burdens of pleading, production, and proof, and rules of evidence. Rules that make perfect sense as a matter of economics may not make sense from the point of view of procedure.¹⁹

¹⁵ Gavil, *supra* note 12, at 80.

¹⁶ May 1 Tr., *supra* note 9, at 17 (Kolasky).

¹⁷ Sherman Act Section 2 Joint Hearing: Loyalty Discounts Session Hr’g Tr. 186, Nov. 29, 2006 [hereinafter Nov. 29 Hr’g Tr.] (Crane).

¹⁸ Jan. 31 Tr., *supra* note 10, at 73–74 (Shelanski).

¹⁹ Gavil, *supra* note 12, at 66; cf. HOVENKAMP, *supra* note 14, at 105 (“If the rule of reason is to be administered rationally through the costly antitrust enterprise, it should never be an unfocused inquiry into all aspects of a defendant’s business.”).

A proper allocation of the burdens can help “limit the cases that proceed to discovery and trial” and “structure the proceedings in the rest, leading courts to focus on the most important issues.”²⁰

The D.C. Circuit outlined a useful procedural framework for distinguishing exclusionary from competitive acts. First, “[T]o be condemned as exclusionary, a monopolist’s act must have an ‘anticompetitive effect.’ That is, it must harm the competitive *process* and thereby harm consumers. . . . [And] the plaintiff, on whom the burden of proof of course rests, must demonstrate that the monopolist’s conduct indeed has the requisite anticompetitive effect.”²¹ Second, “[I]f a plaintiff successfully establishes a *prima facie* case under § 2 by demonstrating anticompetitive effect, then the monopolist may proffer a [nonpretextual] ‘procompetitive justification’ for its conduct.”²² Third, “[I]f the monopolist’s procompetitive justification stands unrebutted, then the plaintiff must demonstrate that the anticompetitive harm of the conduct outweighs the procompetitive benefit.”²³

Requiring plaintiffs to make a showing of harm to the competitive process at the outset facilitates the disposition of non-meritorious claims. One commentator describes this type of requirement as an “important initial filter[]”²⁴ that can “weed[] out either at the pleading stage or the summary judgment stage”²⁵ meritless claims. Likewise, requiring a defendant, upon a *prima facie* showing of harm to the

competitive process, to come forward with a nonpretextual justification for its conduct enables courts and juries to condemn patently anticompetitive conduct without any weighing of offsetting effects.²⁶

These steps can spare courts and juries difficult questions. In many cases, the plaintiff will not be able to make a plausible showing of harm to the competitive process, or the defendant will not be able to muster a plausible efficiency-enhancing rationale for its conduct, meaning that the court or jury can readily determine whether or not the conduct is anticompetitive. In effect, this approach “strip[s] away those explanations that are implausible or unproven until we have a ‘core’ left that characterizes the practice as pro- or anticompetitive.”²⁷

The Department urges courts to apply such a procedural framework and to consider litigation costs and the substantive goals of antitrust when allocating the burdens of proof and production.

III. Proposed General Standards

If the allegation of competitive harm is not meritless but the conduct is not patently anticompetitive, the standard for evaluating the conduct plays a crucial role in ensuring that section 2 promotes competition and consumer welfare. This section discusses five general tests that have been proposed for determining whether or not challenged conduct is anticompetitive.

A. Effects-Balancing Test

Given the objective of identifying conduct that causes harm to the competitive process, it is natural that some commentators and courts favor applying an effects-balancing test that focuses on a challenged practice’s “overall impact on consumers” or net effects on consumer welfare.²⁸ The test asks whether

²⁰ Easterbrook, *supra* note 12, at 18.

²¹ *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) (en banc) (per curiam) (citations omitted) (emphasis in original).

²² *Id.* at 59.

²³ *Id.*

²⁴ Gavil, *supra* note 12, at 62.

²⁵ *Id.* at 75; see also Easterbrook, *supra* note 12, at 17 (endorsing “filters” that “help to screen out cases in which the risk of loss to consumers and the economy is sufficiently small that there is no need of extended inquiry and significant risk that inquiry would lead to wrongful condemnation or to the deterrence of competitive activity as firms try to steer clear of the danger zone”).

²⁶ Cf. Gavil, *supra* note 12, at 80.

²⁷ HOVENKAMP, *supra* note 14, at 108.

²⁸ Salop, *supra* note 8, at 330. It is not always clear whether the consumer-welfare test focuses only on consumer surplus or includes both consumer and producer surplus. See Sherman Act Section 2 Joint

particular conduct “reduces competition without creating a sufficient improvement in performance to fully offset these potential adverse effect[s] on prices and thereby prevent consumer harm.”²⁹ At its core, the test entails quantifying and weighing procompetitive and anticompetitive effects of the challenged conduct.

The effects-balancing test makes illegal all conduct by which a monopolist acquires or maintains monopoly power where the conduct causes net harm to consumers. The effects-balancing test has the advantage of focusing the exclusionary-conduct analysis on the impact on consumers, a key concern of Sherman Act jurisprudence.³⁰

Critics of this test contend that it is not easily administrable and is inconsistent with the Supreme Court’s recent section 2 jurisprudence.³¹ Administrability is crucial, as then-Judge Breyer explained in *Barry Wright Corp. v. ITT Grinnell Corp.*: “Rules that seek to embody every economic complexity and qualification may well, through the vagaries of administration, prove counter-productive, undercutting the very economic ends they seek to serve.”³²

Recent Supreme Court decisions have reflected then-Judge Breyer’s appreciation of the need to adopt standards that reasonably identify truly anticompetitive conduct, minimizing administrative costs and risk of Type I and Type II errors that would ultimately undermine effective antitrust enforcement. The Supreme Court has realized that a search for every possible anticompetitive effect can do more harm than good. The Court’s predatory-

pricing test in *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, for example, provides a safe harbor for pricing above a relevant measure of cost, even though the Court explicitly recognized a possibility of such pricing causing consumer harm through the exclusion of rivals.³³ Similarly, in *Trinko*, the Court observed that violations of certain sharing duties imposed by statute may be “‘beyond the practical ability of a judicial tribunal to control,’” even where enforcement of such duties might increase competition in the short run.³⁴

The effects-balancing test confronts a court with the administrative challenge of conducting an open-ended measuring of effects that includes comparing the existing world with a hypothetical world that is subject to debate. These administrability problems include limitations on both the ability of economists accurately to measure the net consumer-welfare effects of particular conduct³⁵ and the ability of judges and juries to evaluate this evidence.³⁶

³³ 509 U.S. 209, 223 (1993).

³⁴ *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 414 (2004) (quoting *Brooke Group*, 509 U.S. at 223); see also *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 127 S. Ct. 1069, 1078 (2007) (holding that, while higher bidding for inputs may potentially have exclusionary effects even where it does not result in below-cost output pricing, such effects are “‘beyond the practical ability of a judicial tribunal to control without courting intolerable risks of chilling legitimate’ procompetitive conduct” (quoting *Brooke Group*, 509 U.S. at 223)).

³⁵ See, e.g., Gregory J. Werden, *Identifying Exclusionary Conduct Under Section 2: The “No Economic Sense” Test*, 73 ANTITRUST L.J. 413, 431–32 (2006).

³⁶ See, e.g., Elhauge, *supra* note 8, at 317 (The “open-ended balancing inquiry” required by an effects-balancing test, when performed by “antitrust judges and juries[,] would often be inaccurate, hard to predict years in advance when the business decision must be made, and too costly to litigate.”); Melamed, *supra* note 8, at 386–87 (noting that the effects-balancing test would “pose a daunting challenge to any decision maker”); Popofsky, *supra* note 4, at 465 (observing that “the inquiry adjudicators need to make” under the effects-balancing test “is too difficult”); Werden, *supra* note 35, at 431–32 (“Reliance on the jury system assures that the consumer-welfare test would result in a high incidence of false positive findings of exclusionary conduct.”).

Hearing: Predatory Pricing Hr’g Tr. 178–190, June 22, 2006 [hereinafter June 22 Hr’g Tr.]; *id.* at 180 (Salop) (“I think by consumer welfare I mean true consumer welfare.”); *id.* at 184 (Salop) (noting that “what the Supreme Court meant by consumer welfare is total welfare”).

²⁹ Salop, *supra* note 8, at 330.

³⁰ See *id.* at 330–32.

³¹ See, e.g., Popofsky, *supra* note 4, at 464 (stating that the effects-balancing test “cannot be reconciled with certain . . . Section 2 rules”).

³² 724 F.2d 227, 234 (1983).

Indeed, several panelists and commentators have pointed out that, in practice, courts do not engage in the precise balancing called for by the effects-balancing test. One panelist explained that, “when you look at the decisions, the courts never reach [a] final balancing stage.”³⁷ Another panelist agreed, stating that no “court has ever written an opinion saying, now that it is all over, we find that there are these harms and these efficiencies and we are now going to weigh them and we are going to choose between the two.”³⁸ Similarly, in commenting on the D.C. Circuit’s *Microsoft* decision,³⁹ another asserts that the court, “while using the language of comparing effects, in fact *avoided* that inquiry.”⁴⁰

The effects-balancing test also may lead courts to focus too much on static, short-run consumer effects. Because dynamic effects are often more difficult to assess than static effects, the effects-balancing test may well be misapplied to condemn conduct with dynamic effects that benefit consumers significantly. As one commentator notes, “Even if economists could perfectly sort out the relatively short-run economic consequences of all marketplace conduct, they still could not accurately account

for the important long-term effects of any remedial action on incentives for innovation and risk-taking—the twin engines of our prosperity.”⁴¹ To the extent it is applied in a manner that focuses more on short-run consumer effects of specific conduct, the effects-balancing test may ultimately harm, rather than benefit, consumers in the long run.

Further, critics note that the complexity of administering the effects-balancing test would make it difficult for firms to determine at the outset whether specific conduct would violate section 2, thereby potentially chilling pro-competitive conduct and reducing consumer welfare.⁴² Moreover, a legal rule under which every action of a monopolist must be scrutinized for net consumer-welfare effects threatens to chill a monopolist’s incentives to engage in procompetitive conduct out of fear of antitrust investigation, litigation, or even mistaken liability—again, potentially harming consumer welfare.

Given the open-ended nature of the effects-balancing test and the inherent uncertainty for businesses in predicting its outcome, the Department does not believe it should be the general test for analyzing conduct under section 2. Although consumer welfare should remain the goal of enforcement efforts, that objective likely is better served by a standard that takes better account of administrative costs and the benefits of dynamic competition for economic growth.

The Department does not believe that the effects-balancing test should be the general test for analyzing conduct under section 2.

But see Salop, *supra* note 8, at 314 (“Although [the consumer-welfare] standard has been criticized, it can be implemented without causing excessive false positives that might lead to over-deterrence or a welfare-reducing diminution in innovation incentives.”).

³⁷ May 1 Hr’g Tr., *supra* note 9, at 60 (Kolasky).

³⁸ *Id.* at 103 (Krattenmaker); *see also* May 8 Hr’g Tr., *supra* note 8, at 30 (Melamed) (“[T]o talk about . . . balancing as a solution to the problem where you have both benefit and harm . . . is nonsense. And I don’t think any court does it.”); *id.* at 32 (Rule) (stating that balancing “becomes infinitely more difficult . . . in a Section 2 context for a variety of reasons”); May 1 Hr’g Tr., *supra* note 9, at 81 (Calkins) (“[Y]ou never get to the last step, and so it is not really a balancing.”). *But see* May 8 Hr’g Tr., *supra* note 8, at 31 (Pitofsky) (“The balancing test is the baseline of all antitrust . . . Why do you single out Section 2 of the Sherman Act as an area where balancing is nonsense?”).

³⁹ *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (en banc) (per curiam).

⁴⁰ Popofsky, *supra* note 4, at 445 (emphasis in original).

⁴¹ *Id.* at 431–32.

⁴² *See, e.g.*, Sherman Act Section 2 Joint Hearing: Refusals to Deal Session Hr’g Tr. 46, July 18, 2006 [hereinafter July 18 Hr’g Tr.] (Pate) (“[W]hile a general balancing test is flexible . . . it is inherently lacking in any objective content that businesses can apply in a predictable manner to make their decisions.”); Melamed, *supra* note 8, at 387 (stating that a “static market-wide balancing test” would “place a costly and often impossible burden on the defendant when deciding in real time how to conduct its business”).

B. Profit-Sacrifice and No-Economic-Sense Tests

Some commentators favor reducing the uncertainties, and thus perceived chilling effects, surrounding the application of an effects-balancing test by applying tests that do away with the need for that balancing altogether. The profit-sacrifice and no-economic-sense tests are two prominent examples. These tests are often discussed together and commentary is not always clear as to their precise definitions. Indeed, some appear to equate them, while others believe they are different. The Department does not consider them to be equivalent and sets forth below how these tests are sometimes described and how they differ.

Generally, a profit-sacrifice test asks whether the scrutinized conduct is more profitable in the short run than any other conduct the firm could have engaged in that did not have the same (or greater) exclusionary effects. If the conduct is not more profitable, the firm sacrificed short-run profits and might have been investing in an exclusionary scheme, seeking to secure monopoly power and recoup the foregone profits later.

One can apply a version of the no-economic-sense test in a similar fashion, comparing the non-exclusionary profits from the conduct to the profits the firm would have earned from alternative, legal conduct in which it would have engaged (the “but-for” scenario).⁴³ If the non-exclusionary profits are greater, the conduct would make economic sense without exclusionary effects and thus be legal; if the non-exclusionary profits are less, the conduct would not make economic sense and thus potentially be illegal.

However, as often described, another variation of the no-economic-sense test asks whether the conduct in question contributed any profit to the firm apart from its exclusionary effect. As long as the conduct is profitable apart from its exclusionary effect, it would pass this variation of the no-economic-sense test, regardless of whether any other

conduct would have been more profitable or the extent of any harm to competition.

The profit-sacrifice and no-economic-sense tests seek to establish objective standards by which to identify conduct that is likely to damage the competitive process, as opposed to merely aggressive competition. The tests draw on the Supreme Court’s predatory-pricing jurisprudence.⁴⁴ A cornerstone of those cases is a 1975 law review article by Professors Areeda and Turner, in which they argued that “predation in any meaningful sense cannot exist unless there is a temporary sacrifice of net revenues in the expectation of greater future gains.”⁴⁵

That concept, and subsequent academic commentary suggesting that an action’s likely economic effects are key to assessing liability under section 2,⁴⁶ played a significant role in several decisions construing section 2, including *Aspen Skiing*,⁴⁷ *Matsushita Industrial*

⁴⁴ *Id.* at 16–17.

⁴⁵ Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697, 698 (1975); *see also id.* (asserting that “the classically-feared case of predation has been the deliberate sacrifice of present revenues for the purpose of driving rivals out of the market and then recouping the losses through higher profits earned in the absence of competition”).

⁴⁶ *See, e.g.*, ROBERT H. BORK, *THE ANTITRUST PARADOX* 144 (1978) (“Predation may be defined . . . as a firm’s deliberate aggression against one or more rivals through the employment of business practices that would not be considered profit maximizing except for the expectation either that (1) rivals will be driven from the market, leaving the predator with a market share sufficient to command monopoly profits, or (2) rivals will be chastened sufficiently to abandon competitive behavior the predator finds inconvenient or threatening.”); Janusz A. Ordover & Robert D. Willig, *An Economic Definition of Predation: Pricing and Product Innovation*, 91 YALE L.J. 8, 9–10 (1981) (“[P]redatory behavior is a response to a rival that sacrifices part of the profit that could be earned under competitive circumstances, were the rival to remain viable, in order to induce exit and gain consequent additional monopoly profit.”).

⁴⁷ *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 608 (1985) (noting that defendant “elected to forgo . . . short-term benefits because it was more interested in reducing competition in the Aspen market over the long run”).

⁴³ *See* Werden, *supra* note 35, 420–22.

Co., Ltd. v. Zenith Radio Corp.,⁴⁸ *Brooke Group*,⁴⁹ and several lower court decisions.⁵⁰ For instance, pricing below cost is an objectively measurable standard and indicates that the pricing makes no economic sense in the short term and, accordingly, is likely to be serving other ends, which might include exclusion of competitors. Similarly, the *Trinko* Court, while not expressly adopting the no-economic-sense test, identified the *Aspen Skiing* defendant's "willingness to forsake short-term profits to achieve an anticompetitive end" as a key element of the liability finding.⁵¹

Although, as discussed above, there are

⁴⁸ 475 U.S. 574, 588–89 (1986) (explaining that an "agreement to price below the competitive level requires the conspirators to forgo profits that free competition would offer them" in the hope of obtaining "later monopoly profits").

⁴⁹ 509 U.S. 209, 224 (1993) (holding that low prices are not illegal under section 2 absent "a dangerous probability[] of recouping [the] investment in below-cost prices").

⁵⁰ See, e.g., *Covad Commc'ns Co. v. Bell Atl. Corp.*, 398 F.3d 666, 675 (D.C. Cir. 2005) ("[I]n order to prevail upon [a refusal-to-deal] claim [plaintiff] will have to prove [defendant's] refusal to deal caused [defendant] short-term economic loss."); *Morris Commc'ns Corp. v. PGA Tour, Inc.*, 364 F.3d 1288, 1295 (11th Cir. 2004) ("[A]nticompetitive conduct . . . is conduct without a legitimate business purpose that makes sense only because it eliminates competition." (internal quotation marks omitted) (quoting *Gen. Indus. Corp. v. Hartz Mountain Corp.*, 810 F.2d 795, 804 (8th Circuit 1987))); *Neumann v. Reinforced Earth Co.*, 786 F.2d 424, 427 (D.C. Cir. 1986) ("[P]redation involves aggression against business rivals through the use of business practices that would not be considered profit maximizing except for the expectation that (1) actual rivals will be driven from the market, or the entry of potential rivals blocked or delayed, so that the predator will gain or retain a market share sufficient to command monopoly profits, or (2) rivals will be chastened sufficiently to abandon competitive behavior the predator finds threatening to its realization of monopoly profits."); *William Inglis & Sons Baking Co. v. ITT Cont'l Baking Co.*, 668 F.2d 1014, 1030–31 (9th Cir. 1981) (stating that, in order to violate section 2, conduct "must be such that its anticipated benefits were dependent upon its tendency to discipline or eliminate competition and thereby enhance the firm's long-term ability to reap the benefits of monopoly power").

⁵¹ *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 409 (2004).

variations on the profit-sacrifice and no-economic-sense tests, proponents of all variations maintain that the tests are consistent with the Supreme Court's long-standing emphasis on protecting the competitive process and avoiding the chilling of procompetitive conduct.⁵² For instance, while acknowledging that the tests have been "criticized by numerous commentators who are concerned that [they] will result in false negatives,"⁵³ one proponent nevertheless contends that the policy tradeoffs are justified:

The sacrifice test does not purport to condemn all conduct that might create market power or reduce economic welfare. Rather, the test rests on the judgment that market-wide balancing tests, which in theory could condemn all welfare-reducing conduct, will in practice prove to be an inferior legal standard because of their greater difficulty in administration and their perverse incentive effects.⁵⁴

Supporters of the tests also recommend them on grounds that firms can use them to assess the legality of proposed actions before acting and that courts should be able to apply them relatively easily.⁵⁵ Even supporters

⁵² See, e.g., ANTITRUST MODERNIZATION COMM'N, *supra* note 9, at 91–92; *General Approaches to Defining Abusive/Monopolistic Practices—Roundtable*, in 2006 ANNUAL PROCEEDINGS OF THE FORDHAM COMPETITION LAW INSTITUTE 577–79 (Barry E. Hawk ed., 2007) (Werden).

⁵³ A. Douglas Melamed, *Exclusionary Conduct Under the Antitrust Laws: Balancing, Sacrifice, and Refusals to Deal*, 20 BERKELEY TECH. L.J. 1247, 1257 (2005).

⁵⁴ *Id.*; see also Werden, *supra* note 35, at 433 ("The no economic sense test is predicated on the proposition that some potentially harmful conduct must be tolerated to avoid even greater harms from chilling risk taking and aggressively competitive conduct.").

⁵⁵ See Jan. 31 Hr'g Tr., *supra* note 10, at 135 (Rubinfeld) (asserting that the profit sacrifice test is "easier to operationalize"); July 18 Hr'g Tr., *supra* note 42, at 32 (Pate) (stating that "some variation of a price-cost comparison . . . is going to be necessary if objectivity is going to be brought to the inquiry"); Melamed, *supra* note 8, at 393 ("Perhaps most important, the sacrifice test provides simple, effective, and meaningful guidance to firms so that they will know how to avoid antitrust liability without steering clear of procompetitive conduct."); Werden, *supra* note 35, at 433.

acknowledge, however, that these tests can be difficult to apply in some circumstances, for instance “in cases involving simultaneous benefits for the defendant and cost increases for rivals.”⁵⁶

Some panelists criticized these tests for focusing only indirectly on consumers and preferred that section 2 be construed to focus directly on consumer welfare.⁵⁷ Other panelists made similar points, emphasizing the potential of these tests to result in false negatives, allowing conduct that harms consumers to escape liability under section 2.⁵⁸

The profit-sacrifice test also has been

criticized for its potential to result in false positives, condemning procompetitive investments and product innovation. Almost all substantial investments—from building a new factory to new-product development—involve a short-term sacrifice of current revenue in expectation of future increased revenues resulting from taking business from competitors. The test is criticized because it “does not adequately distinguish anticompetitive ‘sacrifice’ from procompetitive investment”⁵⁹ and may condemn clearly procompetitive conduct.⁶⁰ As one commentator

⁵⁶ Melamed, *supra* note 53, at 1261; *see also* Werden, *supra* note 35, at 421 (“The utility of the no economic sense test ultimately is apt to vary, depending mainly on the feasibility of determining whether the challenged conduct would make no economic sense but for its tendency to eliminate competition. That determination should be feasible in the vast majority of cases, but it might not be if the conduct generates legitimate profits as well as profits from eliminating competition.”).

⁵⁷ *See, e.g.*, May 1 Hr’g Tr., *supra* note 9, at 67 (Kolasky) (stating that the profit-sacrifice test “focuses . . . too much attention on whether the conduct makes sense from the standpoint of the alleged monopolist as opposed to what is its effect on the consumer”); Sherman Act Section 2 Joint Hearing: Business Testimony Session Hr’g Tr. 35, Jan. 30, 2007 (Edlin).

⁵⁸ *See, e.g.*, May 1 Hr’g Tr., *supra* note 9, at 77 (Baker) (“If the profit sacrifice or no economic sense test differs from the reasonableness analysis, it is doing so in order . . . to put a thumb on the scales in favor of defendants.”); July 18 Hr’g Tr., *supra* note 42, at 25 (Pitofsky) (stating that he is “uncomfortable” with the profit-sacrifice test because it focuses on the monopolist rather than the consumer); *see also* Gavil, *supra* note 12, at 71 (“As an economic matter, ‘sacrifice’ is not relevant either to the defendant’s market power or the fact that its conduct resulted in actual exclusion or consumer harm.”); Jonathan M. Jacobson & Scott A. Sher, “No Economic Sense” Makes No Sense for Exclusive Dealing, 73 ANTITRUST L.J. 779, 786 (2006) (“[M]ost importantly, the no economic sense and profit sacrifice tests still do not ask the correct question—that is, whether the practice is likely to aid consumers or to hurt them.”); Salop, *supra* note 8, at 345–46, 357–63 (stating that the profit-sacrifice test is a highly imperfect and generally biased predictor of the impact of the conduct on competition and consumer welfare). *But see* Werden, *supra* note 35, at 428 (“Theoretical possibilities [of false negatives] should be given little weight in formulating antitrust policy or any other legal rules of general application.”).

⁵⁹ Herbert Hovenkamp, Antitrust and the Dominant Firm: Where Do We Stand? 12 (n.d.) (unpublished manuscript), available at <http://www.ftc.gov/os/comments/section2hearings/hovenkamppaper.pdf> (“One particular problem with sacrifice tests is that most substantial investments involve a short term ‘sacrifice’ of dollars in anticipation of increased revenue at some future point. . . . Likewise, product innovations are always costly to the defendant, and their success may very well depend on their ability to exclude rivals from the market”); *cf.* Carl Shapiro, Exclusionary Conduct, Testimony Before the Antitrust Modernization Commission 4 (Sept. 29, 2005), available at http://govinfo.library.unt.edu/amc/commission_hearings/pdf/Shapiro_Statement.pdf (endorsing a safe harbor for “investment in new and superior production capacity” and “unadorned product improvement” even though such investment could in theory deter entry by rivals or induce the exit of rivals, thereby leading to higher prices).

⁶⁰ *See, e.g.*, Jan. 31 Hr’g Tr., *supra* note 10, 113–14 (Gilbert) (“[A] profit sacrifice test . . . doesn’t . . . make any sense to innovation” because “innovation almost always involves a profit sacrifice” which is called “investing in research and development. . . . [Moreover], if [innovation] really works, [it] probably excludes competitors. . . . [P]roducing a really good mousetrap” means that “other mousetraps can’t compete.”); Elhauge, *supra* note 8, at 274 (noting that the sacrifice test fails for the fundamental reason that sacrificing short-term profits to make the sort of investments that enable one to destroy one’s rivals is ordinarily not a sign of evil but the mark of capitalist virtue); Popofsky, *supra* note 4, at 462 (noting that the profit-sacrifice test “could deem unlawful conduct that impedes rivals only because it improves the attractiveness of the defendant’s product and has no other exclusionary property”); Salop, *supra* note 8, at 314 (observing that “the profit-sacrifice standard may well be more likely to condemn a cost-reducing investment that leads to market power than would the consumer welfare effect standard”).

puts it,

[P]ublic policy should encourage firms that want to invest in activities that consumers value in order to gain future sales from their rivals. However, because such actions by definition reduce present profits, a blind application of a “profit sacrifice” test could condemn almost any competitive behavior. When a test could potentially challenge a wide array of core competitive behaviors, it becomes dangerous.⁶¹

In addition, although these tests are based in part on their purported ease of administration, critics claim that they are difficult to implement in practice.⁶² For instance, some critics maintain that the tests are inappropriate for analyzing exclusive-dealing arrangements, which make economic sense for the defendant “precisely because they lessen competition by rivals for the affected business.”⁶³ These critics contend that there is no practical way to separate the economic benefits to a defendant from the exclusionary impact on rivals.⁶⁴

⁶¹ Dennis W. Carlton, *Does Antitrust Need to Be Modernized?*, J. ECON. PERSP., Summer 2007, at 155, 170. But see Gregory J. Werden, *Identifying Single-Firm Exclusionary Conduct: From Vague Concepts to Administrable Rules*, in 2006 FORDHAM COMPETITION LAW INSTITUTE 509, 528 (Barry E. Hawk ed., 2007).

⁶² See, e.g., May 1 Hr’g Tr., *supra* note 9, at 69 (Jacobson) (“[I]t is a very, very difficult test to administer.”); *id.* at 77 (Baker) (noting “tremendous problems with administrability”); Elhauge, *supra* note 8, at 293 (“The general problem is that the efforts to modify the profit-sacrifice test to avoid its substantive defects necessarily require distinguishing between profits earned desirably (even if it excludes rivals) and profits earned undesirably Not only does it beg the question of what the criteria of desirability are, it also eliminates any administrability benefit by converting the test from one based on actual profits to one based on the desirability of how those profits were acquired.”); Gavil, *supra* note 12, at 55 (contending that “all forms of the but-for test are objectionable on procedural grounds”); Salop, *supra* note 8, at 321, 323 & n.50 (noting that there is debate over the proper way to implement the standard, including what the benchmark should be and how to determine what profits are due to the lessening of competition compared with other causes).

⁶³ Sherman Act Section 2 Joint Hearing: Exclusive Dealing Session Hr’g Tr. 59, Nov. 15, 2006 (Jacobson).

⁶⁴ See *id.*; Jacobson & Sher, *supra* note 58, at 781

Another contends that these tests conflict with the sham-litigation doctrine; costly litigation might be permissible under the sham-litigation doctrine yet fail the no-economic-sense or profit-sacrifice tests.⁶⁵ Still others express concern that some misleading and deceptive conduct with no efficiency justification might involve little or no profit sacrifice.⁶⁶

Yet another potential problem with these tests is that they may open the door to plaintiffs hypothesizing any number of alternative courses of action that may, especially with the benefit of hindsight, have been more profitable for defendant. However, there may be legitimate reasons why a firm does not pursue the most profitable course of action, including simple unawareness of the options. No defendant should be required to show that it maximized profits among all conceivable choices. Hinging antitrust liability on such second guessing raises serious concerns that such a standard would undermine rather than promote the goal of economic growth and increased consumer welfare.

The Department believes that a profit-sacrifice test that asks whether conduct is more profitable in the short run than other less-exclusionary conduct the firm could have undertaken raises serious concerns and should not be the test for section 2 liability.

The Department believes that a profit-sacrifice test should not be the test for section 2 liability.

The Department further concludes that the

(Analyzing exclusive dealing only under a no-economic-sense or profit-sacrifice test is “unintelligible” because “there is no way to separate the economic benefit to the defendant from the exclusionary impact on rivals. The relevant question for exclusive dealing is not whether it ‘makes economic sense’ (because it so frequently does), but whether, on balance, the specific arrangements at issue are likely to raise prices, reduce output, or otherwise harm consumers. The no economic sense test declines that inquiry.”).

⁶⁵ See Popofsky, *supra* note 4, at 463.

⁶⁶ See, e.g., Susan A. Creighton et al., *Cheap Exclusion*, 72 ANTITRUST L.J. 975, 985–86 (2005). But see Werden, *supra* note 35, at 425–26.

no-economic-sense test should not be the exclusive test for section 2 liability. As even its proponents recognize, there are difficulties using it in all circumstances. Assessing what portion of an act's anticipated profits is exclusionary, as opposed to non-exclusionary, is apt to be difficult in many cases. Also, the test arguably does not work well for exclusionary conduct involving little cost to defendant. The Department also agrees with those who are concerned that this test might allow businesses too much freedom to engage in conduct likely to harm competition, because conduct could be protected even if it contributed virtually no profits (for example, only \$1 of profit) apart from its exclusionary effect but caused tremendous harm to the competitive process. And to the extent that the test relies on a comparison to a but-for scenario, there may be situations where the but-for scenario either is not clear or would take much effort to establish.

Although the Department does not recommend the no-economic-sense test as a necessary condition for liability in all section 2 cases, it believes that the test may sometimes be useful in identifying certain exclusionary conduct.⁶⁷ The test can also serve as a valuable counseling tool by highlighting the need for businesses to think carefully about why they are pursuing a particular course of conduct. If conduct does not make economic sense at the time it is undertaken except for its exclusionary effect on competition, it likely will be difficult to defend.⁶⁸

⁶⁷ See Werden, *supra* note 35, at 418.

⁶⁸ See, e.g., May 1 Hr'g Tr., *supra* note 9, at 55 (McDavid) ("[A]s someone who does not think there is a single standard, I do think [profit sacrifice] is [an] appropriate test, but I do not think it is *the* appropriate test." (emphasis added)); *id.* at 64 (Calkins) ("Everybody . . . would agree that the no economic sense question is a good [one]" for an attorney to ask a client, but it is not the only question.); *id.* at 63–64 (Willig) (stating that the no-economic-sense test is another way of asking whether there is a sound business rationale for the conduct); *id.* at 66 (Kolasky) (agreeing that "focusing on profit sacrifice and whether the conduct makes economic sense is . . . a very useful question to ask your clients"); Nov. 29 Hr'g Tr., *supra* note 17, at 202 (Crane) (stating that the no-economic-

Although the Department does not recommend the no-economic-sense test as a necessary condition for liability in all section 2 cases, it believes that the test may sometimes be useful in identifying certain exclusionary conduct.

C. Equally Efficient Competitor Test

The equally efficient competitor test addresses some of the concerns with open-ended balancing by requiring that "the challenged practice is likely in the circumstances to exclude from defendant's market an equally or more efficient competitor."⁶⁹ If a plaintiff makes such a showing, "defendant can rebut by proving that although it is a monopolist and the challenged practice exclusionary, the practice is, on balance, efficient."⁷⁰ This test is based on the rationale "that a firm should not be penalized for having lower costs than its rivals and pricing accordingly."⁷¹

The equally efficient competitor test also draws on principles similar to those underlying the Supreme Court's predatory-pricing jurisprudence, under which a price is deemed predatory only if it is reasonably calculated to exclude a rival that is at least as efficient as the defendant. As Judge Posner explains, "It would be absurd to require the firm to hold a price umbrella over less efficient entrants. . . . [P]ractices that will exclude only less efficient firms, such as the monopolist's dropping his price nearer to (but not below) his cost, are not actionable, because we want to encourage efficiency."⁷² Courts have referred to the

sense test presents difficulties as a starting point but it makes some sense as a defense); Hovenkamp, *supra* note 59, at 13 (stating that the no-economic-sense test offers a good deal of insight into the question of when aggressive actions by a single firm go too far, but it can lead to erroneous results unless complicating qualifications are added).

⁶⁹ RICHARD A. POSNER, ANTITRUST LAW 194–95 (2d ed. 2001).

⁷⁰ *Id.* at 195.

⁷¹ Herbert Hovenkamp, *Exclusion and the Sherman Act*, 72 U. CHI. L. REV. 147, 154 (2005).

⁷² POSNER, *supra* note 69, at 196.

concept of an equally efficient competitor in a number of cases involving predatory pricing and bundled discounts.⁷³

Proponents of this test point out that it is designed to allow firms to take full advantage of their efficiency and protects competition offered by efficient rivals. Moreover, it is useful because it allows firms to assess their conduct at the outset based on something they should be able to evaluate—their own costs.⁷⁴

Critics of the test assert that there are a number of problems with it, however. First, they challenge the basic premise of the test—that section 2 should focus only on the exclusion of competitors as efficient as the alleged monopolist. They contend that “entry [by] even a less efficient rival can stimulate competition and lower prices if an incumbent dominant firm is charging monopoly prices.”⁷⁵

⁷³ See, e.g., *LePage’s Inc. v. 3M*, 324 F.3d 141, 155 (3d Cir. 2003) (en banc) (observing that “even an equally efficient rival may find it impossible to compensate for lost discounts on products that it does not produce” (quoting *AREEDA & HOVENKAMP*, *supra* note 2, ¶ 749, at 83–84 (Supp. 2002))); *Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039, 1063 (8th Cir. 2000) (stating that above-cost market-share discounts were not unlawful where evidence showed customers switched to competitors offering better discounts); *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 232 (1st Cir. 1983) (Breyer, J.) (noting that, if a firm prices below “avoidable” or “incremental” cost, equally efficient competitors cannot permanently match the price and stay in business); *Ortho Diagnostic Sys., Inc. v. Abbott Labs., Inc.*, 920 F. Supp. 455, 466 (S.D.N.Y. 1996) (“[B]elow-cost pricing, unlike pricing at or above that level, carries with it the threat that the party so engaged will drive equally efficient competitors out of business, thus setting the stage for recoupment at the expense of consumers.”).

⁷⁴ See Sept. 12 Hr’g Tr., *supra* note 9, at 14–15 (Lowe) (acknowledging that efficient competitor is not the only test that can be used and that there may be more than one test applicable to any particular case, but that it is a useful principle because it allows dominant firms to assess their conduct based on their own costs).

⁷⁵ Gavil, *supra* note 12, at 59; see also, e.g., June 22 Hr’g Tr., *supra* note 28, at 124 (Brennan) (noting that “inefficient competitors hold down price”); Salop, *supra* note 8, at 328 (“The fundamental problem with applying the equally efficient entrant standard . . . is that the unencumbered (potential) entry of less-efficient competitors often raises consumer welfare.”).

These critics contend that this is especially true in the case of nascent competition where an equally efficient competitor standard “could lead to false negatives . . . and pose a significant threat of under-deterrence.”⁷⁶ In markets where competition is just starting to emerge, they contend, it is inappropriate to compare the efficiency of new rivals with that of the monopolist.

Second, the test has also been criticized as difficult to administer. Exactly what constitutes an equally efficient competitor is not always evident, and the test is especially difficult to apply outside the pricing context.⁷⁷ For example, it is not clear whether a firm that produces a single product as efficiently as a defendant in a tying case would qualify as an equally efficient competitor if it does not produce the other product(s) involved in the tie. In the multi-product setting, a firm may be equally efficient with respect to one product but not with respect to all the products. A diversified firm may enjoy superior efficiencies in joint production and marketing, as compared to a firm that is arguably as efficient with respect to the one target product. Thus, it may be difficult to conclude that a firm would be equally efficient based on the analysis of only the one targeted product. Moreover, it is difficult to measure and compare efficiencies in multi-product cases where there are joint costs. Similarly, the concept of an equally efficient competitor may be difficult to apply in the exclusive-dealing context, where a firm’s efficiency may depend on how it distributes its products.

The Department believes that whether conduct has the potential to exclude, eliminate,

⁷⁶ Gavil, *supra* note 12, at 61; see also June 22 Hr’g Tr., *supra* note 28, at 73 (Bolton) (expressing concern over exclusion of entrants that offer nascent competition); Gavil, *supra* note 12, at 59–61; Hovenkamp, *supra* note 71, at 154.

⁷⁷ See Nov. 29 Hr’g Tr., *supra* note 17, at 140–41 (Ordoover) (observing that “what it means to be an equally efficient competitor is subject to debate”); Melamed, *supra* note 8, at 388 (“[I]t is not clear what it means to exclude only a less-efficient rival, especially when firms and products are heterogeneous.”); *infra* Chapter 6, Part I(C).

or weaken the competitiveness of equally efficient competitors can be a useful inquiry and may be best suited to particular pricing practices.⁷⁸ The Department does not believe that this inquiry leads readily to administrable rules in other contexts, such as tying and exclusive dealing.

Whether conduct has the potential to exclude, eliminate, or weaken the competitiveness of equally efficient competitors can be a useful inquiry and may be best suited to particular pricing practices.

D. Disproportionality Test

In their *Trinko* merits brief, the Department and the FTC advised the Supreme Court that, in the absence of a conduct-specific rule, conduct is anticompetitive under section 2 when it results in “harm to competition” that is “disproportionate to consumer benefits (by providing a superior product, for example) and to the economic benefits to the defendant (aside from benefits that accrue from diminished competition).”⁷⁹ Under the disproportionality test, conduct that potentially has both procompetitive and anticompetitive effects is anticompetitive under section 2 if its likely anticompetitive harms substantially outweigh its likely procompetitive benefits.

Properly applied, the disproportionality test reduces the need to precisely balance procompetitive and anticompetitive effects, which, as described above, is a difficult and costly task. In addition, it allows firms the freedom to compete vigorously without undue fear of antitrust liability based on an after-the-fact determination that their conduct had small negative effects on static competition. The disproportionality test reduces the risks of chilling procompetitive conduct but prohibits conduct that will significantly harm competition and consumer welfare.

The justification for this test arises from the principles discussed in chapter 1. It expressly focuses on prohibiting conduct that harms competition, not just individual competitors. It seeks to provide reasonable clarity for firms over a wide range of activity. It seeks to reduce administrative costs. Further, it recognizes that the cost of legal rules that erroneously condemn procompetitive conduct likely will be higher and more persistent than the cost of rules that erroneously exonerate anticompetitive conduct.

To be sure, the disproportionality test is not without its difficulties and may not be easy to apply in some instances. As the enforcement agencies acknowledged in their *Trinko* brief, applying the test “‘can be difficult,’ because ‘the means of illicit exclusion, like the means of legitimate competition, are myriad.’”⁸⁰

Moreover, as one commentator cautions, disproportionality “is hardly an inherently certain formula.”⁸¹ In the most difficult cases—those involving significant harm and smaller, but still significant, efficiencies—there is some ambiguity. As one commentator queries, “Is 55–45 percent ‘disproportionate’ enough? Or do proponents of the test think 75–25 percent is more what they have in mind.”⁸²

⁷⁸ See Hovenkamp, *supra* note 71, at 153 (stating that “[t]he ‘equally efficient rival’ test has found widespread acceptance in predatory pricing cases”); see also, e.g., *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 223 (1993) (identifying the relative “cost structure” of competitors as a source of the safe harbor for above-cost pricing in predatory-pricing cases); *Areeda & Turner*, *supra* note 45, at 709–18, 733 (recognizing that, in the predatory-pricing context, prices at or above average variable cost exclude less efficient firms while minimizing the likelihood of excluding equally efficient firms).

⁷⁹ Brief for the United States & the Federal Trade Commission as Amici Curiae Supporting Petitioner at 14, *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004) (No. 02-682), available at <http://www.usdoj.gov/atr/cases/f201000/f201048.htm>. In the brief, the Department and the FTC also argued that the no-economic-sense test should apply to the specific conduct at issue—a refusal to deal.

⁸⁰ *Id.* at 14 (quoting *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) (en banc) (per curiam)).

⁸¹ Gavil, *supra* note 12, at 64.

⁸² *Id.*; see also Herbert Hovenkamp, *Signposts of Anticompetitive Exclusion: Restraints on Innovation and Economies of Scale*, in 2006 FORDHAM COMPETITION LAW INSTITUTE 409, 412 (Barry E. Hawk ed., 2007) (acknowledging that “phrases such as ‘disproportionate to the resulting benefits’ are marshmallows, covering

This issue is critical. Failure to ensure that courts condemn only conduct that has an adverse effect on competition that is substantially disproportionate to any benefits could render this test tantamount to the burdensome, open-ended effects-balancing test discussed above.

Importantly, the standard likely can be readily applied in a number of cases because either the harm or the benefit is clearly predominant.⁸³ A trivial benefit should not outweigh substantial anticompetitive effects. At the same time, if the benefits and harms are comparable or close to comparable, then the conduct should be lawful under this test.

The Department recognizes that the disproportionality test imposes a higher burden on a plaintiff than the effects-balancing test. If there is procompetitive justification for the challenged conduct, the test requires the plaintiff to demonstrate that the harm to competition substantially outweighs the benefits. The Department believes that this higher liability threshold is in keeping with the Supreme Court's repeated insistence that section 2 should not be construed in a way that chills procompetitive conduct, yet it also prohibits conduct where significant anticompetitive harm appears likely.

At the same time, as Professor Hovenkamp states in endorsing this test, its "formulation is not intended to give a complete definition of" conduct that is anticompetitive under section 2, but rather is "only a starting point for the development of specific rules for specific types of conduct."⁸⁴ The Department believes that conduct-specific tests and, where appropriate, safe harbors enable more effective enforcement while providing businesses with greater

certainty, are most administrable by the agencies and courts, and reduce the risk of erroneous determinations. Conduct-specific tests are particularly important because, as Professor Hovenkamp notes, "our level of concern and our administrative capabilities vary considerably among the list of practices that antitrust tribunals have identified as exclusionary."⁸⁵ The Department, therefore, will continue to work to develop conduct-specific tests and safe harbors. However, in general, the Department believes that, when a conduct-specific test is not applicable, the disproportionality test is likely the most appropriate test identified to date for evaluating conduct under section 2.

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IV. Conclusion

There was no consensus at the hearings, and there is currently no consensus among commentators, that a single test should be used to define anticompetitive conduct for purposes of section 2. Although many of the proposed tests have virtues, they also have flaws. The Department believes that none currently works well in all situations.

Thus, as will be seen in subsequent chapters, the Department believes different types of conduct warrant different tests, depending upon, among other things, the scope of harm implicated by the practice; the relative costs of false positives, false negatives, and enforcement; the ease of application; and other administrability concerns. An important goal for any test is to identify conduct that harms competition while enabling firms effectively to evaluate the legality of their conduct before it is undertaken.

very much or very little depending on one's ideology or fundamental beliefs").

⁸³ See Gavil, *supra* note 12, at 77 ("[M]ost cases will be weeded out before trial for weaknesses related to the plaintiff's assertions with respect to monopoly power or effects. To the extent a small number of cases proceed any further, most will be decided based on lopsided evidence—lots of harm and little or no efficiency, or little harm and substantial efficiency.").

⁸⁴ Hovenkamp, *supra* note 82, at 412.

⁸⁵ *Id.*

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In deciding individual cases, courts would be well served to consider the appropriate allocation of burdens of proof and production. In applying legal standards, courts should determine whether the conduct at issue warrants employing a conduct-specific test. In general, the Department believes that when a conduct-specific test is not utilized, the disproportionality test is likely the most appropriate test identified to date for evaluating conduct under section 2.

Adopting conduct-specific tests is in keeping with modern Supreme Court section 2 jurisprudence. In the last twenty-five years, the Court has adopted conduct-specific tests for both predatory pricing and predatory bidding and has avoided articulating a general test applicable to all section 2 cases. Instead, the Court has set forth unifying principles—including protecting the competitive process and avoiding chilling procompetitive conduct—from which conduct-specific tests can be derived. The Department believes that the Court's approach is appropriate and recommends further development of conduct-specific tests to guide the continued evolution of section 2 jurisprudence.

CHAPTER 4

PRICE PREDATION

A firm with monopoly power can violate section 2 if it engages in classic price predation, namely, predatory pricing, or in its buy-side equivalent, predatory bidding.¹ Drawing on the testimony and submissions presented at the hearings, as well as cases and commentary, this chapter explores and provides the Department's views on some important issues surrounding these forms of exclusionary conduct.

I. Predatory Pricing

A. Introduction

There is broad consensus that, in certain circumstances, temporarily charging prices below a firm's costs can harm competition and consumers.² For example, harm could occur if a firm priced low to make it unprofitable for competitors to stay in the market and then, following their exits, increased price to supracompetitive levels for a significant period.³ In such circumstances, although consumers may benefit in the short term from low prices, in the long term they may be worse off.⁴ "There is, therefore, good reason for

including a 'predatory pricing' antitrust offense within the proscription of monopolization or attempts to monopolize in section 2 of the Sherman Act."⁵

However, a firm accused of pursuing a predatory-pricing strategy is, in essence, accused of charging prices that are too low. Therein lies "a difficult conundrum in antitrust law."⁶ Price cutting is a core competitive activity. Consumers prefer lower prices to higher prices, and they benefit when firms aggressively compete to price as low as possible. Price competition enables consumers to secure desired products and services for less.

Thus, alongside the broad consensus that predatory pricing can be anticompetitive, there is general recognition that, in the words of one treatise, "[a]ntitrust would be acting foolishly if it forbade price cuts any time a firm knew that its cuts would impose hardship on any competitor or even force its exit from the market."⁷ In the absence of clear standards, distinguishing harmful predation from procompetitive discounting is often difficult and runs the risk of erroneous condemnation, which can discourage firms from engaging in beneficial price competition and thus "chill the very conduct the antitrust laws are designed to protect."⁸ The key question, therefore, is how

¹ See generally 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶¶ 722-49 (2d ed. 2002). This chapter deals solely with what one commentator characterizes as "conventional" predatory pricing and not with bundling, quantity discounts, market-share discounts, and other forms of what he terms "exclusionary pricing." Herbert Hovenkamp, *The Law of Exclusionary Pricing*, COMPETITION POL'Y INT'L, Spring 2006, at 21. These other types of conduct are addressed in other chapters.

² See generally AREEDA & HOVENKAMP, *supra* note 1, ¶ 723b, at 273-74; RICHARD A. POSNER, *ANTITRUST LAW* 214 (2d ed. 2001).

³ See *Cargill, Inc. v. Monfort of Colo., Inc.*, 479 U.S. 104, 117 (1986); AREEDA & HOVENKAMP, *supra* note 1, ¶ 723a, at 272.

⁴ See Sherman Act Section 2 Joint Hearing: Predatory Pricing Hr'g Tr. 30, June 22, 2006 [hereinafter June 22 Hr'g Tr.] (Bolton).

⁵ Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697, 697 (1975).

⁶ Ari Lehman, Note, *Eliminating the Below-Cost Pricing Requirement from Predatory Pricing Claims*, 27 CARDOZO L. REV. 343, 385 (2005).

⁷ AREEDA & HOVENKAMP, *supra* note 1, ¶ 722, at 271.

⁸ *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 414 (2004) (quoting *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 594 (1986)). See generally Phillip Areeda, *Monopolization, Mergers, and Markets: A Century Past and the Future*, 75 CAL. L. REV. 959, 965-70 (1987); Daniel A. Crane, *The Paradox of Predatory Pricing*, 91 CORNELL L.

to structure a rule under section 2 that effectively condemns only harmful predation while providing clear and sound guidance to firms, competition authorities, potential private plaintiffs, and courts.

B. Background

"The predatory price-cutter is one of the oldest and most familiar villains in our economic folklore."⁹ For instance, the 1906 complaint in *Standard Oil Co. of New Jersey v. United States* alleged, among other things, "local price cutting at the points where necessary to suppress competition."¹⁰ Similarly, in 1911, *United States v. American Tobacco Co.* involved allegations of "ruinous competition, by lowering the price of plug below its cost."¹¹

"Historically, treatment of predatory pricing in the cases and the literature suffered from two interrelated defects: (1) failure to delineate clearly and correctly what practices should constitute the offense, and (2) exaggerated fears that large firms would be inclined to engage in predatory pricing."¹² The result was that in the decades before the Supreme Court decided *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*,¹³ "[p]laintiffs won most litigated cases, including those they probably should have lost."¹⁴

The Supreme Court's decision in *Utah Pie Co. v. Continental Baking Co.*,¹⁵ although decided within the context of the Robinson-Patman

Act¹⁶ and not section 2 of the Sherman Act, nevertheless illustrates the courts' approach to predatory-pricing claims during that period. In *Utah Pie*, defendant Continental Baking Company sold apple pies for \$2.85 a dozen, which "was less than its direct cost plus an allocation for overhead."¹⁷ This caused plaintiff Utah Pie to reduce its price for frozen apple pies to \$2.75 per dozen, a price Continental refused to match.¹⁸ The Supreme Court found Continental had engaged in predatory pricing because a jury could have "reasonably concluded that a competitor who is forced to reduce his price to a new all-time low in a market of declining prices will in time feel the financial pinch and will be a less effective competitive force."¹⁹

Utah Pie received much scholarly criticism as an example of a case where "low prices seemed more likely to injure competitors than competition and consumers."²⁰ One commentator wrote that it "must rank as the most anticompetitive antitrust decision of the decade."²¹ Judge Bork's view was that "[t]here is no economic theory worthy of the name that could find an injury to competition on the facts of the case."²² As he saw it, "Defendants were convicted not of injuring competition but, quite

REV. 1, 55-56 (2005).

⁹ Roland H. Koller II, *The Myth of Predatory Pricing: An Empirical Study*, ANTITRUST L. & ECON. REV., Summer 1971, at 105, 105.

¹⁰ 221 U.S. 1, 43 (1911). See generally Elizabeth Granitz & Benjamin Klein, *Monopolization by "Raising Rivals' Costs": The Standard Oil Case*, 39 J.L. & ECON. 1 (1996); John S. McGee, *Predatory Price Cutting: The Standard Oil (N.J.) Case*, 1 J.L. & ECON. 137 (1958).

¹¹ 221 U.S. 106, 160 (1911).

¹² AREEDA & HOVENKAMP, *supra* note 1, ¶ 723a, at 272-73 (footnotes omitted).

¹³ 509 U.S. 209 (1993).

¹⁴ Patrick Bolton et al., *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239, 2250 (2000).

¹⁵ 386 U.S. 685 (1967).

¹⁶ 15 U.S.C. § 13(a) (2000); see *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 127 S. Ct. 1069, 1074 n.1 (2007) ("[P]rimary-line competitive injury under the Robinson-Patman Act is of the same general character as the injury inflicted by predatory pricing schemes actionable under § 2 of the Sherman Act." (quoting *Brooke Group*, 509 U.S. at 221)).

¹⁷ 386 U.S. at 698.

¹⁸ *Id.* at 698-99.

¹⁹ *Id.* at 699-700.

²⁰ Aaron S. Edlin, *Stopping Above-Cost Predatory Pricing*, 111 YALE L.J. 941, 953 (2002); see also Kenneth G. Elzinga & Thomas F. Hogarty, *Utah Pie and the Consequences of Robinson-Patman*, 21 J.L. & ECON. 427, 427 (1978) ("The *Utah Pie* opinion . . . has provoked much criticism on the grounds that it serves to protect localized firms from the competition of more distant sellers.").

²¹ Ward S. Bowman, *Restraint of Trade by the Supreme Court: The Utah Pie Case*, 77 YALE L.J. 70, 84 (1967).

²² ROBERT H. BORK, *THE ANTITRUST PARADOX* 387 (1978).

simply, of competing.”²³

Utah Pie was not an aberration. As one treatise points out, “Historically, courts approved formulations or jury instructions containing . . . useless formulae” that “provide[d] little or no basis for analyzing the predatory pricing offense.”²⁴

In 1975, after *Utah Pie* but before *Brooke Group*, Professors Areeda and Turner published a landmark article “attempt[ing] to formulate meaningful and workable tests for distinguishing between predatory and competitive pricing by examining the relationship between a firm’s costs and its prices.”²⁵ Their proposal was that, for a firm with monopoly power, “[a] price at or above reasonably anticipated average variable cost should be conclusively presumed lawful,” and a price below that cost “should be conclusively presumed unlawful.”²⁶ The rationale was that prices at or above average variable cost²⁷ exclude less efficient firms while minimizing the likelihood of excluding equally efficient firms.²⁸

Notwithstanding the rapidity with which the appellate courts embraced the new Areeda-Turner test²⁹ and the increasing scholarly

criticism of then-prevailing legal doctrine that predatory intent plus an unreasonably low price was sufficient to prove predatory pricing,³⁰ firms continued to face the risk of antitrust liability for price cutting that appeared to benefit consumers. For instance, in 1983, the Ninth Circuit rejected the notion, espoused by Areeda and Turner, that “prices above average total cost ‘should be conclusively presumed legal.’”³¹ The court reasoned that “we should hesitate to create a ‘free zone’ in which monopolists can exploit their power without fear of scrutiny by the law” and that a “rule based exclusively on cost forecloses consideration of other important factors, such as intent, market power, market structure, and long-run behavior in evaluating the predatory impact of a pricing decision.”³² The court accordingly held that “if the challenged prices exceed average total cost, the plaintiff must prove by clear and convincing evidence—i.e., that it is highly probably true—that the defendant’s pricing policy was predatory.”³³

But in 1986, the Supreme Court handed down two significant decisions—*Matsushita Electric Industrial Co. v. Zenith Radio Corp.*³⁴ and *Cargill*³⁵—that focused on the relationship between price and cost and the central role that recoupment plays in a successful predation strategy, and thus anticipated by seven years its opinion in *Brooke Group*.³⁶ In *Matsushita*, the

²³ *Id.*; see also Edlin, *supra* note 20, at 953 (the “facts [of *Utah Pie*] suggest vigorous price competition that benefited consumers”).

²⁴ AREEDA & HOVENKAMP, *supra* note 1, ¶ 723d, at 276–77.

²⁵ Areeda & Turner, *supra* note 5, at 699–700, see also June 22 Hr’g Tr., *supra* note 4, at 8 (Elzinga) (stating that Areeda and Turner’s 1975 article on predatory pricing is “the most often cited article in antitrust scholarship”).

²⁶ Areeda & Turner, *supra* note 5, at 733.

²⁷ DENNIS W. CARLTON & JEFFREY M. PERLOFF, MODERN INDUSTRIAL ORGANIZATION 29 (4th ed. 2005) (Average variable costs are the “costs that change with the level of output.”).

²⁸ Areeda & Turner, *supra* note 5, at 711, 716–18.

²⁹ See, e.g., Bolton et al., *supra* note 14, at 225 (“The Areeda-Turner rule had an immediate impact on the courts.”); William E. Kovacic, *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix*, 2007 COLUM. BUS. L. REV. 1, 46 (“In 1975, Areeda and Turner published a proposal that courts use the relationship of the dominant firm’s prices to its variable costs to determine

the legality of a challenged pricing strategy. Within months of the article’s publication, two courts of appeals relied heavily on the paper to dismiss predatory pricing allegations.”).

³⁰ See generally Richard O. Zerbo, Jr. & Michael T. Mumford, *Does Predatory Pricing Exist? Economic Theory and the Courts After Brooke Group*, 41 ANTITRUST BULL. 949, 949–50 (1996) (summarizing the pre-*Brooke Group* criticism).

³¹ *Transamerica Computer Co. v. IBM*, 698 F.2d 1377, 1386 (9th Cir. 1983). Average total cost is total fixed and total variable costs, divided by quantity of output. *Id.* at 1384.

³² *Id.* at 1387.

³³ *Id.* at 1388.

³⁴ 475 U.S. 574 (1986).

³⁵ 479 U.S. 104 (1986).

³⁶ See June 22 Hr’g Tr., *supra* note 4, at 8 (Elzinga) (describing *Matsushita* and the Areeda and Turner

Court affirmed the grant of summary judgment in favor of defendants on a claim that a group of twenty-one Japanese television manufacturers and U.S. subsidiaries had engaged in a twenty-year predatory-pricing conspiracy,³⁷ noting in the process that “there is a consensus among commentators that predatory pricing schemes are rarely tried, and even more rarely successful.”³⁸ Similarly, *Cargill* contains an extensive discussion of why predatory pricing rarely succeeds.³⁹ In particular, the Court highlighted two significant obstacles to a successful predation strategy that are not often overcome. First, “[T]o succeed in a sustained campaign of predatory pricing, a predator must be able to absorb the market shares of its rivals once prices have been cut.”⁴⁰ Second, “It is also important to examine the barriers to entry into the market, because ‘without barriers to entry it would presumably be impossible to maintain supracompetitive prices for an extended time.’”⁴¹

Three years after *Matsushita* and *Cargill*, Professors Elzinga and Mills proposed that the feasibility of recoupment be used as a complement to the Areeda-Turner below-

average-variable-cost requirement.⁴² Under their recoupment-feasibility test, “if a given predatory strategy is an economically implausible investment, as judged by the parameters of the recoupment plan it implies, then the alleged predator is exonerated.”⁴³ Elzinga and Mills viewed this “investment test” as “a check on the internal consistency of a plaintiff’s allegations.”⁴⁴ They pointed out that in predatory pricing, “[t]he predator’s short-run loss is an investment in prospective monopoly profits.” Consequently, “predatory pricing is attractive to a profit-seeking firm only where it expects enough monopoly profit to earn a return on its investment in predation that equals or exceeds the interest rate that could be earned on alternative investments.”⁴⁵ In particular, “If it can be shown that a firm has no reasonable prospect for recouping its losses and profiting from its investment, then predatory claims would be discredited.”⁴⁶

In 1993, *Brooke Group* presented the Supreme Court with a direct opportunity to consider the then-contemporary legal and economic scholarship on predatory pricing, including the already extant game theoretic literature.⁴⁷ The plaintiff in *Brooke Group*, Liggett, contended that a rival cigarette manufacturer had “cut prices on generic cigarettes below cost . . . to force Liggett to raise its own generic cigarette prices and introduce oligopoly pricing in the economy segment.”⁴⁸ Viewing the evidence in the light most favorable to Liggett, the Court held that the rival cigarette manufacturer was entitled to judgment as a matter of law since “the evidence cannot support a finding that [the rival cigarette manufacturer]’s alleged scheme was likely to result in oligopolistic price coordination and sustained supracompetitive

article as the two events that most changed the thinking regarding predatory pricing).

³⁷ 475 U.S. at 590–92 (“In order to recoup their losses, petitioners must obtain enough market power to set higher than competitive prices, and then must sustain those prices long enough to earn in excess profits what they earlier gave up in below-cost prices. Two decades after their conspiracy is alleged to have commenced, petitioners appear to be far from achieving this goal: the two largest shares of the retail market in television sets are held by RCA and respondent Zenith. . . . The alleged conspiracy’s failure to achieve its ends in the two decades of its asserted operation is strong evidence that the conspiracy does not in fact exist.” (citations omitted) (footnote omitted)).

³⁸ *Id.* at 589. *But see Cargill*, 479 U.S. at 121 (“While firms may engage in [predatory pricing] only infrequently, there is ample evidence suggesting that the practice does occur.”).

³⁹ *See* 479 U.S. at 119–21 n.15; *id.* at 121–22 n.17.

⁴⁰ *Id.* at 119 n.15.

⁴¹ *Id.* at 120 n.15 (quoting *Matsushita*, 475 U.S. at 591).

⁴² Kenneth G. Elzinga & David E. Mills, *Testing for Predation: Is Recoupment Feasible?*, 34 ANTITRUST BULL. 869 (1989).

⁴³ *Id.* at 871.

⁴⁴ *Id.*

⁴⁵ *Id.* at 870.

⁴⁶ *Id.* at 872.

⁴⁷ *See infra* Part C(1).

⁴⁸ 509 U.S. 209, 212 (1993).

pricing in the generic segment of the national cigarette market.”⁴⁹

Relying on the principles set forth in both the Areeda and Turner and Elzinga and Mills articles, the Court in *Brooke Group* held that there are “two prerequisites to recovery” where the claim alleges predatory pricing under section 2.⁵⁰ Plaintiff must prove that (1) the prices were “below an appropriate measure”⁵¹ of defendant’s costs in the short term, and (2) defendant had “a dangerous probability of recouping its investment in below-cost prices.”⁵² The Court elaborated on the recoupment prerequisite, concluding that “plaintiff must demonstrate that there is a likelihood that the predatory scheme alleged would cause a rise in prices above a competitive level that would be sufficient to compensate for the amounts expended on the predation, including the time value of the money invested in it.”⁵³

To prevail on a predatory-pricing claim, plaintiff must prove that (1) the prices were below an appropriate measure of defendant’s costs in the short term, and (2) defendant had a dangerous probability of recouping its investment in below-cost prices.

By establishing these basic prerequisites, *Brooke Group* brought needed rigor and order to predatory-pricing law. Importantly, while the Court in *Brooke Group* recognized that there can be occasions when above-cost pricing theoretically could hurt consumers, it also concluded that there is no reliable way to distinguish between above-cost predatory pricing and legitimate price discounting.⁵⁴

Thus, any rule permitting findings of above-cost predation, the Court reasoned, could discourage desirable price competition. The Court concluded that above-cost predatory-pricing schemes may be “beyond the practical ability of a judicial tribunal to control”⁵⁵ and created a safe harbor for pricing above cost.

Also importantly, by limiting liability to prices below a short-run measure of incremental cost, the Court implicitly rejected the idea that liability in this context could be based on a failure to maximize profits.⁵⁶ Evidence that defendant would have been better off at least in the short run by shutting down production provides a reasonable indication that there might be harmful exclusion. It is a far different step—and one the Court rejected—to base liability on an ex post evaluation of the relative profitability of another potential course of action that defendant might not have even considered at the time.⁵⁷

Some have suggested that since *Brooke Group* it has become unnecessarily difficult for plaintiffs to prove predatory pricing.⁵⁸ Another commentator, however, suggests that this view is unsupported, arguing that, even under *Brooke Group*, plaintiffs still “can strategically misuse predatory pricing law to coerce more efficient rivals to forgo . . . price cuts.”⁵⁹

chilling legitimate price cutting.”).

⁴⁹ *Id.* The Court strongly reiterated this conclusion in *Weyerhaeuser*, 127 S. Ct. 1069, 1074 (2007), and *Trinko*, 540 U.S. 398, 414 (2004).

⁵⁰ *Brooke Group*, 509 U.S. at 223.

⁵¹ See June 22 Hr. Tr., *supra* note 4, at 52 (Melamed).

⁵² Bolton et al., *supra* note 14, at 2241–49; Edlin, *supra* note 20, at 941–942.

⁵³ Crane, *supra* note 8, at 1; see also *id.* at 4–5 (noting that “although it is accepted wisdom that no predatory pricing plaintiff has won a verdict since *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, plaintiffs have recently won some predatory pricing cases and procured substantial settlements in others. Additionally, regardless of their low probability of success, plaintiffs continue to file a significant number of federal predatory pricing cases, suggesting that predatory pricing complaints may afford plaintiffs strategic advantages whether or not they ultimately prevail.”) (footnote omitted).

⁴⁹ *Id.* at 243.

⁵⁰ *Id.* at 222–27.

⁵¹ *Id.* at 222.

⁵² *Id.* at 224.

⁵³ *Id.* at 225.

⁵⁴ See *id.* at 223 (“As a general rule, the exclusionary effect of prices above a relevant measure of cost either reflects the lower cost structure of the alleged predator . . . or is beyond the practical ability of a judicial tribunal to control without courting intolerable risks of

Since *Brooke Group*, a significant issue in the lower courts has been defining the “appropriate measure” of cost, an issue the Court expressly did not resolve in *Brooke Group*. In 2003, the Tenth Circuit noted in *United States v. AMR Corp.*, “Despite a great deal of debate on the subject, no consensus has emerged.”⁶⁰

In *AMR*, the Tenth Circuit affirmed a grant of summary judgment in favor of an established airline that allegedly engaged in a scheme of price cutting and predatory-capacity additions designed to drive out a start-up airline. The Tenth Circuit held that the government had not established “pricing below an appropriate measure of cost.”⁶¹

The Court “decline[d] to dictate a definitive cost measure for all cases.”⁶² It observed that average variable cost is a “commonly accepted proxy for marginal cost in predatory pricing cases,”⁶³ citing Areeda and Turner’s 1975 article. But it also cautioned that “[w]hatever the proxy used to measure marginal cost, it must be accurate and reliable in the specific circumstances of the case at bar.”⁶⁴

In particular, the court emphasized that “[s]ole reliance on AVC [average variable cost] as the appropriate measure of cost may obscure the nature of a particular predatory scheme and, thus . . . we do not favor AVC to the exclusion of other proxies for marginal cost.”⁶⁵ The court rejected several proposed measures of incremental costs and revenues attributable to allegedly predatory capacity additions in part because they would be equivalent to applying an average total cost test “implicitly ruled out by *Brooke Group*’s mention of incremental costs only.”⁶⁶

In another recent case in which an established air carrier allegedly engaged in predation against a new competitor, the Sixth Circuit took a different approach. Applying a

“modified version of the Areeda-Turner test,” the court seemed open to the possibility of a price being illegal under section 2 even if it is above average variable cost, so long as it is below average total cost:

If the defendant’s prices were below average total cost but above average variable cost, the plaintiff bears the burden of showing defendant’s pricing was predatory. If, however, the plaintiff proves that the defendant’s prices were below average variable cost, the plaintiff has established a prima facie case of predatory pricing and the burden shifts to the defendant to prove that the prices were justified without regard to any anticipated destructive effect they might have on competitors.⁶⁷

C. Analysis

Six key issues animate the structuring of a rule under section 2 that provides clear and sound guidance regarding predatory pricing: (1) the frequency of predatory pricing, (2) treatment of above-cost pricing, (3) cost measures, (4) recoupment, (5) potential defenses, and (6) equitable remedies. This part of the chapter describes the legal and economic analysis pertinent to each of these issues.

1. Frequency of Predatory Pricing

As one commentator notes, “A key premise in developing an enforcement policy for predatory pricing is the expected frequency and severity of its occurrence.”⁶⁸ Some commentators maintain that the Court’s statement in *Matsushita* that “predatory pricing schemes are rarely tried, and even more rarely successful”⁶⁹ is “not justified by the available data”⁷⁰ and that there is “little reason to accept the comforting view that predation very rarely

⁶⁰ 335 F.3d 1109, 1115 (10th Cir. 2003).

⁶¹ *Id.* at 1120.

⁶² *Id.* at 1116.

⁶³ *Id.* at 1116 & n.7.

⁶⁴ *Id.* at 1116.

⁶⁵ *Id.*

⁶⁶ *Id.* at 1119.

⁶⁷ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 938 (6th Cir. 2005).

⁶⁸ Bolton et al., *supra* note 14, at 2243.

⁶⁹ 475 U.S. 574, 589 (1986).

⁷⁰ Richard O. Zerby, Jr., *Monopsony and the Ross-Simmons Case: A Comment on Salop and Kirkwood*, 72 ANTITRUST L.J. 717, 717 (2005); see also Zerby & Mumford, *supra* note 30, at 955–64, 982–85 (noting that “there is theoretical and empirical evidence to refute” the Court’s statement).

or never occurs in reality.”⁷¹ However, others argue that regardless of how often predatory-pricing schemes are attempted, successful predation—predation that causes consumer harm—is indeed rare.⁷²

This controversy over the frequency and severity of predatory pricing has existed since at least 1958.⁷³ That year, economist John McGee published a seminal article arguing that predatory pricing is not a rational business strategy, and hence is rare or nonexistent,⁷⁴ because the monopolist, by cutting prices, loses more than its prey: “To lure customers away from somebody, [the monopolizing firm] must be prepared to serve them himself. The monopolizer thus finds himself in the position of selling more—and therefore losing more—than his competitors.”⁷⁵ Thus, in the words of Judge Bork, “predatory price cutting is most unlikely to exist,” and we should instead “look for methods of predation which do not require the predator to expand output and incur

disproportionately large costs.”⁷⁶

Modern economic game theory models, developed in the 1980s, counter the view that predatory pricing cannot be a rational business strategy.⁷⁷ These models provide theoretical support for the proposition that a monopolist may be willing to trade off current and future profits under certain circumstances. When it induces the exit of a recent entrant or deters future entrants, according to these models, predatory pricing can be a successful and rational strategy that maximizes long-run profits. As one commentator explains:

Thus, for example, a firm in an industry with rapid product change might cut prices sharply in answer to new entry in order to discourage the new entrant from continuing an active product development programme. Whether the entrant attributes its lack of profitability to its high costs, to weak market demand, to overcapacity in the industry, or to aggressive behaviour by its competitor, it will properly reduce its estimate of its future profits. If its capital has other good uses, this might lead it to withdraw from the industry. If not, it may nevertheless be dissuaded from making new investments in and developing [n]ew products for the industry. At the same time, other firms may be deterred from entering the industry. If *any* of these things happen, the predator benefits.⁷⁸

Other economists, however, are less sanguine about the ability of modern game

⁷¹ William J. Baumol, *Principles Relevant to Predatory Pricing*, in SWEDISH COMPETITION AUTHORITY, THE PROS AND CONS OF LOW PRICES 15, 35 (2003); see also June 22 Hr’g Tr., *supra* note 4, at 58 (Bolton) (“[T]here has been new scholarship started in the 1980s, rigorous economic scholarship based on rigorous game theory analysis showing exactly how predatory pricing strategy could be rational, and . . . slowly, this literature is being brought in, is being acknowledged, and is being recognized, and so . . . today, we should be less skeptical about the rationale for predatory pricing than we have been and that the Supreme Court has been in its *Brooke* decision and its *Matsushita* decision, which was based on older writing which couldn’t be articulated using the tools of modern game theory.”); Thomas B. Leary, *The Dialogue Between Students of Business and Students of Antitrust: A Keynote Address*, 47 N.Y.L. SCH. L. REV. 1, 13 (2003).

⁷² See Kenneth G. Elzinga, Remarks 3 (June 23, 2006) (hearing submission) (“In my experience, if one plays with the math behind most alleged episodes of predatory pricing, it is difficult to come up with examples where recoupment is mathematically possible.”). See generally JOHN R. LOTT, JR., ARE PREDATORY COMMITMENTS CREDIBLE? 4–10 (1999).

⁷³ See AREEDA & HOVENKAMP, *supra* note 1, ¶ 723b, at 273 & nn.7–9.

⁷⁴ McGee, *supra* note 10.

⁷⁵ *Id.* at 140.

⁷⁶ BORK, *supra* note 22, at 155; see also Frank H. Easterbrook, *When Is It Worthwhile to Use Courts to Search for Exclusionary Conduct?*, 2003 COLUM. BUS. L. REV. 345, 346–47 (“Claims that the long run will depart from the short run are easy to make but hard to prove. . . . If monopolistic prices happen later, prosecute then.”); Frank H. Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263, 263–64 (1981) [hereinafter *Predatory Strategies*] (“[T]here is no sufficient reason for antitrust law or courts to take predation seriously.”).

⁷⁷ See, e.g., Paul Milgrom & John Roberts, *Predation, Reputation, and Entry Deterrence*, 27 J. ECON. THEORY 280, 303 (1982); David M. Kreps & Robert Wilson, *Reputation and Imperfect Information*, 27 J. ECON. THEORY 253 (1982).

⁷⁸ Paul Milgrom, *Predatory Pricing*, in 3 THE NEW PALGRAVE: A DICTIONARY OF ECONOMICS 937, 938 (John Eatwell et al. eds., 1987) (emphasis in original).

theoretic models to distinguish between predatory pricing and benign price discounting. Thus, one commentary argues, “Although strategic theories of predatory pricing are exemplary in their coherence and rigor, their potential to add value to antitrust policy is much more modest than the authors admit.”⁷⁹ This is because the strategic theories of predatory pricing that underlie these game theoretic models “are so fragile,” relying on strict assumptions that may not be met in the real world.⁸⁰

One panelist suggested that these economic models could help identify predatory pricing,⁸¹ while acknowledging that the “formal economic proof of the theories is complex.”⁸² Most panelists, however, expressed concern regarding the practical utility of many of these models. As one panelist put it, “[W]e should take the learning of these models and figure out what they mean in terms of implementable rules.”⁸³ He also noted,

[W]e come back to the question . . . [of] how to translate it into something that a businessperson, who has to be counseled, will be able to understand in day-to-day operations, and how [a] Court [will] be able to take these principles of game theory,

⁷⁹ Kenneth G. Elzinga & David E. Mills, *Predatory Pricing and Strategic Theory*, 89 GEO. L.J. 2475, 2475 (2001).

⁸⁰ *Id.* at 2494; *see also id.* at 2493–94 (noting that they are “pristine theoretical existence proofs” and “require[] more factual support than the authors admit” and require compliance with strict assumptions that may not be likely to be met in the real world); *id.* at 2478 (“These theories typically assume an extremely simple market structure. . . . While this stylized market structure yields sufficient conditions to sustain the plausibility of predatory pricing, the plausibility does not transfer automatically to other generally more complex market structures.”); *id.* at 2477–78 (“The foundational assumption upon which most strategic theories of predation rest is either asymmetric information or asymmetric access to financial resources. . . . Before the authority of a strategic theory can be invoked in a particular dispute, it must be established that the information or financial resource condition in the market square[s] with the theory.” (internal quotation marks omitted)).

⁸¹ *See* June 22 Hr’g Tr., *supra* note 4, at 58 (Bolton).

⁸² Bolton et al., *supra* note 14, at 2248.

⁸³ June 22 Hr’g Tr., *supra* note 4, at 67–68 (Ordovery).

subgame perfect[] Nash equilibria and all these things, and translate it into some simple rules that . . . thou shall not do what?⁸⁴

As Judge Posner notes, “[R]ecent scholarship has brought to light a nontrivial number of cases of predatory pricing.”⁸⁵ As another commentary puts it, “Even were empirical evidence lacking, one should be cautious in saying that predation does not exist today since theory suggests that it can occur.”⁸⁶ Indeed, the

⁸⁴ *Id.* at 67 (Ordovery); *see also id.* at 74 (Melamed) (noting the difficulty of implementing a game theory model); Sherman Act Section 2 Joint Hearing: Business Testimony Hr’g Tr. 187, Feb. 13, 2007 [hereinafter Feb. 13 Hr’g Tr.] (Sewell) (“The laws [to which] we’re seeking to conform need to be understandable by the people who are asked to adhere to them.”).

⁸⁵ POSNER, *supra* note 2, at 214; *see also* Malcolm R. Burns, *New Evidence of Price-Cutting*, 10 MANAGERIAL & DECISION ECON. 327, 327 (1989) (letters between officers of the tobacco trust show predatory intent); Malcolm R. Burns, *Predatory Pricing and the Acquisition Cost of Competitors*, 94 J. POL. ECON. 266, 268–69 (1986) (the tobacco trust between 1891 and 1901 engaged in profitable predation); Kenneth G. Elzinga & David E. Mills, *Predatory Pricing in the Airlines Industry: Spirit Airlines v. Northwest Airlines*, in THE ANTITRUST REVOLUTION 219, 244 (John E. Kwoka & Lawrence J. White eds., 5th ed. 2008) (“[T]he facts in *Spirit v. Northwest* feature the exit of a viable competitor and a subsequent increase in prices.”); David Genesove & Wallace P. Mullin, *Predation and Its Rate of Return: The Sugar Industry, 1887–1914*, 37 RAND J. ECON. 47, 67 (2006) (the American Sugar Refining Company engaged in predatory pricing); Fiona Scott Morton, *Entry and Predation: British Shipping Cartels 1879–1929*, 6 J. ECON. & MGMT. STRATEGY 679, 714 (1997) (“The evidence on price wars in the early liner shipping industry suggests they were predatory in nature.”); Balder Von Hohenbalken & Douglas S. West, *Empirical Tests for Predatory Reputation*, 19 CAN. J. ECON. 160, 176 (1986) (describing empirical evidence that “having a reputation for aggressiveness created by earlier spatial predation” discourages “new entry by other firms”); David F. Weiman & Richard C. Levin, *Preying for Monopoly? The Case of Southern Bell Telephone Company, 1894–1912*, 102 J. POL. ECON. 103, 103 (1994) (“Southern Bell effectively eliminated competition through a strategy of pricing below cost in response to entry. . . .”); B. S. Yamey, *Predatory Price Cutting: Notes and Comments*, 15 J.L. & ECON. 129, 137–42 (1972) (a conference of shipowners in the China-England trade in the 1880s engaged in predatory pricing).

⁸⁶ Zerbe & Mumford, *supra* note 30, at 956.

consensus at the hearings, and the predominant (but by no means unanimous) view among commentators, is that, in certain circumstances, predatory pricing can be a rational strategy for a firm with monopoly power facing a smaller competitor.⁸⁷

In certain circumstances, predatory pricing can be a rational strategy for a firm with monopoly power facing a smaller competitor.

Although theoretically a rational strategy, actual evidence on the frequency of predatory pricing, nonetheless, is limited. "Since *Brooke Group* was decided in 1993, at least fifty-seven federal antitrust lawsuits alleging predatory pricing have been filed."⁸⁸ Because publicly available data about all predatory-pricing claims or allegations are limited, it is impossible to determine whether this number either supports or refutes the conclusion that "evidence regarding predation does not suggest it is either rare or unsuccessful."⁸⁹ In addition, as one antitrust scholar notes, "[I]t is impossible to be certain how pervasive predation would be or how long its effects would endure" because "[a]ny studies of business behavior today are affected by the fact that predatory pricing is illegal."⁹⁰

⁸⁷ See, e.g., June 22 Hr'g Tr., *supra* note 4, at 31 (Bolton) ("I would argue that over time, things have moved in the direction of thinking of predatory pricing as being more prevalent than we thought and also more likely to succeed than we thought before . . ."); *id.* at 55–56 (Elzinga); see also, e.g., CARLTON & PERLOFF, *supra* note 27, at 360 ("[I]t is a mistake to think of price predation as inconceivable.").

⁸⁸ Crane, *supra* note 8, at 6.

⁸⁹ Zerbe & Mumford, *supra* note 30, at 957; see also Bolton et al., *supra* note 14, at 2258–59 (noting that in the six years following the 1993 *Brooke Group* decision, defendants won thirty-six of thirty-nine reported decisions; two cases settled after plaintiffs' claims survived motions for summary judgment; and the disposition of the remaining case was uncertain).

⁹⁰ Crane, *supra* note 8, at 39; see also *id.* at 38–39 ("The incidence of costs of predatory pricing in a regime without any predatory pricing prohibition . . . remains highly speculative" and "is unlikely to be ascertained empirically except by reference to historical case studies

However, certain market characteristics may contribute to potentially successful predatory pricing.⁹¹ For example, in markets where information is imperfect, a predator can mislead potential entrants into thinking that market conditions are unfavorable when they are not or that the predator's costs are lower than they actually are.⁹² Also, the predator can engage in "reputation-effect" predation by building a reputation that discourages future entrants from entering the market because they fear that they will suffer the same fate as earlier victims.⁹³ This may occur when "the entrants [are] less than certain that they are correct in modeling the established firm as rationally choosing between predation and peaceful coexistence."⁹⁴ Where potential rivals refrain from entering simply because they fear the "retribution" of the dominant firm,⁹⁵ the dominant firm's reputation as a predator itself operates as an entry barrier.⁹⁶

[T]hink of it this way. You are walking

of particular firms from the time period before the adoption of the Sherman Act, since predatory pricing has long been illegal . . ." (footnote omitted)). Accord POSNER, *supra* note 2, at 214; Bolton et al., *supra* note 14, at 2247.

⁹¹ See generally AREEDA & HOVENKAMP, *supra* note 1, ¶ 723c.

⁹² See Bolton et al., *supra* note 14, at 2248–49.

⁹³ *The Current State of Economics Underlying Section 2: Comments of Michael Katz and Michael Salinger*, ANTITRUST SOURCE, Dec. 2006, at 1, 5, <http://www.abanet.org/antitrust/at-source/06/12/Dec06-BrownBag.pdf> [hereinafter *Katz & Salinger Comments*]; Bolton et al., *supra* note 14, at 2248 ("In reputation effect predation . . . a predator reduces price in one market to induce the prey to believe that the predator will cut price in its other markets or in the predatory market itself at a later time, thereby enabling multimarket recoupment of predatory losses.").

⁹⁴ Milgrom & Roberts, *supra* note 77, at 302; see also Bolton et al., *supra* note 14, at 2301 n.271.

⁹⁵ See *Katz & Salinger Comments*, *supra* note 93, at 5.

⁹⁶ See Sherman Act Section 2 Joint Hearing: Academic Testimony Hr'g Tr. 12, Jan. 31, 2007 [hereinafter Jan. 31 Hr'g Tr.] (Farrell) ("[E]verybody recognizes that if [Spirit] enters and offers the three hundred dollar deal, Northwest will cut its price to two hundred dollars. . . . So, [Spirit] anticipates that, doesn't enter, and consumers continue to pay five hundred dollars.").

along and you want to have a picnic, and there's a sign that says, "No trespassing." . . . You throw down your blanket, you have a nice picnic, and you leave, right?

Now you are walking along and there's another field where you want to have a picnic and there's a no trespassing sign, and there are about four or five corpses lying around. Are you going to have a picnic there? I don't think so.⁹⁷

As a result, by predating in one or more markets, the monopolist potentially can defend many of its other markets from entry, making predation more profitable.⁹⁸ And in any market where entry barriers are high, there will be greater opportunity for the monopolist to recoup whatever investment it makes in below-cost pricing.⁹⁹

The Department concurs with the panelists and the vast majority of commentators that, absent legal proscription, predatory pricing can occur in certain circumstances. Accordingly, it is necessary to develop rules for distinguishing between legitimate discounting and unlawful predation.

2. Above-Cost Pricing

While acknowledging the theoretical possibility that above-cost pricing may sometimes reduce welfare, the Court in *Brooke Group* held that above-cost pricing does not violate section 2 because condemning it would chill desirable discounting: "As a general rule, the exclusionary effect of prices above a relevant measure of cost either reflects the lower cost structure of the alleged predator . . . or is beyond the practical ability of a judicial tribunal to control without courting intolerable risks of chilling legitimate price cutting."¹⁰⁰ Over a decade later, in *Weyerhaeuser*, the Court pointed out that in *Brooke Group*, "[w]e were particularly wary of allowing recovery for

above-cost price cutting because such claims could, perversely, 'chill[] legitimate price cutting,' which directly benefits consumers."¹⁰¹

Thus, *Brooke Group* created a safe harbor for above-cost pricing, concluding that reliably distinguishing between welfare-enhancing and welfare-decreasing above-cost pricing was impractical and counterproductive. As one commentator notes, "Even though one can easily construct theoretical models of above-cost predatory pricing, antitrust authorities treat above-cost pricing decisions as a safe harbor, not to be challenged."¹⁰²

Some commentators advocate revisiting *Brooke Group's* safe harbor for above-cost pricing. They contend that economic theory now can reliably be used to identify and efficiently prosecute anticompetitive above-cost pricing.¹⁰³ One economist, for example, asserts that above-cost predation is possible "where rivals have higher costs than an incumbent monopoly."¹⁰⁴ He proposes preventing an incumbent monopolist from charging prices above its costs if preventing it from doing so would facilitate entry by new competitors.

In markets where an incumbent monopoly enjoys significant advantages over potential entrants, but another firm enters and provides buyers with a substantial discount, the monopoly should be prevented from responding with substantial price cuts or significant product enhancements until the entrant has had a reasonable time to recover its entry costs and become viable, or until the entrant's share grows enough so that the monopoly loses its dominance.¹⁰⁵

However, others strongly disagree. One

⁹⁷ Sherman Act Section 2 Joint Hearing: Monopoly Power Session Hr'g Tr. 191, Mar. 7, 2007 (Stelzer).

⁹⁸ See Jonathan B. Baker, *Predatory Pricing After Brooke Group: An Economic Perspective*, 62 ANTITRUST L.J. 585, 590 (1994).

⁹⁹ AREEDA & HOVENKAMP, *supra* note 1, ¶ 723c.

¹⁰⁰ *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 223 (1993).

¹⁰¹ *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 127 S. Ct. 1069, 1074 (2007) (alteration in original) (citing *Brooke Group*, 509 U.S. at 222–23).

¹⁰² Dennis W. Carlton, *Does Antitrust Need to Be Modernized?*, J. ECON. PERSP., Summer 2007, at 155, 160.

¹⁰³ Some commentators are particularly concerned about possible above-cost predation with products such as software or pharmaceuticals that have large fixed costs but very low marginal costs. This is discussed further below at part C(3)(c) in connection with long-run average incremental cost.

¹⁰⁴ Edlin, *supra* note 20, at 963.

¹⁰⁵ *Id.* at 945.

commentator concludes:

Even when incumbents do have market power, restrictions on their ability to adopt reactive above-cost price cuts are unlikely to achieve the objective of encouraging and protecting entry because less efficient entrants cannot survive in the long run, and entrants who are (or will predictably become) more efficient need no encouragement or protection.¹⁰⁶

As then-Judge Breyer once explained:

In sum, we believe that such above-cost price cuts are typically sustainable; that they are normally desirable (particularly in concentrated industries); that the “disciplinary cut” is difficult to distinguish in practice; that it, in any event, primarily injures only higher cost competitors; that its presence may well be “wrongly” asserted in a host of cases involving legitimate competition; and that to allow its assertion threatens to “chill” highly desirable procompetitive price cutting.¹⁰⁷

Most panelists concluded that “[p]rices above some measure of cost . . . should not be considered predatory.”¹⁰⁸ They largely agreed that “[administrability] is a serious concern,”¹⁰⁹ that current game theory models “do not give a clear reading on cost benchmarks,”¹¹⁰ and that it is still not within “the practical ability of a

judicial tribunal to control” above-cost predatory pricing “without courting intolerable risks of chilling legitimate price cutting.”¹¹¹ The Department sees no reason to revisit *Brooke Group* under these circumstances.

Most panelists concluded that prices above some measure of cost should not be considered predatory.

Moreover, even if beneficial above-cost price cutting and deleterious predatory pricing could be distinguished after the fact, the Department does not believe that there is a practical, readily applicable test businesses can use to determine whether their above-cost prices are legal at the time they are making pricing decisions.¹¹² For example, under the approach one commentator describes, the legality of above-cost price cuts could depend, in part, on whether the price cut permits an entrant “reasonable time” to recover its “entry costs” or “become viable,” or capture sufficient market share so that the price-cutting firm “loses its dominance.”¹¹³ However, an incumbent firm is unlikely to be able to make this determination with any confidence, even assuming it has all relevant data about its rivals, which it usually will not.

If firms can violate section 2 by pricing above cost, this likely will discourage

¹⁰⁶ Einer Elhauge, *Why Above-Cost Price Cuts to Drive Out Entrants Are Not Predatory – and the Implications for Defining Costs and Market Power*, 112 YALE L.J. 681, 826 (2003).

¹⁰⁷ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 235–36 (1st Cir. 1983) (Breyer, J.).

¹⁰⁸ June 22 Hr’g Tr., *supra* note 4, at 72. Although one panelist disagreed that “prices above average variable cost should not be considered as predatory,” *id.* at 72 (Bolton), he “would not object to a rule that says price above average total cost is per se legal as a way of implementing an easily administrable rule,” *id.* at 75.

¹⁰⁹ *Id.* at 75 (Bolton); *see also id.* at 99 (Ordovery) (“I think at this point we have enough learning to try to go back to first principles and try to understand what it is that we are trying to accomplish, taking full account of the [administrability] of whatever provisions are going to ultimately be developed . . .”).

¹¹⁰ *Id.* at 73 (Bolton); *see id.* (Ordovery); *see also id.* (Bolton) (adding, however, that focusing on cost may not be an effective way of distinguishing between procompetitive and anticompetitive effects).

¹¹¹ *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 223 (1993); *see also* June 22 Hr’g Tr., *supra* note 4, at 74 (Melamed) (“I understand the theory, even if I cannot understand the game theory, of why an above cost . . . test could be predatory. . . . What I don’t understand . . . is how one turns that into a legal rule that companies can comply with.”); *id.* at 75 (Bolton).

¹¹² *See* June 22 Hr’g Tr., *supra* note 4, at 67–68, 74 (Ordovery); *id.* at 74 (Melamed).

¹¹³ *See, e.g.,* Edlin, *supra* note 20, at 945. This commentator notes, however, that “for the sake of correctness in application, this Essay usually assumes that if an entrant prices twenty percent below an incumbent monopoly, the incumbent’s prices will be frozen for twelve to eighteen months.” *Id.* at 945–46. “The exact operationalization of the rule,” however, “could vary by industry or be decided on a case-by-case basis. The price freeze might also be adjusted for inflation in periods of high inflation or for substantial industry-specific price trends.” *Id.* at 946 n.19.

aggressive price discounting that benefits consumers. As was noted at the hearings, sometimes firms with monopoly power will not lower their prices to consumers because they are worried about false condemnations.¹¹⁴ Such a result harms consumer welfare and justifies a safe harbor for above-cost pricing.¹¹⁵

The Department believes that above-cost pricing should remain per se legal. Aggressive price cutting is central to a properly functioning market.¹¹⁶ Consequently, it is critical that enforcement against predatory pricing avoids chilling procompetitive price discounting to the extent reasonably possible. The Department, therefore, will intervene only in those instances where prices are below an appropriate measure of cost, in addition to meeting the other elements of a price-predation claim.

The Department believes that above-cost pricing should remain per se legal.

3. Appropriate Measure of Cost

a. Analytical Considerations

The Department believes three factors bear on the appropriate measure of cost to use in the price-cost test for predatory pricing. First, the cost measure should help reveal whether the firm made unprofitable sales—or, to be more precise, whether the firm's sales were

economically irrational but for their apparent exclusionary effect.

Second, the cost measure should help identify situations in which the firm's pricing would force the exit of a rival that could produce the additional output resulting from the pricing strategy (i.e., the predatory increment) as efficiently as the monopolist. An efficient firm should not be prohibited from reducing its prices based on claims that a rival could become equally efficient in the future, as such claims are too speculative to support a finding of section 2 liability and would sacrifice current consumer benefits for uncertain future gains.¹¹⁷

Both of these factors point to a focus on some form of incremental cost. *Brooke Group*¹¹⁸ and its precursors,¹¹⁹ while not prescribing any particular cost measure, nonetheless are predicated upon the notion, perhaps best expressed by then-Judge Breyer in *Barry Wright*, that “modern antitrust courts look to the relation of price to ‘avoidable’ or ‘incremental’ costs as a way of segregating price cuts that are ‘suspect’ from those that are not.”¹²⁰ This is because, in general, if

a firm charges prices that fail to cover these “avoidable” or “incremental” costs—the costs that the firm would save by not producing the additional product it can sell

¹¹⁴ See June 22 Hr'g Tr., *supra* note 4, at 68–69 (Melamed) (acknowledging some chilling of procompetitive discounting but refraining from comparing the magnitude of harm from false positives and false negatives); see also Crane, *supra* note 8, at 10.

¹¹⁵ Cf. Crane, *supra* note 8, at 32 (“In sum, the available information on lawyer fee structures in post-*Brooke Group* predatory pricing cases supports two hypotheses regarding the Chicago School predatory pricing precedents: First, that the potential for substantial plaintiff's verdicts in predatory pricing cases remains, and second, that some firms use predatory pricing complaints strategically to diminish price competition by competitors.”). Available evidence, however, suggests that in recent years liability findings on claims involving predatory pricing have been rare. See *supra* Part I(C)(1).

¹¹⁶ Cf. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 594 (1986) (noting that “cutting prices in order to increase business often is the very essence of competition”).

¹¹⁷ Cf. Elhauge, *supra* note 106, at 784 (suggesting no need to protect from incumbent's above-cost price cuts an entrant who will eventually become more, or as, efficient as the incumbent since capital markets already successfully take that into account); *id.* at 782–92.

¹¹⁸ 509 U.S. 209, 223 (1993) (“Although *Cargill* and *Matsushita* reserved as a formal matter the question whether recovery should *ever* be available . . . when the pricing in question is above some measure of incremental cost, the reasoning in both opinions suggests that only below-cost prices should suffice . . .” (citations omitted) (internal quotation omitted) (emphasis in original)).

¹¹⁹ *Matsushita*, 475 U.S. at 585 n.9 (“We do not consider whether recovery should *ever* be available on a theory such as respondents’ when the pricing in question is above some measure of incremental cost.” (emphasis in original)); *Cargill, Inc. v. Monfort of Colo., Inc.*, 479 U.S. 104, 117 n.12 (1986) (same).

¹²⁰ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 232 (1st Cir. 1983) (Breyer, J.).

at that price . . . [t]hen one would know that the firm cannot rationally plan to maintain this low price; if it does not expect to raise its price, it would do better to discontinue production.¹²¹

As a consequence, there is general agreement that the appropriate measure of cost in any price-cost test for predatory pricing is “some kind of incremental cost.”¹²²

The third factor is administrability. Businesses must have rules that they can readily apply at the time of their conduct to know with a reasonable degree of confidence whether their pricing will be deemed predatory. As one panelist stressed, it is valuable in “saying to the client, when I’m talking about costs, ‘What are the costs you are incurring to engage in the strategy at issue *that you wouldn’t otherwise have incurred?*’ Clients understand that question, and it’s not always a trivial question, but I think it’s one they can answer.”¹²³ In addition, courts and enforcers must be able to assess whether the rules were applied properly. “A rule that cannot be intelligibly applied invites confusion and quixotic results”¹²⁴

Panelists emphasized that this third consideration is as important as the first two.¹²⁵ One panelist noted:

[I]t is absolutely essential that we take these models and we translate them into principles that are implementable by the business people, by the lawyers and by the courts. Otherwise, we are nowhere, and . . . what we have been struggling with is trying to come to articulation of some principles

that are actually understandable¹²⁶

The issue, then, is what kind of incremental cost best serves the above three goals.

b. Average Total Cost

Given the above factors, the Department agrees with the many courts and commentators concluding that pricing above average total cost—total cost divided by total output—should be per se legal.¹²⁷ Moreover, even pricing below average total cost frequently may be economically rational.¹²⁸ A price below average total cost would often be cash-flow positive for an equally efficient competitor. Such a rival would find it more advantageous in the short run to continue producing than to exit. Accordingly, since lower prices will always provide short-term benefits to consumers, the Department believes that merely showing that prices are below average total cost should not be sufficient to support a finding of liability.

¹²⁶ June 22 Hr’g Tr., *supra* note 4, at 67 (Ordovery).

¹²⁷ See, e.g., *United States v. AMR Corp.*, 335 F.3d 1109, 1117 (10th Cir. 2003) (asserting that *Brooke Group’s* focus on incremental costs “implicitly ruled out” above-total-cost pricing as a basis for antitrust liability); AREEDA & HOVENKAMP, *supra* note 1, ¶ 723d2, at 280 (“Dicta in the Supreme Court’s *Brooke* decision appears to have settled this matter for all prices higher than average total cost.”); *id.* ¶ 739c3, at 420 (“But numerous lower courts have concluded that condemning prices greater than average total cost—that is, fully profitable prices—unwisely invites plaintiffs into protracted litigation and close questions about the precise location of marginal cost and the reasons for such prices. The prospect of such litigation serves to deter legitimate, pro-competitive price cutting.” (footnote omitted)); see also June 22 Hr’g Tr., *supra* note 4, at 75 (Bolton) (“I would not object to a rule that says price above average total cost is per se legal as a way of implementing an easily administrable rule.”).

¹²⁸ June 22 Hr’g Tr., *supra* at note 4, at 8–9 (Elzinga) (“Let’s say . . . that this [television] set was sold by Toshiba . . . to Sears for \$95, and the average total cost was \$100, but the average variable cost was \$90 Almost everyone at the time believed Toshiba was selling below cost. . . . And it took an instinct for economic reasoning or a recollection of a price theory course to realize that such a price was above the shut-down point, it was cash flow positive, and that Toshiba was better off making the sale to Sears than not making that sale”).

¹²¹ *Id.*

¹²² June 22 Hr’g Tr., *supra* note 4, at 44–45 (Melamed).

¹²³ *Id.* at 46 (emphasis added).

¹²⁴ AREEDA & HOVENKAMP, *supra* note 1, ¶ 736d, at 392.

¹²⁵ June 22 Hr’g Tr., *supra* note 4, at 74 (Melamed); see also *id.* at 75 (Bolton); Sherman Act Section 2 Joint Hearing: Section 2 Policy Issues Hr’g Tr. 77–79, May 1, 2007 [hereinafter May 1 Hr’g Tr.] (Baker) (discussing difficulties in administering price-cost test in predatory-pricing cases); Feb. 13 Hr’g Tr., *supra* note 84, at 187 (Sewell).

c. Measures of Incremental Cost

The four most frequently suggested incremental-cost measures are: (1) marginal cost, (2) average variable cost, (3) long-run average incremental cost, and (4) average avoidable cost. Each seeks to ascertain what it would cost a firm to make additional units of output.

Marginal Cost. For each unit sold, marginal cost is the additional cost of producing that unit.¹²⁹ It refers to short-run marginal cost—the change in cost that results from producing a unit of output during a period in which “a firm does not change its fixed cost-productive assets, such as its plant.”¹³⁰ In other words, fixed costs are not included in determining marginal costs.

Many courts have suggested that marginal cost is the theoretically appropriate measure of cost for evaluating predatory pricing. For example, in *AMR* the Tenth Circuit observed, with qualifications,¹³¹ that marginal cost is “the ideal measure of cost . . . because ‘[a]s long as a firm’s prices exceed its marginal cost, each additional sale decreases losses or increases profits.’”¹³² Likewise, a treatise notes that “[m]arginal-cost pricing generally maximizes market efficiency.”¹³³ Hence, “no price equal to

or exceeding properly defined and reasonably anticipated marginal cost should be deemed unlawful under the antitrust laws.”¹³⁴ One panelist also said that marginal cost “really i[s] the right test.”¹³⁵

However, as Areeda and Turner pointed out as early as 1975, marginal cost is difficult to determine in most instances.¹³⁶ In addition, because marginal cost indicates only the cost of a single unit, comparing price with marginal cost does not indicate whether the alleged predation is causing the firm to lose money on anything but that single unit—normally the last unit produced.

Average Variable Cost. Average variable cost is the total of all the costs that vary when there is a change in the quantity of a particular good produced, divided by the quantity of the goods produced.¹³⁷ Average variable cost excludes all fixed costs.¹³⁸ Typical costs that vary with changes in output are materials, fuel, labor, repair and maintenance, use depreciation, and per-unit royalties and license fees.¹³⁹

A treatise notes that “[n]umerous decisions have concluded that [average variable cost] is at least the presumptive baseline for determining predation.”¹⁴⁰ Average variable cost is favored both as a more workable proxy for marginal cost¹⁴¹ and because it is instructive in and of

¹²⁹ *E.g.*, *Pac. Eng’g & Prod. Co. of Nev. v. Kerr-McGee Corp.*, 551 F.2d 790, 796 n.7 (10th Cir. 1977) (citing *Areeda & Turner*, *supra* note 5, at 700); *AREEDA & HOVENKAMP*, *supra* note 1, ¶ 753b3, at 367; *CARLTON & PERLOFF*, *supra* note 27, at 783 (defining marginal cost as “the increment, or addition, to cost that results from producing one more unit of output”).

¹³⁰ *AREEDA & HOVENKAMP*, *supra* note 1, ¶ 735b1, at 365; *see id.* ¶ 735b3, at 367.

¹³¹ *See infra* note 136.

¹³² *AMR*, 335 F.3d at 1116 (alteration in original) (quoting *Advo, Inc. v. Phila. Newspapers, Inc.*, 51 F.3d 1191, 1198 (3d Cir. 1995)); *see also* *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 937–38 (6th Cir. 2005); *Stearns Airport Equip. Co. v. FMC Corp.*, 170 F.3d 518, 532 (5th Cir. 1999); *Kelco Disposal, Inc. v. Browning-Ferris Indus. of Vt. Inc.*, 845 F.2d 404, 407 (2d Cir. 1988), *aff’d on other grounds*, 492 U.S. 257 (1989); *McGahee v. N. Propane Gas Co.*, 858 F.2d 1487, 1504 (11th Cir. 1988); *Arthur S. Langenderfer, Inc. v. S.E. Johnson Co.*, 729 F.2d 1050, 1056 (6th Cir. 1984); *MCI Commc’ns Corp. v. AT&T*, 708 F.2d 1081, 1119–23 (7th Cir. 1983).

¹³³ *AREEDA & HOVENKAMP*, *supra* note 1, ¶ 739a, at 412–13.

¹³⁴ *Id.*

¹³⁵ Feb. 13 Hr’g Tr., *supra* note 84, at 185 (Wark).

¹³⁶ *See* *Areeda & Turner*, *supra* note 5, at 716 (noting that “[t]he incremental cost of making and selling the last unit cannot readily be inferred from conventional business accounts”); *see also* *AMR*, 335 F.3d at 1116 (acknowledging that “marginal cost, an economic abstraction, is notoriously difficult to measure and ‘cannot be determined from conventional accounting methods’” (quoting *Ne. Tel. Co. v. AT&T*, 651 F.2d 76, 88 (2d Cir. 1981))).

¹³⁷ *AREEDA & HOVENKAMP*, *supra* note 1, ¶ 735b3 (“Variable costs, as the name implies, are costs that vary with changes in output,” and “[t]he average variable cost is the sum of all variable costs divided by output.” (internal quotation marks omitted)).

¹³⁸ *See* *Bolton et al.*, *supra* note 14, at 2271–72.

¹³⁹ *AREEDA & HOVENKAMP*, *supra* note 1, ¶ 735b3, at 366.

¹⁴⁰ *Id.* ¶ 740a, at 425.

¹⁴¹ *See* *AMR*, 335 F.3d at 1116; *Stearns Airport Equip.*

itself in evaluating allegedly predatory pricing.¹⁴²

However, a major shortcoming of average variable cost is that it measures the average cost of the entire output, not just of the incremental output that is the focus of the predation claim.¹⁴³ Moreover, using average variable cost frequently requires difficult determinations of whether a particular cost is, in the circumstances involved, fixed or variable. Only the latter is included in calculating the average variable cost. But ascertaining whether a particular expenditure should be classified as fixed or variable is often difficult or at least seemingly somewhat arbitrary.¹⁴⁴ For example, the Second Circuit has held that “the general legal rule is that depreciation caused by use is a variable cost, while the depreciation through obsolescence is a fixed cost,” and “the characterization of legitimately disputed costs is a question of fact for the jury.”¹⁴⁵

Co. v. FMC Corp., 170 F.3d 518, 532 (5th Cir. 1999); see also *Areeda & Turner*, *supra* note 5, at 718 (“[D]espite the possibility that average variable cost will differ from marginal cost, it is a useful surrogate for predatory pricing analysis”); Feb. 13 Hr’g Tr., *supra* note 84, at 185 (Wark) (“I think it’s important to recognize that average variable cost is really a proxy for marginal cost because that really is the right test.”).

¹⁴² See William J. Baumol, *Predation and the Logic of the Average Variable Cost Test*, 39 J.L. & ECON. 49, 55–57 (1996); cf. *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883, 910 (9th Cir. 2008) (holding that the appropriate measure of costs in a “bundled discounting context” is average variable cost).

¹⁴³ See Baumol, *supra* note 142, at 57–59; see also June 22 Hr’g Tr., *supra* note 4, at 32 (Bolton) (“price being below average variable cost[] is a very poor proxy for measuring profit sacrifice, which is what we are trying to go after”).

¹⁴⁴ See June 22 Hr’g Tr., *supra* note 4, at 82–83 (Elzinga); *id.* at 83 (Ordovery).

¹⁴⁵ *Kelco Disposal, Inc. v. Browning-Ferris Indus. of Vt., Inc.*, 845 F.2d 404, 408 (2d Cir. 1988), *aff’d on other grounds*, 492 U.S. 257 (1989); see also *U.S. Philips Corp. v. Windmere Corp.*, 861 F.2d 695, 704 (Fed. Cir. 1988) (whether advertising expenses were variable or fixed costs was a question of fact); *Sunshine Books, Ltd. v. Temple Univ.*, 697 F.2d 90, 94–97 (3d Cir. 1982) (whether inventory shrinkage and payroll expenses are variable or fixed costs are questions of fact); *Ne. Tel. Co. v. AT&T*, 651 F.2d 76, 86 n.12 (2d Cir. 1981) (“Whether a particular

Long-run Average Incremental Cost. Long-run average incremental cost is the average “cost of producing the predatory increment of output whenever such costs [are] incurred.”¹⁴⁶ Unlike average variable cost, it includes all product-specific fixed costs, “even if those costs were sunk before the period of predatory pricing.”¹⁴⁷ That is, long-run average incremental cost by definition includes both recoverable and sunk fixed costs.

Long-run average incremental cost has been suggested as the appropriate cost measure when predatory conduct involves intellectual property. The contention is that “the only tenable cost standard” for predatory pricing with regard to intellectual property “must be a long-run cost measure,”¹⁴⁸ because “after the product is developed and launched, [average avoidable cost] or [average variable cost] may approach or equal zero.”¹⁴⁹ In computer software, for example, once the software product has been developed “the short-run incremental cost of a program downloaded from the Internet is nil.”¹⁵⁰

In many instances, however, long-run average incremental cost may identify as “predatory” pricing that is actually economically rational apart from any exclusionary effect. Because long-run average incremental cost includes all product-specific sunk fixed costs, a firm pricing below that cost could generate a positive cash flow (i.e., cover its variable costs and make a contribution to its already-sunk fixed costs) and thus would not necessarily be better off by discontinuing or reducing production. Such sales, which a long-run average incremental cost standard might condemn as predatory, would therefore be potentially profitable, and hence reflect no

expense, e.g., the cost of a new factory, should be classified as variable or fixed depends in part on the time under consideration.”).

¹⁴⁶ Bolton et al., *supra* note 14, at 2272.

¹⁴⁷ *Id.* at 2272. “Sunk cost” is “the portion of fixed costs that is not recoverable.” CARLTON & PERLOFF, *supra* note 27, at 785.

¹⁴⁸ Bolton et al., *supra* note 14, at 2273.

¹⁴⁹ *Id.* at 2272.

¹⁵⁰ *Id.*

more than economically rational competition, not predation.¹⁵¹

Average Avoidable Cost. Average avoidable cost consists of all costs, including both variable costs and product-specific fixed costs, that could have been avoided by not engaging in the predatory strategy. Unlike long-run average incremental cost, average avoidable cost omits all fixed costs that were already sunk before the time of the predation; consequently, average avoidable cost will generally be lower than long-run average incremental cost.

Many have observed that by omitting fixed costs that were sunk before the predatory sales, average avoidable cost appropriately answers the question about avoidable losses.¹⁵² The absence or presence of avoidable losses is the best indicator of whether the firm made or lost money on the additional increment of product, which *Brooke Group* and *Weyerhaeuser* made clear is the critical question in predatory-pricing cases. Moreover, by including all costs that the firm could have avoided by not producing the additional units, average avoidable cost circumvents the difficult issue of whether a particular cost is fixed or variable. This obviates the frequently thorny expense classification that the use of average variable cost often entails. These considerations are no doubt factors in the recent decision of several foreign competition authorities to use average avoidable cost as their preferred measure in predatory-pricing cases.¹⁵³

¹⁵¹ See generally Elzinga & Mills, *supra* note 79, at 2484 (“Adopting . . . [the long-run average incremental cost standard] would be inconsistent with the generally accepted view that predatory pricing means pricing that would not be remunerative except for its exclusionary effect.”); AREEDA & HOVENKAMP, *supra* note 1, ¶ 741e, at 449–55 (noting that preexisting capital costs “are not part of the cost of predation, because those costs remain the same”).

¹⁵² See CARLTON & PERLOFF, *supra* note 27, at 29 (“A sunk cost is like spilled milk. Once it is sunk, there is no use worrying about it, and it should not affect any subsequent decisions. . . . Costs, including fixed costs, that are not incurred if operations cease are called avoidable costs.”).

¹⁵³ See COMPETITION BUREAU, CAN., ENFORCEMENT GUIDELINES: PREDATORY PRICING 14–15 (2008), available at <http://www.competitionbureau.gc.ca/epic/site/cb->

Illustrative Application of Different Cost Measures

The following example illustrates some of these different cost measures. Suppose a dominant firm produces 1,500 units at a variable cost of \$8 per unit with no fixed costs. A new firm enters the market. The dominant firm produces an additional 500 units at a variable cost of \$10 per unit and sells 2,000 units at a price of \$9.50 per unit. Since the dominant firm would have sold 1,500 units absent entry, the potentially predatory increment is 500 units. The dominant firm’s marginal cost (the cost of producing the last good) is \$10, its average variable cost is \$8.50 per unit,¹⁵⁴ and its average avoidable cost is \$10 per unit.¹⁵⁵ The firm’s \$9.50 per unit price is thus greater than its average variable cost, but less than its marginal cost and its average avoidable cost and is potentially predatory.

In this example, all the costs included in average avoidable cost are variable. There can be instances where some fixed costs would be included in average avoidable cost, such as if some fixed costs were incurred to produce the predatory increment, but would have been avoided if that increment had not been produced. For example, suppose that the dominant firm had a factory capable of producing 1,500 units and that to produce the additional 500 units it had to expand the

[bc.nsf/vwapj/Predatory_Pricing_Guidelines-e.pdf/\\$file/Predatory_Pricing_Guidelines-e.pdf](http://www.competitionbureau.gc.ca/epic/site/cb-bc.nsf/vwapj/Predatory_Pricing_Guidelines-e.pdf/$file/Predatory_Pricing_Guidelines-e.pdf); DIRECTORATE-GEN. FOR COMPETITION, EUROPEAN COMM’N, DISCUSSION PAPER ON THE APPLICATION OF ARTICLE 82 OF THE TREATY TO EXCLUSIONARY ABUSES 31 (2005), available at <http://ec.europa.eu/comm/competition/antitrust/art82/discpaper2005.pdf>.

¹⁵⁴ (1,500 units at \$8 per unit + 500 units at \$10 per unit) divided by 2,000 units.

¹⁵⁵ (500 units at \$10 per unit) divided by 500 units.

factory. The cost of expansion would be included in average avoidable cost. In contrast, long-run average incremental cost would include the cost of both the initial factory and the expansion.

d. Emerging Consensus Support for Average Avoidable Cost

The emerging consensus is that average avoidable cost typically is the best cost measure to evaluate predation claims.¹⁵⁶ However, there is not complete unanimity on this issue.

One panelist, although willing to use average avoidable cost to define a level below which price should be presumptively unlawful,¹⁵⁷ urged that prices above average avoidable cost but below long-run average incremental cost be treated as predatory in the absence of a plausible efficiency defense.¹⁵⁸ He argued that a long-run standard is necessary to provide meaningful protection against predatory pricing in contexts like computer software, where costs are minimal after the product has been developed and launched.¹⁵⁹

¹⁵⁶ See June 22 Hr'g Tr., *supra* note 4, at 36 (Bolton), 46 (Melamed); *id.* at 53–54 (Melamed); *id.* at 77–80 (panelists voiced no disagreement that average avoidable cost was the “best cost measure,” although one panelist questioned this proposition’s phrasing and another panelist noted definitional ambiguities in the cost measure); Baumol, *supra* note 142, at 49, 57–59; Bolton et al., *supra* note 14, at 2271–72; *see also* Gregory J. Werden, *The American Airlines Decision: Not with a Bang but a Whimper*, ANITRUST, Fall 2003, at 32, 34–35; UNILATERAL CONDUCT WORKING GROUP, INT’L COMPETITION NETWORK, REPORT ON PREDATORY PRICING 3, 10–11 (2008), available at http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/FINALPredatoryPricingPDF.pdf (“The most commonly cited measure is average variable cost, although there appears to be a growing trend toward the use of average avoidable cost.”); *see supra* note 153.

¹⁵⁷ See Bolton et al., *supra* note 14, at 2271; June 22 Hr'g Tr., *supra* note 4, at 36–37 (Bolton).

¹⁵⁸ See June 22 Hr'g Tr., *supra* note 4, at 37 (Bolton); Bolton et al., *supra* note 14, at 2271–74.

¹⁵⁹ See Bolton et al., *supra* note 14, at 2272–73; *cf.* Feb. 13 Hr'g Tr., *supra* note 84, at 93 (Balto) (arguing that average variable cost is a poor test for predatory pricing in the context of pharmaceuticals where “all the costs are up front”).

Another commentator, however, maintains that, although long-run average incremental cost would be relevant for testing whether a defendant’s price is compensatory in the long run, that is not the appropriate question regarding predatory pricing. Rather, he concludes that defendant’s average avoidable cost is the appropriate cost measure because it focuses on the threat to an efficient rival in the short run.¹⁶⁰

The Department agrees that average avoidable cost is the most appropriate cost measure to use when evaluating an alleged predatory-pricing scheme because it focuses on the costs that were incurred when the predatory pricing was pursued. Predatory pricing, if it is to have an exclusionary effect, must result in additional sales for the predator that were taken away from its prey. When price is set below average avoidable cost, the firm is experiencing a negative cash flow on its incremental sales at that price. Prices below average avoidable cost should trigger antitrust inquiry because they suggest that the firm is making sales that are unprofitable and may reflect an effort to exclude. Prices that are set above average avoidable cost, however, may enhance the firm’s profits irrespective of any exclusionary effects.

The illustration demonstrates the superiority of average avoidable cost over both marginal cost and average variable cost as the appropriate measure for predatory pricing. The dominant firm made 500 additional units when the new firm entered. It was not the 500th unit that caused the new firm’s demise. Rather, it was all 500 new units—the whole additional incremental lot. Average avoidable cost measures what it cost to make those additional units. That is a better measure of what it cost the firm to make the alleged predatory incremental sales than the cost of the last unit of that increment.

Likewise, it was not the original production quantity of the dominant firm that caused the entrant’s demise. It was the 500 additional units the dominant firm produced after the new firm arrived on the scene. Yet, average variable

¹⁶⁰ See Baumol, *supra* note 142, at 58–59.

cost reflects what it cost the dominant firm to make each unit of the combined original and incremental production. Average avoidable cost, in contrast, focuses on what it cost the dominant firm to make just the incremental amount.

Moreover, as long as the rival firm can cover its average avoidable cost, selling its goods will be more profitable than exiting the market or not entering.¹⁶¹ The consequence is that an equally efficient rival pricing below long-run average incremental cost, but above average avoidable cost, will remain in the market and compete against the alleged predator. Only when price falls below average avoidable cost will the equally efficient rival exit the market.

Panelists cautioned it may be difficult to implement an average avoidable cost standard.¹⁶² But the Department believes that average avoidable cost is easier to calculate and theoretically more appropriate than either marginal cost—with its abstract “single, last unit”—or average variable cost—with its difficult separation of variable from fixed costs.¹⁶³ Although the difficulties presented by the use of an average avoidable cost standard should not be understated, panelists suggested that the basic concept of identifying those costs that would be avoided in the absence of an alleged predatory strategy was something that businesses understand and can analyze.¹⁶⁴

The hearings focused particular attention on one implementation issue—whether avoidable costs should include any revenues forgone by

reducing price on sales that the firm would have made without the predatory scheme. Although panelists generally agreed that opportunity costs should be included in the calculation of avoidable costs, they disagreed on whether these lost “inframarginal revenues” should be considered. One panelist contended that, theoretically, lost inframarginal revenues should be taken into account,¹⁶⁵ although he expressly recognized a “real question” as to whether this would be administrable.¹⁶⁶ Another panelist argued that “inframarginal revenues . . . shouldn’t be treated as an opportunity cost, at least not for this purpose, because they are not a cost. . . . They are simply a transfer payment actually from producer to consumer”¹⁶⁷ Taking into account inframarginal revenues, he continued, requires “a profit maximization test . . . and that is in most cases going to be virtually impossible . . . for the Court to figure out and surely impossible for the firm to figure out in real time when it’s trying to comply with the law.”¹⁶⁸ Moreover, a commentator has argued that the loss of inframarginal revenues should be ignored because “it is irrelevant to whether the lower price, in itself, is or is not a threat to an efficient rival.”¹⁶⁹

Furthermore, there is no support in the case law for including lost inframarginal revenues as a cost.¹⁷⁰ *AMR*, for example, notes that the

¹⁶¹ See *id.* at 58.

¹⁶² See June 22 Hr’g Tr., *supra* note 4, at 83 (Ordovery).

¹⁶³ Cf. *id.* at 82 (Elzinga) (noting the potential sensitivity of average variable cost to choice of accounting convention). But see Feb. 13 Hr’g Tr., *supra* note 84, at 187 (Sewell) (stating that “average variable cost is a measure which is widely understood by business people . . . it’s a metric that exists for other than just antitrust enforcement purposes . . . and therefore has some additional validity”).

¹⁶⁴ See June 22 Hr’g Tr., *supra* note 4, at 46 (Melamed); *id.* at 79 (Ordovery) (noting that “these avoidable costs which we looked at at the route level are typically the kind of costs business people look at when they make business decisions in the airline business”).

¹⁶⁵ *Id.* at 84–85 (Bolton); see also Jan. 31 Hr’g Tr., *supra* note 96, at 33 (Edlin) (“The [AMR trial] Judge thought there that the extra plane was profitable if you ignore effects on other planes. I suggest that everyone reread footnote 13 of that case over and over and over again if you think that the extreme sacrifice test might make sense, as the Judge did.”).

¹⁶⁶ June 22 Hr’g Tr., *supra* note 4, at 84 (Bolton).

¹⁶⁷ *Id.* at 53 (Melamed).

¹⁶⁸ *Id.* at 52.

¹⁶⁹ Baumol, *supra* note 142, at 70–71.

¹⁷⁰ See *United States v. AMR Corp.*, 335 F.3d 1109, 1118–19 (10th Cir. 2003) (treating as “invalid as a matter of law” a cost test that “simply performs a ‘before-and-after’ comparison of the route as a whole, looking to whether profits on the route as a whole decline after capacity was added, not to whether the challenged capacity additions were done below cost” because such a test treats foregone profits as costs (citation omitted)).

Supreme Court's predatory-pricing jurisprudence rejects requiring a firm to maximize profits.¹⁷¹ A firm failing to maximize profits could nevertheless still be attaining a positive cash-flow, and hence acting rationally irrespective of the impact of the firm's conduct on rivals.¹⁷²

The Department concludes that consideration of foregone revenues is neither appropriate nor likely to be administrable. The Department consequently will not consider the lost revenues on inframarginal sales as a cost when evaluating predatory-pricing claims.¹⁷³

Given the above, when the Department can determine the predatory increment, it generally will rely on average avoidable cost as the appropriate measure of incremental cost under the *Brooke Group* test. The Department believes average avoidable cost typically will most accurately reflect the incremental cost of the alleged predatory output increase, and therefore will most accurately depict whether sales are beneficial to the firm, apart from any exclusionary effect, and whether the pricing strategy could cause the exit in the short run of an equally efficient competitor. Furthermore, average avoidable cost tends to be a more administrable standard than the other available cost measures and business-decision makers readily understand the concept. However, if the predatory increment is indeterminate and average avoidable cost is difficult to assess, the Department will consider other measures of

cost, with average variable cost as typically the next best alternative.¹⁷⁴

When the Department can determine the predatory increment, it generally will rely on average avoidable cost in determining whether prices are predatory.

4. Recoupment

"Predatory pricing is a three-stage process: Low prices, followed by the exit of producers who can no longer make a profit, followed by monopoly prices."¹⁷⁵ The Supreme Court observed in *Brooke Group* that, unless recoupment is feasible, "predatory pricing produces lower aggregate prices in the market, and consumer welfare is enhanced."¹⁷⁶ Thus, the Court held that a plaintiff in a section 2 predatory-pricing case must demonstrate that the dominant firm had "a dangerous probability[]" of recouping its investment in below-cost prices."¹⁷⁷

One panelist at the hearings was "very skeptical" about retaining the recoupment requirement as an element of the offense.¹⁷⁸ He argued that this requirement "clearly complicates the proceedings,"¹⁷⁹ explaining that "[i]t's not necessary in order to identify anticompetitive conduct, because if we think we got the price-cost test right and the guy is selling below cost, you can . . . infer that he

¹⁷¹ *Id.* at 1118–19. See also *Stearns Airport Equip. Co., Inc. v. FMC Corp.*, 170 F.3d 518, 533 n.14 (5th Cir. 1999); *MCI Comm'ns Corp. v. AT&T*, 708 F.2d 1081, 1114 (7th Cir. 1983).

¹⁷² Cf. June 22 Hr'g, *supra* note 4, at 9 (Elzinga).

¹⁷³ The Department will, however, consider the foregone value of the possibility of renting or leasing an owned fixed asset in determining the cost the firm incurred in producing the putatively predatory increment. See generally *Baumol*, *supra* note 142, at 70–71 (noting that "a price of firm F that does not cover the opportunity cost of that firm's avoidable investment can constitute a threat to a more efficient rival and should be considered to fail the generalized Areeda-Turner Test"). In that situation, there is a readily available means to ascertain the firm's cost of the asset used to produce the purportedly predatory increment. This does not involve constructing hypothetical costs for the firm or imputing lost profits to it.

¹⁷⁴ See generally *id.* at 55–58 ("I will argue now that the Areeda-Turner test is entirely defensible as a criterion to determine whether the price at issue constitutes a threat to efficient rivals of firm F. But I will show that for this purpose it is average variable cost or a near relative of [average variable cost], rather than marginal cost, that provides the requisite information."); *Hovenkamp*, *supra* note 1, at 23–24.

¹⁷⁵ *Wallace v. IBM*, 467 F.3d 1104, 1106 (7th Cir. 2006) (Easterbrook, J.).

¹⁷⁶ 509 U.S. 209, 224 (1993). But see *Katz & Salinger Comments*, *supra* note 93, at 6 (noting that, as a logical matter, even without successful recoupment, predatory pricing could, under certain circumstances, harm consumers).

¹⁷⁷ 509 U.S. at 224.

¹⁷⁸ June 22 Hr'g Tr., *supra* note 4, at 49–50 (Melamed).

¹⁷⁹ *Id.* at 49.

expects to recoup.”¹⁸⁰

However, as Professors Elzinga and Mills have pointed out, the recoupment requirement serves as a valuable reality check—if a firm is unlikely to be able to recoup, then it raises the question of why the firm would have tried to engage in predatory pricing.¹⁸¹ It appropriately leads courts to inquire into alternative explanations for the lower prices. For example, lower prices may simply be some type of procompetitive discounting.¹⁸² As one panelist noted, failing the recoupment test “can dispose of a large fraction of predatory pricing cases . . . [because] at the end of the day, [that] indicates that there is really not harm to consumer welfare; there is not exclusion that you need to be concerned about.”¹⁸³

This reality check is particularly important because predatory pricing contains a key temporal element: a monopolist incurs short-term losses in the expectation of recouping those losses in the future by raising prices.¹⁸⁴ Thus, the *Brooke Group* Court went to some length to set out the analytic framework for deciding whether a firm could recoup short-term losses.¹⁸⁵ The Court held that assessment of recoupment “requires an estimate of the cost of the alleged predation and a close analysis of both the scheme alleged by the plaintiff and the structure and conditions of the relevant market.”¹⁸⁶

A panelist indicated that recoupment is most likely when there is asymmetry between conditions of exit from, and entry into, a particular market—in other words, when exit from the market is easy, but entry is difficult.¹⁸⁷ In that situation, a predator is more likely to recoup its investment in below-cost pricing. Once its prey exits quickly, the predator may enjoy the payoff of its relatively low-cost investment without fear of subsequent entry rapidly eroding its monopoly profits.

In assessing whether recoupment is likely, courts since *Brooke Group* have also considered reputation effects. For example, the Tenth Circuit recognized that a firm might engage in predation in one market to prevent the target of the predation from expanding to compete in a separate market.¹⁸⁸ Similarly, the Third Circuit explained that predation makes sense when a monopolist operates in several related markets because “the predator needs to make a relatively small investment (below-cost prices in only a few markets) in order to reap a large reward (supra-competitive prices in many markets).”¹⁸⁹ As these cases suggest, consideration of out-of-market effects can be significant because the predator’s low prices in only one market may induce the prey or other competitors to believe that the predator will reduce prices in other monopolized markets in the future, discouraging entry there as well.¹⁹⁰

¹⁸⁰ *Id.* at 50.

¹⁸¹ Elzinga & Mills, *supra* note 42, at 870–72, 893; *see also* Bolton et al., *supra* note 14, at 2263; Katz & Salinger *Comments*, *supra* note 93, at 6.

¹⁸² Cf. June 22 Hr’g Tr., *supra* note 4, at 71–72 (Bolton) (stating that recoupment is “the right question to ask”).

¹⁸³ Sherman Act Section 2 Joint Hearing: Conduct as Related to Competition Hr’g Tr. 70, May 8, 2007 [hereinafter May 8 Hr’g Tr.] (Rule).

¹⁸⁴ *See* June 22 Hr’g Tr., *supra* note 4, at 10 (Elzinga) (“[T]he recoupment returns for the aspiring monopolist must be enjoyed for a longer time period than the time frame in which the aspiring monopolist shouldered the cost of the predation strategy . . .”); *Predatory Strategies*, *supra* note 76, at 266–69.

¹⁸⁵ *See* *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 225–26 (1993).

¹⁸⁶ *Id.* at 226.

¹⁸⁷ *See* June 22 Hr’g Tr., *supra* note 4, at 13 (Elzinga); *see also* Kenneth G. Elzinga, *When Does Predatory Pricing Work?* 1 (n.d.) (hearing submission).

¹⁸⁸ *See* *Multistate Legal Studies, Inc. v. Harcourt Brace Jovanovich Legal and Publ’ns, Inc.*, 63 F.3d 1540, 1549 n.6 (10th Cir. 1995).

¹⁸⁹ *Advo, Inc. v. Phila. Newspapers, Inc.*, 51 F.3d 1191, 1196 n.4 (3d Cir. 1995); *accord* AREEDA & HOVENKAMP, *supra* note 1, ¶ 727g, at 337 (stating that a firm that operates in numerous markets may predate in only one to acquire or maintain “higher prices in all the others as well”); *see also* Bolton et al., *supra* note 14, at 2267–68 (recoupment “may occur in either the predatory market or in a strategically related market where the effects of the predation are felt”); *id.* at 2300 (“Reputation effects may be present when the predator sells in two or more markets or in successive time periods within the same market.”).

¹⁹⁰ *See* Baker, *supra* note 98, at 590–91; Bolton et al., *supra* note 14, at 2248–49, 2267–68; *see also* June 22 Hr’g

Panelists generally agreed that, in principle, reputation effects should be taken into account when considering predatory-pricing claims.¹⁹¹ At the same time, however, panelists voiced substantial concern about the administrability of considering reputation effects. While one panelist asserted that reputation effects could conceivably be assessed by analyzing “[c]ircumstantial evidence,”¹⁹² other panelists cautioned that such effects may depend on factors that are difficult, if not impossible, to measure. “What we don’t know in real life is how many of these new entrants do you have to kill . . . before somebody finally realizes, hey, I’m not coming in”¹⁹³ Thus, while courts may be able to evaluate reputation effects in assessing the probability of recoupment, they must exercise great care when doing so, or otherwise risk exceeding their “practical ability . . . to control [predatory pricing] without courting [the] intolerable risks of chilling legitimate price cutting.”¹⁹⁴

Tr., *supra* note 4, at 22 (Ordovery); *id.* at 36 (Bolton).

¹⁹¹ See, e.g., June 22 Hr’g Tr., *supra* note 4, at 63 (Bolton) (“We have to look at the deterrent effect of episodic, very rare predatory pricing.”); *id.* at 86–92 (multiple panelists).

¹⁹² *Id.* at 87 (Bolton); see also Aaron S. Edlin & Joseph Farrell, *The American Airlines Case: A Chance to Clarify Predation Policy* (2001), in *THE ANTITRUST REVOLUTION* 502, 518–19 (John E. Kwoka & Lawrence J. White eds., 2004) (observing that “there is apt to be a reason why a firm is in multiple markets, so there will usually be some link”).

¹⁹³ June 22 Hr’g Tr., *supra* note 4, at 89–90 (Ordovery) (adding, “I just don’t see how I can translate that into an administrable test for the courts and for counsel”); see also *id.* at 48–49 (Melamed) (noting that while “the recoupment requirement is central to and a great contribution to predatory pricing law,” demanding stringent quantification as some have suggested “clearly complicates the proceedings, increases costs” and “may be an impossible burden for the plaintiff in a multi-market reputation effect recoupment story”); *cf.* *id.* at 88 (Elzinga) (“[O]nce you start bringing in reputation effects as a potential hammer for antitrust plaintiffs, what is the consequence of that for all the good things that reputations do . . . to keep people, even for their own good, out of markets in which they have no business competing because they will not be efficient utilizers of society’s scarce resources in those settings?”).

¹⁹⁴ *Brooke Group Ltd. v. Brown & Williamson*

The Department believes that the recoupment requirement, when properly applied, serves as a valuable screening device to identify implausible predatory-pricing claims. In many instances, the obvious inability of a firm to recoup any losses may obviate the more difficult task of determining whether prices were below cost.¹⁹⁵ Further, the recoupment requirement may help ensure that procompetitive price discounting is not unduly chilled. Although acknowledging the difficulties inherent in doing so, the Department may, in appropriate circumstances, consider both in-market and out-of-market effects when assessing recoupment.¹⁹⁶

The recoupment requirement serves as a valuable screening device to identify implausible predatory-pricing claims.

5. Potential Defenses

Even when recoupment appears plausible, below-cost pricing is not necessarily proof of

Tobacco Corp., 509 U.S. 209, 223 (1993).

¹⁹⁵ See *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, 881 F.2d 1396, 1401 (7th Cir. 1989) (Easterbrook, J.) (“Only if market structure makes recoupment feasible need a court inquire into the relation between price and cost.”); see also June 22 Hr’g Tr., *supra* note 4, at 70 (Ordovery) (stating sometimes “there is no need to somehow construct this potentially complicated analytics” because industry structure is such that “you know, quick as a bunny, somebody else is going to show up who may be even [a] more competitively advantaged rival”); *id.* at 71 (Elzinga) (“I do not think you need to do a recoupment analysis for many predation allegations, because entry conditions or prices and costs will tell you you needn’t take that extra step.”).

¹⁹⁶ For an example of an approach to considering out-of-market effects in assessing the likelihood of recoupment, see Bolton et al., *supra* note 14, at 2302–04 (articulating a four-part test: (1) a dominant multi-market firm or a predator that “faces localized or product-limited competition or potential competition, or alternatively operating within a single market . . . and faces probable successive entry over time,” (2) the reputation effect either reinforces another predatory strategy or is based on the perceived probability that the predator will repeat its conduct in the future, (3) the “predator deliberately pursues a reputation effects strategy,” and (4) potential entrants observe the exit or other adverse effect).

anticompetitive predation. Certain defenses may justify below-cost pricing. Although the Department will not accept a meeting-competition defense, as discussed below, the Department will consider efficiency defenses in appropriate circumstances.

a. Meeting Competition

There is a substantial question regarding whether the antitrust laws should ever prohibit a firm from matching a rival's prices. In *United States v. AMR Corp.*, the trial court held in the alternative that defendant was entitled to summary judgment because "it is uncontroverted that American's prices only matched, and never undercut, the fares of the new entrant."¹⁹⁷ The court reasoned that "[t]he meeting competition defense to Section 2 liability is predicated on a similar statutory defense to price discrimination claims under the Robinson-Patman Act."¹⁹⁸ In contrast, the United States on appeal argued that "[t]here is nothing in [the] text of the Sherman Act that speaks of such a defense" and that "such a defense would make *Brooke Group's* below-cost pricing prerequisite superfluous when it is most important: when an entrenched, high-cost monopolist faces new, more efficient competition."¹⁹⁹

The Tenth Circuit "declin[ed] to rule that the 'meeting competition' defense applies in the § 2 context" but did note that "[t]here may be strong arguments for application of the meeting competition defense in the Sherman Act context by analogy to the Robinson-Patman context."²⁰⁰ On the other hand, the trial court in *Spirit Airlines* ruled there was no such defense, "respectfully declin[ing] to follow *AMR Corp.* on this point," because "[a]lthough *Brooke Group* does not formally and expressly reject the possibility of a 'matching competition' defense, it does adopt an economic model

which is at odds with the assumptions underlying such a defense."²⁰¹

Panelists did not agree on whether there should be a meeting-competition defense to predatory-pricing claims. One panelist asserted there should be no safe harbor for pricing below cost to meet competition.²⁰² Another panelist had previously written that "[a] monopoly or dominant firm should not be permitted to sell below its short-run costs to meet the price of a new entrant or smaller rival."²⁰³ "To allow a predator to price below its short-run cost frustrates a market test based on . . . relative efficiency," he explained, because "[i]f the rival's price is sustainable, it will almost surely be above short-run cost."²⁰⁴ On the other hand, one panelist asserted there should be a general meeting-competition defense under section 2 since "[s]uch a rule would provide a clear line, and matching a competitor's price in hopes of competing for every last customer is exactly what competitors are supposed to do."²⁰⁵ He added that a "competitor that cannot survive at the price point it has chosen is not the type of efficient competitor the antitrust laws should be protecting."²⁰⁶

Panelists also expressed concern regarding the administrability of a meeting-competition defense:

[W]hat do we mean by meeting the competition? Is matching the price of the entrant meeting the competition? Is that

²⁰¹ *Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, No. 00-71535, 2003 WL 24197742, at 12 & n.15 (E.D. Mich. Mar. 31, 2003), *rev'd on other grounds*, 431 F.3d 917 (6th Cir. 2005).

²⁰² June 22 Hr'g Tr., *supra* note 4, at 93 (Melamed).

²⁰³ Bolton et al., *supra* note 14, at 2276 n.198.

²⁰⁴ *Id.* At the hearings, however, this panelist stated, "If meeting the competition is a best response, then this should be a defense." June 22 Hr'g Tr., *supra* note 4, at 92 (Bolton). Another panelist responded, "If it's the best response, then it would seem . . . that the revenues generated by the response are in excess of the avoidable costs, in which case it passes the price-cost test, but if that's not the case, if it fails that test, it's an inefficient response." *Id.* at 93 (Melamed).

²⁰⁵ Feb. 13 Hr'g Tr., *supra* note 84, at 180 (Wark).

²⁰⁶ *Id.*

¹⁹⁷ 140 F. Supp. 2d 1141, 1204 (D. Kan. 2001).

¹⁹⁸ *Id.*

¹⁹⁹ Brief for Appellant United States of America at 67, *United States v. AMR Corp.*, 335 F.3d 1109 (10th Cir. 2003) (No. 01-3202), available at <http://www.usdoj.gov/atr/cases/f9800/9814.pdf>.

²⁰⁰ *AMR*, 335 F.3d at 1120 n.15.

how we define it? I would argue that's dangerous, because the products may not be the same. If the incumbent's product is higher quality than the entrant's, then matching the price of the entrant is not meeting competition.²⁰⁷

A meeting-competition defense would be difficult to administer and could protect below-cost pricing that harms competition and consumers. The Department believes that a meeting-competition defense should not apply in section 2 predatory-pricing cases.

The Department believes that a meeting-competition defense should not apply in section 2 predatory-pricing cases.

b. Efficiency Defenses

The Department will consider as possible defenses to below-cost pricing a persuasive showing that the conduct is part of a firm's procompetitive efforts to promote or improve its product or reduce its costs and may, in the long term, reduce the price consumers pay for its goods and services or increase the value of those goods or services.²⁰⁸ One panelist suggested,

There are all sorts of reasons that [pricing below costs] could be okay . . . I mean, it could be that . . . the price is low relative to whatever the measure is because the firms are making all sorts of investments in market share . . . to induce people to try the product . . . or . . . create scale economies or learning.²⁰⁹

These efficiency defenses received little attention at the hearings, and the Department will not attempt in this report to depict all the circumstances in which their recognition would or would not be appropriate. However, some general points can be made here.

Certain types of efficient conduct, such as

promotional pricing,²¹⁰ may not be plausible when the firm already has monopoly power or a dangerous probability of acquiring monopoly power.²¹¹ Network externalities, which occur "when a consumer's valuation of a product increases with the number of other consumers using the product,"²¹² raise somewhat similar issues. When a firm is trying to build an installed base and win a standards competition, initially pricing below cost may enhance the value of and demand for its product.²¹³ When a monopolist has already built a large installed-base network, that rationale may not hold.²¹⁴ Other efficiencies, such as "learning-by-doing," which occurs when a firm's cost of production "decreases as it produces more because it learns how to produce the product more efficiently,"²¹⁵ may be plausible for a new product even when a firm has achieved monopoly power as to different products; the below-cost price of today may become an above-cost price in the future, and "the prospect of reducing costs in the future"

²¹⁰ See Bolton et al., *supra* note 14, at 2278–79 (noting that promotional pricing involves "temporarily pric[ing] below . . . cost in order to induce consumers to try a new product"). The firm's expectation in engaging in promotional pricing is that "a favorable consumption experience induced by prices below cost will increase future consumer demand at prices above cost." *Id.* at 2279. Efficiency is enhanced if this occurs, since the firm's profits stem from customers' future willingness to purchase its product and not the elimination of rivals. This "reflects rational, profit-maximizing behavior," not predation. CARLTON & PERLOFF, *supra* note 27, at 357.

²¹¹ See AREEDA & HOVENKAMP, *supra* note 1, ¶ 746a, at 494 ("When a firm has considerable market power in the very product or service being promoted, the promotional pricing defense disappears. . . . In contrast to new entrants or small rivals, the monopolist has little need to resort to extreme price reductions to acquaint existing consumers with the merits of its brand."); *cf. id.* at 492 ("Unless continued over a long period of time, in which case it is no longer promotional, promotional pricing by new entrants or established firms who lack power in the promoted product or service are no threat to competition.").

²¹² Bolton et al., *supra* note 14, at 2281.

²¹³ See Sherman Act Section 2 Joint Hearing: Remedies Hr'g Tr. 95–97, Mar. 29, 2007 (Page).

²¹⁴ See Bolton, *supra* note 14, at 2281–82.

²¹⁵ CARLTON & PERLOFF, *supra* note 27, at 359.

²⁰⁷ June 22 Hr'g Tr., *supra* note 4, at 92–93 (Bolton).

²⁰⁸ See, e.g., AREEDA & HOVENKAMP, *supra* note 1, ¶ 742f, at 470–71, *id.* ¶ 746a, at 491–95. See generally Bolton et al., *supra* note 14, at 2276–82.

²⁰⁹ May 1 Hr'g Tr., *supra* note 125, at 78–79 (Baker).

may “justif[y] the lower price as an important investment for the firm.”²¹⁶ Accordingly, the Department will consider efficiency claims supported by evidence even in settings where there is existing monopoly power.

6. Equitable Remedies

In cases where predatory pricing is established, the next question for an enforcer or a court is what to do about it. Chapter 9 of this report discusses the topic of section 2 remedies in greater detail, but there are aspects of equitable remedies in the context of predatory-pricing cases that should be noted here.

Injunctive remedies can pose particularly severe difficulties in predatory-pricing cases. For instance, an injunction setting a defendant’s prices would substitute a court’s or agency’s judgment for the workings of the market. Summarizing concerns with this approach, one panelist observed that he “probably like everybody” is “suspicious of having antitrust become a price regulatory regime.”²¹⁷ The pricing issues often will be both complex and constantly shifting and call to mind the Supreme Court’s warning against remedies that require a court “to assume the day-to-day controls characteristic of a regulatory agency.”²¹⁸ And, of course, in predatory-pricing contexts, any errors on the side of stringency will suppress legitimate price competition.

The Department believes courts should exercise particular care when crafting behavioral injunctive relief in privately litigated predatory-pricing cases.²¹⁹ The plaintiff in a private predatory-pricing injunctive action is typically a rival whose interests may conflict with those of consumers or the general public. Indeed, it may be in the interest of both plaintiff

and defendant to have the court preclude defendant from discounting even if consumers would be better off with the lower prices.

Other approaches sometimes may be possible. One panelist suggested crafting injunctive remedies that do not involve price-regulation regimes: “I don’t think we would want to have a remedy that said, defendant, don’t sell your widgets for less than \$4. But we might say don’t sell it for less than whatever we think the appropriate cost measure is and in effect incorporate into an injunction the substantive standard.”²²⁰ Compliance issues, however, could become complex; the court or agency might be called upon over time, for example, repeatedly to assess a multitude of changing prices against the cost standard.²²¹

Another suggestion was that courts, where possible, consider ways of altering market structure to eliminate opportunities for continued predatory pricing.²²² A drawback to this approach, however, is that structural remedies may impose large costs of their own; a divestiture may harm a firm’s own efficiency and not necessarily create an efficient rival.²²³ A divestiture also may raise regulatory issues. For example, one panelist suggested that predatory pricing by an airline might be remedied by requiring the airline to divest airport-gate leases or landing or take-off rights that prevent entry and enable predation to

²¹⁶ *Id.*

²¹⁷ June 22 Hr’g Tr., *supra* note 4, at 95 (Elzinga).

²¹⁸ *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 415 (2004) (discussing access remedies for refusals to deal).

²¹⁹ See May 8 Hr’g Tr., *supra* note 183, at 159–60 (Rule) (suggesting that injunctive remedies be available only in section 2 cases brought by the federal government).

²²⁰ *Id.* at 158 (Melamed); see also Gregory J. Werden, *Remedies for Exclusionary Conduct Should Protect and Preserve the Competitive Process*, 76 ANTITRUST L.J. (forthcoming 2009) (“[A] predatory pricing decree should prescribe a particular price-cost comparison. Thus, the decree should specify a particular measure of the defendant’s cost and indicate how the defendant’s accounts are to be employed in constructing that cost measure. The decree also should specify how the defendant’s price data are to be used in the comparison.”).

²²¹ Cf. *Trinko*, 540 U.S. at 414–15.

²²² See, e.g., June 22 Hr’g Tr., *supra* note 4, at 95–96 (Elzinga) (“It may be that in a genuine predatory pricing case . . . you could get at some other part of the structure of the market that allows the predatory pricing to be a viable marketing strategy.”).

²²³ See *infra* Chapter 9, Part IV(B).

succeed.²²⁴ However, another panelist responded that this remedy raised issues of access pricing for those gates. According to this panelist, the structural remedy might merely replace a difficult price-regulation issue with an even more difficult access-regulation issue.²²⁵ Thus, the Department believes that courts should be very cautious in imposing structural remedies in predatory-pricing cases.

D. Conclusion

The Department believes that predatory pricing can harm competition and should be condemned in appropriate circumstances. It is nonetheless important to develop sound, clear, objective, effective, and administrable predatory-pricing rules that enable firms to know in advance whether their price cutting will result in antitrust liability. The development of such rules is necessary, feasible, and already far along. Such rules must enable enforcers, courts, and businesses to determine whether the incremental revenue from the pricing claimed to be predatory is greater than the incremental cost of the additional output. Only claims involving prices below average avoidable cost, or below a similarly appropriate cost measure, combined with a dangerous probability of recoupment, should be subject to potential liability. Efficiency defenses, when supported by evidence, should be considered, and, in instances where injunctive relief is appropriate, care should be taken to ensure that the remedy imposed ultimately benefits consumers.

II. Predatory Bidding

Predatory bidding involves a buyer of a critical input bidding up the price of that input and thereby foreclosing rival buyers from competing. In certain circumstances, a buyer might be able to drive rival purchasers from the market. By obtaining monopsony power and thereby the ability to purchase its inputs at prices below competitive levels, the predatory buyer would recoup any losses it might incur

from “paying too much” in the short run.²²⁶

In effect, predatory bidding is the mirror image of predatory pricing.²²⁷ When a firm engages in predatory pricing, it lowers its price to consumers, to the detriment of competing sellers. When a firm engages in predatory bidding, it raises its price to input suppliers, to the detriment of competing input buyers. Just as consumers benefit in the short run from lower prices charged by a firm that pursues a predatory-pricing strategy, input suppliers benefit in the short run from higher prices paid for inputs by a firm that pursues a predatory-bidding strategy.

Historically, predatory bidding had been a minor antitrust issue.²²⁸ However, in 2005, the Ninth Circuit issued an opinion finding Weyerhaeuser liable for timber-buying practices that the court deemed predatory.²²⁹ This decision generated substantial interest concerning the proper legal standards for predatory bidding, which were addressed at the hearings.²³⁰ The consensus at the hearings was that successful predatory bidding is relatively rare and should be penalized only when bidding up input prices will clearly lead to long-run competitive harm. The Supreme Court granted certiorari in *Weyerhaeuser* during the course of the hearings.²³¹

In *Weyerhaeuser*, a sawmill operator claimed that Weyerhaeuser, a rival sawmill operator, violated section 2 by predatorily bidding up the price for alder sawlogs in the Pacific Northwest. The trial court instructed jurors that they could find that Weyerhaeuser, which had a sixty-five

²²⁶ See generally John B. Kirkwood, *Buyer Power and Exclusionary Conduct: Should Brooke Group Set the Standards for Buyer-Induced Price Discrimination and Predatory Pricing?*, 72 ANTITRUST L.J. 625, 652 (2005).

²²⁷ June 22 Hr’g Tr., *supra* note 4, at 104 (Kirkwood).

²²⁸ See Scott C. Hall, *Ross-Simmons v. Weyerhaeuser: Antitrust Liability in Predatory Bidding Cases*, ANTITRUST, Spring 2006, at 55.

²²⁹ *Confederated Tribes of Siletz Indians v. Weyerhaeuser Co.*, 411 F.3d 1030 (9th Cir. 2005), *vacated and remanded sub nom. Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 127 S. Ct. 1069 (2007).

²³⁰ June 22 Hr’g Tr., *supra* note 4.

²³¹ 127 S. Ct. 1069.

²²⁴ See June 22 Hr’g Tr., *supra* note 4, at 96 (Elzinga).

²²⁵ See *id.* at 97 (Ordovery).

percent share of the alder sawlog market, had acted anticompetitively if they found that Weyerhaeuser had “purchased more logs than it needed or paid a higher price for logs than necessary, in order to prevent the Plaintiffs from obtaining the logs they needed at a fair price.”²³² The jury found for plaintiff, and the Ninth Circuit affirmed, concluding that the prerequisites for establishing liability for predatory pricing set forth in *Brooke Group*²³³ did not control predatory bidding.²³⁴

The Supreme Court unanimously overruled the Ninth Circuit, holding that the *Brooke Group* test for predatory pricing – below-cost pricing and likelihood of recoupment – also applies to predatory bidding. The Court noted that “predatory bidding mirrors predatory pricing” in respects most significant to its analysis in *Brooke Group*.²³⁵ Just as with predatory pricing, the Court found, predatory bidding involves a firm suffering short-term losses on the chance of recouping those losses through supracompetitive profits in the future. The Court reasoned that no rational business will incur such losses unless recoupment is feasible,²³⁶ and recognized that recoupment could occur through lower input or higher output prices.²³⁷ It noted that there are many benign or even procompetitive reasons why a buyer might bid up the price of inputs, ranging from merely miscalculating its input needs to attempting to increase its market share in the output or downstream market. The Court stressed that there is “nothing illicit about these bidding decisions;” indeed, they are “the very essence of competition.”²³⁸ Thus: “Given the multitude of procompetitive ends served by higher bidding for inputs, the risk of chilling procompetitive behavior with too lax a liability

standard is as serious here as it was in *Brooke Group*.”²³⁹ Accordingly, to prevail on a predatory-bidding claim, plaintiff must show that defendant (1) suffered (or expected to suffer) a short-term loss as a result of its higher bidding and (2) had a dangerous probability of recouping its loss.²⁴⁰

To prevail on a predatory-bidding claim, plaintiff must show that defendant (1) suffered (or expected to suffer) a short-term loss as a result of its higher bidding and (2) had a dangerous probability of recouping its loss.

The Department believes that, as with predatory pricing,²⁴¹ the focus of the price-cost analysis should be on the additional output generated by the incremental input purchases. The Department also believes that, in most cases, average avoidable cost is likely to be the best measure of the incremental changes in cost associated with the increased purchase of inputs resulting from the allegedly predatory act.²⁴²

Although the exercise of monopsony power against input suppliers can be associated with the exercise of monopoly power in the output market, that does not have to be the case, and *Weyerhaeuser* was a case in which the potential anticompetitive effects were confined to the input market.²⁴³ The Department believes that the Sherman Act “does not confine its protection to consumers, or to purchasers, or to competitors, or to sellers.”²⁴⁴ “The Act is comprehensive in its terms and coverage, protecting all who are made victims of . . . forbidden practices[,] by whomever they may be perpetrated.”²⁴⁵ As the Court observed in

²³² 411 F.3d at 1036 n.8.

²³³ 509 U.S. 209 (1993).

²³⁴ 411 F.3d at 1037 (concluding that “benefit to consumers and stimulation of competition do not necessarily result from predatory bidding the way they do from predatory pricing”).

²³⁵ 127 S. Ct. at 1077.

²³⁶ *Id.*

²³⁷ *Id.* at 1076–77 & n.2.

²³⁸ *Id.* at 1077 (internal quotation marks omitted).

²³⁹ *Id.* at 1078.

²⁴⁰ *Id.*

²⁴¹ See *supra* Part I.

²⁴² *Id.*

²⁴³ See 127 S. Ct. at 1076 (“[T]his case does not present . . . a risk of significantly increased concentration in . . . the market for finished lumber.”).

²⁴⁴ *Mandeville Island Farms, Inc. v. Am. Crystal Sugar Co.*, 334 U.S. 219, 236 (1948).

²⁴⁵ *Id.*

Weyerhaeuser, “The kinship between monopoly and monopsony suggests that similar legal standards should apply to claims of monopolization and to claims of monopsonization.”²⁴⁶ Thus, the Department will challenge under section 2 conduct that threatens harm to the competitive process, whether that harm occurs upstream or downstream.

In this regard, as the Supreme Court recognized in *Weyerhaeuser*, higher input prices alone do not indicate harm to the competitive process.²⁴⁷ To the contrary, they are often indicative of vigorous competition, raising the danger that faulty assessments could chill procompetitive activity.²⁴⁸ For example, a firm might “acquire excess inputs as a hedge against the risk of future rises in input costs or future input shortages”²⁴⁹ or to “ensure that it obtains the input from a particularly reliable or high-quality supplier.”²⁵⁰ In those situations, the competitive process has not been harmed, and antitrust enforcement should not discourage the conduct.²⁵¹ Moreover, even where potential harm to competition can be demonstrated, appropriate efficiency defenses also need to be considered.

The Supreme Court’s *Weyerhaeuser* decision

was a significant step towards the development of clear, administrable rules for predatory bidding. The Department believes that the decision strikes the right balance in ensuring that only bidding that harms the competitive process will be found to violate section 2.

²⁴⁶ 127 S. Ct. at 1076.

²⁴⁷ *Id.* at 1077.

²⁴⁸ See June 22 Hr’g Tr., *supra* note 4, at 135 (Salop) (stating that he was “very worried that there could be false positives”). But cf. *id.* at 106 (Kirkwood) (“[A]rguably, there have been no false positives, no liability findings [in predatory bidding cases] where it appeared that the defendant had not, indeed, harmed welfare.”).

²⁴⁹ *Weyerhaeuser*, 127 S. Ct. at 1077; see also June 22 Hr’g Tr., *supra* note 4, at 158 (McDavid) (stating that a firm might decide to “stockpile inventory to preclude future shortages or to hedge against a future price increase”).

²⁵⁰ Brief for the United States as Amicus Curiae Supporting Petitioner at 16, *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 127 S. Ct. 1069 (No. 05-381), available at <http://www.usdoj.gov/atr/cases/f217900/217988.pdf>.

²⁵¹ Cf. June 22 Hr’g Tr., *supra* note 4, at 113 (Kirkwood) (“[I]f the defendant can show that bidding up input prices was profitable, without regard to any increase in monopsony power, [then] it should have a complete defense.”).

CHAPTER 5

TYING

I. Introduction

Tying occurs when a firm “sell[s] one product but only on the condition that the buyer also purchases a different (or tied) product, or at least agrees that [it] will not purchase that product from any other supplier.”¹ As panelists observed, nearly every item for sale arguably is composed of what could be viewed as distinct tied products, making tying one of the most ubiquitous business practices from an economic perspective.² Under prevailing legal precedent,

¹ N. Pac. Ry. Co. v. United States, 356 U.S. 1, 5–6 (1958); *see also, e.g.*, U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 103 (2007), *available at* <http://www.usdoj.gov/atr/public/hearings/ip/222655.pdf> (“A tying arrangement occurs when, through a contractual or technological requirement, a seller conditions the sale or lease of one product or service on the customer’s agreement to take a second product or service.”); DENNIS W. CARLTON & JEFFREY M. PERLOFF, MODERN INDUSTRIAL ORGANIZATION 675 (4th ed. 2005) (Tying is conditioning “the sale of one product . . . upon the purchase of another.”). Conduct is sometimes analyzed as tying even when the purchase of a second product is not required. In an example discussed below, for instance, a firm prohibited the use of one of its machines with complementary machines made by other manufacturers; no second purchase was required. Some refer to those practices as tie-outs, as opposed to tie-ins. Firms selling more than one product sometimes condition the price of one product on whether other products are also purchased. While some refer to those pricing practices as ties, *see, e.g.*, Michael D. Whinston, *Tying, Foreclosure, and Exclusion*, 80 AM. ECON. REV. 837, 837 (1990), the Department addresses them in this report as bundled discounts, *see infra* Chapter 6.

² *See, e.g.*, Sherman Act Section 2 Joint Hearing: Tying Session Hr’g Tr. 13, Nov. 1, 2006 [hereinafter Nov. 1 Hr’g Tr.] (Waldman) (“[A]lmost any good you can find, defined in some sense, is a tying of various goods.”); *id.* at 31 (Evans) (“[T]ying is ubiquitous, it is utterly common.”); *id.* at 57 (Popofsky) (“Tying . . . is ubiquitous in competitive markets.”).

however, not all items are considered tied products. Case law requires two separate product markets for a tie to exist.³

Firms can tie through contracts and by bundling. Contractual ties often concern purchases made at different times. For instance, several cases have addressed contractual requirements ties. With requirements ties, a firm requires “customers who purchase one product . . . to make all their purchases of another product from that firm.”⁴ Requirements ties often involve a durable product and a complementary product used in variable proportions (i.e., different customers use the complement in different quantities). An example discussed below involves a tie between canning machines (the durable, tying product) and salt (the complementary, tied product used in variable proportions).

Tying through bundling occurs when a firm sells “two or more products” together and does not sell one of the products separately.⁵ As several panelists noted, tying through bundling is particularly common.⁶ Computer manufacturers, for instance, bundle different components and offer them as an integrated computer system whose components are not all sold individually. That physical integration is sometimes called technological tying, a term some also use to describe the situation where a firm designs its

³ *See, e.g.*, Jack Walters & Sons Corp. v. Morton Bldg., Inc., 737 F.2d 698, 703–04 (7th Cir. 1984) (Posner, J.) (discussing evolution of separate-products requirement); *see also* 10 PHILLIP E. AREEDA ET AL., ANTITRUST LAW ¶¶ 1741–42 (2d ed. 2004).

⁴ CARLTON & PERLOFF, *supra* note 1, at 321.

⁵ *Id.* at 321, 324; *see also* Dennis W. Carlton & Michael Waldman, *How Economics Can Improve Antitrust Doctrine Towards Tie-In Sales: Comment on Jean Tirole’s “The Analysis of Tying Cases: A Primer,”* COMPETITION POL’Y INT’L, Spring 2005, at 27, 38.

⁶ *See supra* note 2.

products in a way that makes them incompatible or difficult to use with other firms' products.⁷

This chapter reviews tying law, discusses tying's potential anticompetitive, procompetitive, and price-discrimination effects, and sets forth the Department's view on certain legal issues regarding the treatment of ties. To aid the discussion, the following definitions are used in this chapter:

Bundled tie: the simultaneous sale of two or more products, one of which is not sold separately.

Contractual tie: a tie achieved through contract.

Requirements tie: a tie whereby customers that purchase one product must purchase all their requirements of another product from the same seller.

Technological tie: a tie achieved through integration of what could be viewed as two products.

Tied product: the product whose purchase is required to obtain the tying product.

Tying product: the product that is sold only if the tied product is purchased.

II. Background

Tying can be challenged under four provisions of the antitrust laws: (1) section 1 of the Sherman Act, which prohibits contracts "in restraint of trade,"⁸ (2) section 2 of the Sherman Act, which makes it illegal to "monopolize,"⁹ (3) section 3 of the Clayton Act, which prohibits exclusivity arrangements that may "substantially lessen competition,"¹⁰ and

(4) section 5 of the FTC Act, which prohibits "[u]nfair methods of competition."¹¹ Although the Supreme Court drew a distinction between standards governing tying's legality under the Sherman and Clayton Acts shortly after the latter's enactment, those differences faded to the point where an antitrust expert asserted in 1978 that those standards "have become so similar that any differences remaining between them are of interest to only antitrust theologians."¹² In particular, because courts in tying cases often rely on tying precedent from claims brought under different statutory provisions, tying jurisprudence under the different statutes is indelibly intertwined.¹³ Accordingly, significant tying decisions, even if not specifically dealing with section 2, are discussed below.

Judicial treatment of tying has vacillated over time. For instance, in its oft-cited dicta in *Standard Oil Co. of California v. United States (Standard Stations)*, the Supreme Court stated that "[t]ying agreements serve hardly any purpose beyond the suppression of competition."¹⁴ The Court has since "rejected" that dictum¹⁵ and currently is significantly less hostile to tying arrangements, despite continued reliance on a rule of per se illegality, albeit one subject to conditions. The Court's movement has been informed by economic learning and scholarship that have identified procompetitive rationales for tying.¹⁶

The Supreme Court's first tying decision under the antitrust laws came in 1918 when it

¹¹ *Id.* § 45(a)(1). This report does not address section 5, which is beyond the scope of this report.

¹² ROBERT H. BORK, *THE ANTITRUST PARADOX* 366 (1978).

¹³ See, e.g., *Ill. Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 34–38 (2006) (noting that tying cases have been brought under "four different rules of law" and discussing tying cases brought under several statutes); *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 9–18 (1984) (relying on tying precedent involving claims brought under several different statutes).

¹⁴ *Standard Oil Co. of Cal. v. United States (Standard Stations)*, 337 U.S. 293, 305–06 (1949).

¹⁵ *Ill. Tool*, 547 U.S. at 36.

¹⁶ See *infra* Part III(B).

⁷ See, e.g., 1 HOVENKAMP ET AL., *IP AND ANTITRUST* § 21.5b2, at 21–104.1 (Supp. 2006).

⁸ 15 U.S.C. § 1 (2000).

⁹ *Id.* § 2.

¹⁰ *Id.* § 14. Among other limitations, section 3 applies only to "goods, wares, merchandise, machinery, supplies, or other commodities." *Id.*

affirmed dismissal of an action under the Sherman Act challenging a contractual tie. In that case, United Shoe leased different machines performing different parts of the shoe-making process and prohibited lessees from using United Shoe machines with other manufacturers' machines. The Court upheld the arrangement, partly on the ground that "best results are obtained" when United Shoe machines are used together.¹⁷ The Court went on to assert that "the leases are simply bargains, not different from others, moved upon calculated considerations, and, whether provident or improvident, are entitled nevertheless to the sanctions of the law."¹⁸

Four years later, in a second tying case involving United Shoe, the Court condemned essentially the same provisions under the Clayton Act, holding that "[t]he Sherman Act and the Clayton Act provide different tests of liability."¹⁹ Acquiring or maintaining a monopoly appeared to be the theory of competitive harm, as the Court held that United Shoe's "tying agreements must necessarily lessen competition and tend to monopoly."²⁰ Although the Supreme Court did not delineate the markets at issue, the lower court stated that United Shoe leased patented "auxiliary machines" on the condition that they be used only with United Shoe's "principal machines." The principal machines performed the "fundamental operations" of shoe making and faced some low-price competition while the auxiliary machines performed minor roles in the shoe-making process yet were deemed essential by some customers.²¹

¹⁷ *United States v. United Shoe Mach. Co. of N.J.*, 247 U.S. 32, 64 (1918).

¹⁸ *Id.* at 66.

¹⁹ *United Shoe Mach. Corp. v. United States*, 258 U.S. 451, 459 (1922); *see also* H.R. REP. NO. 63-627, pt. 1, at 13 (1914) (United Shoe's "exclusive or 'tying' contract made with local dealers becomes one of the greatest agencies and instrumentalities of monopoly ever devised by the brain of man.").

²⁰ 258 U.S. at 457.

²¹ *United States v. United Shoe Mach. Co.*, 264 F. 138, 142-43, 146 (E.D. Mo. 1920), *aff'd*, 258 U.S. 451 (1922).

After its second *United Shoe* decision, the Court routinely condemned ties for a period of time. In 1936, the Court addressed a requirements tie and affirmed an injunction under the Clayton Act prohibiting IBM from enforcing a lease provision whereby lessees of IBM tabulating machines agreed to buy tabulating cards needed to use the machines only from IBM.²² The Court held that the tie had been "an important and effective step" in creating "a monopoly in the production and sale of tabulating cards suitable for [IBM's] machines."²³

In its next significant tying decision, the Court affirmed a judgment enjoining International Salt from enforcing a requirements tie in which lessees of International Salt's canning machines agreed to buy the salt needed to use the machines only from International Salt.²⁴ As in *IBM*, the Court identified harm to the market for the tied product (salt) as the competitive concern: International Salt was found to have violated the Clayton Act and the Sherman Act by "contracting to close [the] market for salt against competition."²⁵ The Court rejected International Salt's argument that a trial was needed to determine whether the tie could result in a monopoly in the salt market, finding that the likelihood of a salt monopoly was "obvious" because the "volume of business affected"—annual sales of salt used in the machines were about \$500,000 (about \$4.5 million in today's dollars)—could not be said "to be insignificant or insubstantial."²⁶ Significantly, the Court also stated that tying was "unreasonable, per se," when it "foreclose[d] competitors from any substantial market."²⁷

The following year, the Court upheld, under sections 1 and 2 of the Sherman Act, an injunction prohibiting movie distributors from

²² *IBM v. United States*, 298 U.S. 131, 140 (1936).

²³ *Id.* at 136.

²⁴ *Int'l Salt Co. v. United States*, 332 U.S. 392, 396 (1947).

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

block-booking—that is, from licensing “one feature or group of features on condition that the exhibitor will also license another feature or group of features”²⁸—on the ground that the antitrust laws prohibit “a refusal to license one or more copyrights unless another copyright is accepted.”²⁹ The Court found that the “trade victims of this conspiracy have in large measure been the small independent operators” of movie theaters, which were unable to compete successfully against “large empires of exhibitors,”³⁰ because block-booking prevented independents from “bidding for single features on their individual merits.”³¹

Ten years later, the Court reviewed Northern Pacific Railway’s sale of land adjacent to its tracks on the condition that, whenever Northern Pacific’s shipping rates were at least as low as its competitors’ rates, the purchaser used Northern Pacific to ship “commodities produced or manufactured on the land.”³² Inferring Northern Pacific’s “great power”³³ in the market for land (i.e., the tying product) from these preferential shipping provisions, the Court condemned the tie, holding that the Sherman Act does not “requir[e] anything more than sufficient economic power [in the tying market] to impose an appreciable restraint on free competition in the tied product.”³⁴

In *United States v. Loew’s Inc.*, the Court returned to the subject of block-booking, condemning movie distributors’ refusal to license individual films to television stations as an impermissible tie that compelled television stations to license “inferior” films to obtain “desirable pictures.”³⁵ The Court identified the underlying harm to competition in the movie-distribution market: “[t]elevision stations

forced by appellants to take unwanted films were denied access to films marketed by other distributors who, in turn, were foreclosed from selling to the stations.”³⁶

Thus, the Supreme Court treated ties harshly for decades. That began to change, however, in the 1970s. In 1977, the Court upheld a tying arrangement on the merits, ending fifteen years of litigation under sections 1 and 2 of the Sherman Act concerning U.S. Steel’s extension of favorable credit terms to a housing developer on the condition that the developer use U.S. Steel’s prefabricated homes.³⁷ In an earlier decision, the Court had reversed the trial court’s entry of summary judgment in favor of U.S. Steel,³⁸ and the trial court entered judgment for the developer on remand. The Court subsequently reversed on the ground that the developer had failed to prove that U.S. Steel had “some advantage not shared by [its] competitors” in the credit market.³⁹

The Court permitted another tie in 1984 in a section 1 action brought by an anesthesiologist seeking hospital staff privileges.⁴⁰ The hospital had denied the anesthesiologist privileges on the ground that it had granted to others the exclusive right to perform anesthesiology services at the hospital. The anesthesiologist sued, claiming that the arrangement resulted in an impermissible tie between anesthesiology services and “other hospital services provided by” the hospital.⁴¹ The Court upheld the arrangement, citing plaintiff’s failure to offer “evidence that any patient” was unable to use a competing hospital “that would provide him with the anesthesiologist of his choice.”⁴²

In reaching that conclusion, the Court set forth a detailed framework for evaluating a tie’s

²⁸ *United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 156 (1948).

²⁹ *Id.* at 159.

³⁰ *Id.* at 162.

³¹ *Id.* at 156–57.

³² *N. Pac. Ry. Co. v. United States*, 356 U.S. 1, 3 (1958).

³³ *Id.* at 8.

³⁴ *Id.* at 11.

³⁵ 371 U.S. 38, 40 (1962).

³⁶ *Id.* at 49.

³⁷ *U.S. Steel Corp. v. Fortner Enters., Inc.*, 429 U.S. 610, 622 (1977).

³⁸ *Fortner Enters., Inc. v. U.S. Steel Corp.*, 394 U.S. 495, 500–04 (1969).

³⁹ 429 U.S. at 620.

⁴⁰ *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 32 (1984).

⁴¹ *Id.* at 23.

⁴² *Id.* at 30.

legality. In so doing, the majority rejected the view of the four concurring Justices who asserted that the “time has . . . come to abandon the ‘*per se*’ label and refocus the inquiry on the adverse economic effects, and the potential economic benefits, that the tie may have.”⁴³ The Court stated that tying arrangements were subject to a rule of *per se* illegality: “It is far too late in the history of our antitrust jurisprudence to question the proposition that certain tying arrangements pose an unacceptable risk of stifling competition and therefore are unreasonable ‘*per se*.’”⁴⁴ Although the action arose under the Sherman Act, the Court noted that its *per se* rule “reflects congressional policies underlying the antitrust laws,” specifically Congress’s “great concern about the anticompetitive character of tying arrangements” expressed during deliberations about the Clayton Act.⁴⁵

But the Court stated that the *per se* rule should only apply in the presence of “forcing,” which it defined as “the seller’s exploitation of its control over the tying product to force the buyer into the purchase of a tied product that the buyer either did not want at all, or might have preferred to purchase elsewhere on different terms.”⁴⁶ The court described forcing as “the essential characteristic of an invalid tying arrangement.”⁴⁷ The Court also stated that the *per se* rule applied only when “two separate product markets have been linked,” an inquiry turning on whether “there is a sufficient demand for the purchase of [the tied product] to identify a distinct product market in which it is efficient to offer [the tied product] separately.”⁴⁸

⁴³ *Id.* at 35 (O’Connor, J., concurring).

⁴⁴ *Id.* at 9.

⁴⁵ *Id.* at 10.

⁴⁶ *Id.* at 12.

⁴⁷ *Id.* Other considerations include whether the tie forecloses “a substantial volume of commerce,” *id.* at 16, or whether “the seller has some special ability — usually called ‘market power’ — to force a purchaser to do something that he would not do in a competitive market,” *id.* at 13–14.

⁴⁸ *Id.* at 21–22.

Eight years later, the Court held that a jury should decide whether Kodak violated sections 1 and 2 of the Sherman Act by adopting policies effectively precluding independent service organizations (ISOs) from obtaining parts necessary to service Kodak machines, thereby causing some equipment owners that allegedly wanted to purchase maintenance and repair services from ISOs to purchase those services from Kodak instead.⁴⁹ Kodak maintained that its policies were legal because it had valid business reasons for adopting them — namely, (1) avoiding blame for equipment breakdowns “resulting from inferior ISO service,” (2) controlling inventory costs, and (3) precluding ISOs from free riding on Kodak’s investment in equipment development.⁵⁰ Without specifying precisely how Kodak’s defenses fit in the *per se* analysis, the Court concluded that questions of fact existed as to “the validity and sufficiency” of Kodak’s business justifications.⁵¹

In 2006, the Supreme Court addressed Illinois Tool’s requirement that purchasers use its patented printing systems only with Illinois Tool ink. Rejecting the lower court’s use of a presumption that “a patent always gives the patentee significant market power” in the market for the tying product (here, printing systems),⁵² the Court held that “in all cases involving a tying arrangement, the plaintiff must prove that the defendant has market power in the tying product.”⁵³ Significantly, the Court also stated that it had “rejected” its *Standard Stations* dicta that tying serves “‘hardly any purpose beyond the suppression of competition.’”⁵⁴

The D.C. Circuit’s 2001 *United States v. Microsoft Corp.* decision also is a significant

⁴⁹ *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 458 (1992).

⁵⁰ *Id.* at 465, 483–85.

⁵¹ *Id.* at 483.

⁵² *Ill. Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 37 (2006).

⁵³ *Id.* at 46.

⁵⁴ *Id.* at 35 (quoting *Standard Oil Co. of Cal. v. United States (Standard Stations)*, 337 U.S. 293, 305–06 (1949)).

tying decision.⁵⁵ The court found that Microsoft's "contractual and technological" bundling of its Internet-browsing software to its operating-system software did not necessarily constitute an impermissible tie under section 1 of the Sherman Act.⁵⁶ The court held that "the rule of reason, rather than per se analysis, should govern the legality of tying arrangements involving platform software products" because these products involved "novel" characteristics with "no close parallel in prior antitrust cases."⁵⁷ Thus, to prevail under their section 1 tying claim, plaintiffs in that case had to "demonstrate that [the tie's] benefits – if any – are outweighed by the harms in the *tied product* market."⁵⁸

These decisions unfortunately do not provide explicit guidance regarding how to distinguish between legal and illegal ties.⁵⁹ One treatise, collecting cases and attempting to synthesize them, states that under current law a tie is illegal when four conditions exist:

- (1) two separate products or services are involved, (2) the sale or agreement to sell one product or service is conditioned on the purchase of another, (3) the seller has sufficient economic power in the market for the tying product to enable it to restrain trade in the market for the tied product, and (4) a not insubstantial amount of interstate commerce in the tied product is affected.⁶⁰

The Supreme Court, however, has never expressly adopted this formula, nor has it expressly delineated how a tie's procompetitive effects should affect its legality.

III. Analysis

Tying can harm consumers in some

circumstances.⁶¹ For example, a tie may result in a firm with monopoly power in one market acquiring a monopoly in a second market or perpetuating its monopoly in the tying product. Theories of competitive harm, however, often are based on "highly stylized assumptions that are difficult to apply to the factual settings courts confront."⁶² Those deficiencies lead some to be concerned that we still "do not understand much about tying" and to question how frequently, if ever, tying harms competition.⁶³

Additionally, some of these theories of harm focus almost solely on tying's effect on rivals, potentially obscuring tying's procompetitive benefits. Tying has the potential to benefit consumers by allowing firms to lower costs and better satisfy consumer demand.⁶⁴ When firms tie, manufacturing and retailing costs can be lower and purchases for consumers easier than they would be if firms sold the products separately. This practice can benefit consumers overall, even when some consumers prefer buying the products separately.

⁶¹ See, e.g., Nov. 1 Hr'g Tr., *supra* note 2, at 127 (Evans) (noting that tying "can be used anticompetitively only in limited circumstances"); Carlton & Waldman, *supra* note 5, at 30–33.

⁶² Keith N. Hylton & Michael Salinger, *Tying Law and Policy: A Decision-Theoretic Approach*, 69 ANTITRUST L.J. 469, 470 (2001); see also Nov. 1 Hr'g Tr., *supra* note 2, at 33 (Evans) (stating that "it is very clear from the literature that lots of assumptions need to be true in order for us to find anticompetitive tying").

⁶³ Alden F. Abbott & Michael A. Salinger, *Learning from the Past: The Lessons of Vietnam, IBM, and Tying*, COMPETITION POL'Y INT'L, Spring 2006, at 3, 8; see also, e.g., Michael D. Whinston, *Exclusivity and Tying in U.S. v. Microsoft: What We Know, and Don't Know*, J. ECON. PERSP., Spring 2001, at 63, 79 ("What is striking about the area of . . . tying . . . is how little the current literature tells us about what [its] effects are likely to be.").

⁶⁴ See, e.g., Nov. 1 Hr'g Tr., *supra* note 2, at 23, 24 (Evans) (stating that, "in the absence of contrary significant evidence," the "courts and competition authorities should presume that tying is efficient"); HERBERT HOVENKAMP, *THE ANTITRUST ENTERPRISE* 200 (2005) ("After a half century of economic analysis we know that [tying is] efficient and procompetitive most of the time . . .").

⁵⁵ 253 F.3d 34, 84 (D.C. Cir. 2001) (en banc) (per curiam).

⁵⁶ *Id.*

⁵⁷ *Id.*; see also *id.* at 96.

⁵⁸ *Id.* at 96 (citations omitted) (emphasis in original).

⁵⁹ See generally 1 SECTION OF ANTITRUST LAW, AM. BAR ASS'N, ANTITRUST LAW DEVELOPMENTS 172–207 (6th ed. 2007).

⁶⁰ *Id.* at 177; see also *id.* n.999 (citing cases).

A. Potential Anticompetitive Effects

1. Monopolizing the Tied-Product Market

In its tying decisions, the Supreme Court often has identified harm to competition in the tied-product market as the concern: tabulating cards in *IBM*, salt in *International Salt*, prefabricated homes in *Fortner*, and maintenance services in *Kodak*. Some commentators question whether monopolization of the tied product was threatened in these cases. Judge Bork's assessment of *International Salt*—where the Court found “the tendency of the arrangement to accomplishment of monopoly . . . obvious”⁶⁵—is typical: “It is inconceivable that anybody could hope to get a monopoly, or anything remotely resembling a monopoly, in a product like salt by foreclosing the utterly insignificant fraction of the market represented by the salt passing through [International Salt's] leased machines.”⁶⁶

Commentators also contend that a monopolist may not have any incentive to monopolize a complementary product market. First, a monopolist is likely to prefer competition in the complementary product market because a lower price for the complement will lead to increased demand for the monopoly product.⁶⁷ Second, under certain circumstances, a monopolist cannot increase its profits by monopolizing another market through a tie. Specifically, commentators agree that, in certain circumstances, a firm cannot increase its profits by tying a monopoly product and a complement that is always used in fixed proportions with the monopoly product.⁶⁸

In some circumstances, though, a monopolist may have an incentive to use tying to obtain a monopoly in a second market. For instance, a monopolist may have an incentive to use a tie to monopolize a second market if some consumers of the tied product do not purchase the monopoly product.⁶⁹ This incentive may arise when production of the tied product exhibits scale economies: using a tie can effectively bar rivals in the tied-product market from selling to many customers that buy the tying product and therefore may deprive those rivals of sufficient sales to achieve scale efficiency in the tied-product market. That may, in turn, induce rivals' exit from the tied-product market (or keep them inefficiently small) and thus create a monopoly in the tied-product market. For instance, the only hotel on an island may tie accommodations and meal packages to its guests. If there are an insufficient number of island residents to support a second restaurant, the hotel may be able to extract greater profit through its tie of accommodations and meals because the tie enables the hotel also to monopolize restaurant services. The hotel thus would extract monopoly profits from not only its guests (the purchasers of the original monopoly product—accommodations) but also island residents (who would buy only the second product—restaurant food).⁷⁰ Similarly, a firm may tie to deter entry into the tied-product market; if a potential entrant does not expect sufficient profits, it may decide not to enter because of the tie.⁷¹

281, 290 (1956); Whinston, *supra* note 1, at 838.

⁶⁵ *Int'l Salt Co. v. United States*, 332 U.S. 392, 396 (1947).

⁶⁶ BORK, *supra* note 12, at 367.

⁶⁷ See, e.g., RICHARD A. POSNER, *ANTITRUST LAW* 199 (2d ed. 2001).

⁶⁸ Put another way, a firm with monopoly power in the tying-product market can, under certain conditions, maximize its profits without tying, by pricing the tying good appropriately. See, e.g., *Schor v. Abbott Labs.*, 457 F.3d 608, 611–13 (7th Cir. 2006) (Easterbrook, J.); Nov. 1 Hr'g Tr., *supra* note 2, at 16–17 (Waldman); BORK, *supra* note 12, at 373; Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 51 NW. U. L. REV.

⁶⁹ See, e.g., Nov. 1 Hr'g Tr., *supra* note 2, at 16–17 (Waldman) (noting the incentive of a monopolist to tie in order to achieve a second monopoly in the market for a “complementary good” that is not consumed with the original monopoly product for “some uses”); Whinston, *supra* note 1, at 840.

⁷⁰ See Dennis W. Carlton, *A General Analysis of Exclusionary Conduct and Refusal to Deal – Why Aspen and Kodak Are Misguided*, 68 ANTITRUST L.J. 659, 667–68 (2001).

⁷¹ See, e.g., Whinston, *supra* note 1, at 844; cf. Jay Pil Choi & Christodoulos Stefanadis, *Tying, Investment, and the Dynamic Leverage Theory*, 32 RAND J. ECON. 52, 70 (2001); Barry Nalebuff, *Bundling as an Entry Barrier*, 119

Moreover, even when the monopoly product (i.e., the tying product) and the second product (i.e., the tied product) are always used together, a monopolist may tie to earn monopoly profits in the tied-good market that are not currently available but will be in the future. For example, a monopolist might have an incentive to tie its product to a complementary product if, in the future, consumers would incur costs in switching to a different manufacturer's complementary product. In other words, a monopolist may have an incentive to extract those switching costs. A monopolist also might have an incentive to tie products when the complementary product will be upgraded in the future.⁷²

2. Maintaining a Monopoly in the Tying-Product Market

There was consensus at the hearings that tying could allow a monopolist to maintain its monopoly in the tying product to the detriment of consumers.⁷³ For instance, a monopolist could tie a monopoly product to a

Q.J. ECON. 159, 183 (2004).

⁷² Nov. 1 Hr'g Tr., *supra* note 2, at 17 (Waldman); *see also, e.g.,* Carlton & Waldman, *supra* note 5, at 32 (noting that a firm may have incentive to obtain a monopoly in tied-product market characterized by "product upgrades and switching costs"); Dennis W. Carlton & Michael Waldman, *Tying, Upgrades, and Switching Costs in Durable-Goods Markets 3* (Nat'l Bureau of Econ. Research, Working Paper No. 11407, 2005), *available at* <http://www.nber.org/papers/w11407>.

⁷³ *See, e.g.,* Nov. 1 Hr'g Tr., *supra* note 2, at 18 (Waldman) (noting that tying can "increase or preserve . . . market power in that initial monopolized market"); *id.* at 65–66 (Feldman) (noting that tying can involve the monopolist "trying to protect its original monopoly from the next generation of products"); *id.* at 87 (Willig) (noting that one theory of harm is "the potential for harm to competition in the market for . . . the tying good"); POSNER, *supra* note 67, at 202; Dennis W. Carlton & Michael Waldman, *The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries*, 33 RAND J. ECON. 194, 198–212 (2002); Robin Cooper Feldman, *Defensive Leveraging in Antitrust*, 87 GEO. L.J. 2079, 2079 (1999) (noting that tying can "prevent erosion of the primary monopoly"); Nalebuff, *supra* note 71, at 183 (noting that tying may allow a firm with monopolies in two related markets to maintain both monopolies).

complementary product to preclude another firm from entering the complementary-good market, because, under certain conditions, the potential rival will be unable to obtain the scale necessary to make entry worthwhile. Because it does not enter the complementary-good market, the potential rival might then have no incentive to enter the monopoly-good market either. The monopolist would be using ties, in this situation, to maintain its monopoly and its future profits in the monopoly-product market. That appears to have been the theory of harm in the Supreme Court's first decision finding an illegal tie under the antitrust laws: United Shoe's practices may have delayed erosion of United Shoe's monopoly in the shoe-making machinery market.⁷⁴

B. Potential Procompetitive Effects

In early tying decisions, the Supreme Court often noted tying's potentially procompetitive effects, but it quickly dismissed them. IBM, for instance, claimed that it required use of its cards in its tabulating machines because the machines would not work if defective cards were used, causing consumer dissatisfaction with the machine.⁷⁵ Without ruling on whether an "exception" to the prohibition against tying could ever be allowed,⁷⁶ the Court rejected the defense on the ground that "others are capable of manufacturing cards suitable for use."⁷⁷ Likewise, the Court rejected International Salt's claim that use of its salt allowed it to minimize its repair costs on the leased machines on the ground that other salt manufacturers could produce salt meeting the machines' "specifications."⁷⁸ In later cases, the Court gradually began incorporating potentially procompetitive effects into its analysis.⁷⁹

⁷⁴ *See supra* text accompanying notes 19–21.

⁷⁵ IBM v. United States, 298 U.S. 131, 138–39 (1936).

⁷⁶ *Id.* at 140.

⁷⁷ *Id.* at 139.

⁷⁸ Int'l Salt Co. v. United States, 332 U.S. 392, 398 (1947).

⁷⁹ *See, e.g.,* Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451, 483 (1992) (stating that liability on the section 2 claim "turns . . . on whether 'valid business reasons' can explain Kodak's actions" (quoting

Economists now recognize that tying offers many potential efficiencies.⁸⁰ A firm that uses ties can have lower costs—sometimes significantly lower—than if it offered each product separately.⁸¹ As one panelist noted, “[T]here are fixed costs of offering different product combinations, and that necessarily limits the variants offered by firms.”⁸² For a variety of reasons, only offering two products together may cost less than also offering them separately, and if relatively few consumers strongly prefer to purchase one without the other, it may not be profitable to incur the additional costs of catering to that limited demand.

Tying may also reduce a consumer’s costs,⁸³ including the cost of negotiating terms of sale, transportation costs, and integration costs.⁸⁴ Although a tie reduces consumers’ options, it may nevertheless make them better off. In addition, tying may benefit consumers by

improving or controlling quality.⁸⁵

The existence and magnitude of any procompetitive effects, however, depend on the specific circumstances of the tie at issue. Quantifying any cost savings is “difficult because . . . it is not clear that one could isolate and measure cost savings” from business records.⁸⁶ As some have observed, evidence of similar business practices “in industries that resemble the monopolist’s but are competitive” may shed light on whether the tie is likely to generate some efficiencies.⁸⁷ Examination of other markets in any depth, however, would present significant administrability concerns.

C. Price Discrimination

Different customers typically have different preferences for a firm’s products and thus are willing to pay different prices. For instance, one customer might be willing to pay \$20 a month for access to a sports television network, while another might be willing to pay only \$10. When a firm engages in price discrimination—that is, charging different customers different prices, as opposed to charging a uniform price—it is typically attempting to extract from customers more of what each is willing to pay. When a monopolist is able to engage in perfect price discrimination—that is, to charge each customer the most it is willing to pay—the efficiency loss normally associated with monopoly is eliminated because the monopolist will produce as many units as would be sold in a competitive market; thus, “[t]he perfectly

Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 605 (1985)); see also *Jerrold Elecs. Corp. v. United States*, 365 U.S. 567 (1961) (mem.) (per curiam) (summarily affirming judgment where trial court found, among other things, that tying cable equipment and a service contract was, at the time of the initial roll-out, reasonable because of the need to ensure adequate service to protect good will), *aff’d* 187 F. Supp. 554, 557 (E.D. Pa. 1960); *Times-Picayune Publ’g Co. v. United States*, 345 U.S. 594, 623 (1953) (noting an alleged tie’s potential cost savings).

⁸⁰ See, e.g., Nov. 1 Hr’g Tr., *supra* note 2, at 12 (Waldman) (noting “many efficiency reasons associated with tying”).

⁸¹ See, e.g., David S. Evans & Michael Salinger, *Why Do Firms Bundle and Tie? Evidence from Competitive Markets and Implications for Tying Law*, 22 YALE J. ON REG. 37, 83–84 (2005); Roy W. Kenney & Benjamin Klein, *The Economics of Block Booking*, 26 J.L. & ECON. 497, 523 (1983).

⁸² Nov. 1 Hr’g Tr., *supra* note 2, at 32 (Evans).

⁸³ *Id.* at 13 (Waldman) (identifying reduction of consumer “search and sorting” costs as a potential benefit of tying).

⁸⁴ See, e.g., 9 PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶ 1717b2, at 185 (2d ed. 2004) (explaining how tying can result in “consumers . . . receiv[ing] greater value for the same expenditure as before the tie”).

⁸⁵ See *Jerrold Elecs. Corp. v. United States*, 365 U.S. 567 (1961) (mem.) (per curiam); see also Marius Schwartz & Gregory J. Werden, *A Quality-Signaling Rationale for Aftermarket Tying*, 64 ANTITRUST L.J. 387, 388 (1996) (“[T]ying can make it profitable to offer high-quality durables if the demand for the complement is sufficiently higher when the durable proves to be of high quality.”).

⁸⁶ Evans & Salinger, *supra* note 81, at 83.

⁸⁷ POSNER, *supra* note 67, at 253; see also, e.g., Nov. 1 Hr’g Tr., *supra* note 2, at 29 (Evans); *id.* at 121 (Feldman); *id.* at 122 (Waldman, Willig). But see *id.* at 122 (Russell) (stating that reliance on “similar” tying arrangements in competitive markets is a “fuzzy concept”).

discriminating monopoly sells more than the nondiscriminating monopoly.”⁸⁸ That is, price discrimination can be efficiency-enhancing and allow output to be greater than it otherwise would be.

Assessing each customer’s willingness to pay is difficult. For some products, a crude measure of a customer’s willingness to pay may be the frequency with which the product is used.⁸⁹ A tie to a complementary product that is purchased more as use of the underlying product increases allows a firm to link pricing to the frequency with which customers use the underlying product (a practice referred to as “metering”). As one panelist put it, requirements ties allow firms to price discriminate by “trying to give the higher price to the individuals who use the good more intensively.”⁹⁰ Thus, a firm may sell a device (e.g., a printer) at a low price to attract as many customers as possible, and then use a tie to extract more revenue from those that use the device frequently by charging high prices for the necessary complementary product (e.g., ink). Under this view, profit from sales of the complement (i.e., ink) flows from the firm’s monopoly in the market for the device (i.e., the printer), not from monopolization of the complement market.⁹¹

Tying may allow a firm to price discriminate in a second way. Consider the example mentioned earlier, the cable television customer who would be willing to pay \$20 a month for a sports channel and assume that the customer would pay \$10 a month for a movie channel. Further assume a second customer willing to pay \$10 a month for the sports channel and \$20 a month for the movie channel. By tying the channels and offering both for \$30, the firm is able to extract from both customers the most each is willing to pay for both channels.⁹²

Although both customers in this example pay the same amount, the effect is the same as if they had been charged different amounts based on their preferences. And output is greater than it would have been if the cable company had charged \$20 for each channel individually: both customers receive two channels, not just one.

Price discrimination typically has ambiguous effects on both customers and efficiency.⁹³ The ability to price discriminate often allows firms to increase output. More consumers can be served when firms charge higher prices for customers that value a product highly and lower prices for those that value the product less. In those cases, however, the price paid by some consumers—specifically, those that value the product the most—might be higher than the price they would have paid if the product were sold to every customer at the same price.

Many forms of price discrimination (e.g., offering coupons or limited-time sales) are not illegal under the antitrust laws. Panelists maintained that there is no principled reason to condemn, on the one hand, tying that allows price discrimination and yet condone, on the other hand, other business practices with similar effects.⁹⁴ Prohibiting only one of the many ways to price discriminate hurts

THE ORGANIZATION OF INDUSTRY 165, 166 (1968) (suggesting that movie distributors may have used block-booking to price discriminate); R. Preston McAfee et al., *Multiproduct Monopoly, Commodity Bundling, and Correlation of Values*, 104 Q.J. ECON. 371, 372 (1989).

⁹³ See, e.g., Nov. 1 Hr’g Tr., *supra* note 2, at 15, 20 (Waldman); *id.* at 33 (Evans); *id.* at 109–11 (Willig); see also, e.g., Carlton & Waldman, *supra* note 5, at 35; James C. Cooper et al., *Does Price Discrimination Intensify Competition? Implications for Antitrust*, 72 ANTITRUST L.J. 327, 369 (2005) (“[I]n certain cases price discrimination can cause firms to compete more intensely, leading to lower prices for all consumers and lower profits for all firms.”); Warren S. Grimes, *Tying: Requirements Ties, Efficiency and Innovation* 5 (Nov. 20, 2006) (hearing submission) (“There is some discussion, however, whether the effects of metered pricing are pro- or anticompetitive.”).

⁹⁴ See Nov. 1 Hr’g Tr., *supra* note 2, at 15–16 (Waldman) (questioning “why you would want to eliminate the ability to use tying for price discrimination”); *id.* at 33 (Evans); *id.* at 109 (Willig).

⁸⁸ CARLTON & PERLOFF, *supra* note 1, at 300.

⁸⁹ Nov. 1 Hr’g Tr., *supra* note 2, at 15 (Waldman).

⁹⁰ *Id.*

⁹¹ See, e.g., POSNER, *supra* note 67, at 202–07.

⁹² Nov. 1 Hr’g Tr., *supra* note 2, at 14–15 (Waldman) (noting that tying products allows firms to price discriminate when customers value goods differently); see also, e.g., George J. Stigler, *A Note on Block Booking*, in

consumers when firms refrain from using ties to price discriminate out of fear of antitrust liability and instead use more expensive ways to price discriminate, thereby raising their costs.⁹⁵ Indeed, as one panelist asserted, “price discrimination ought to be very, very presumptively innocent for a wide variety of deep economic reasons as well as just commonplace observations that the most competitive of industries are full of instances of price discrimination.”⁹⁶

The Department agrees that tying should not be illegal under section 2 merely because it enables price discrimination.⁹⁷ This conclusion does not mean, however, that all ties enabling price discrimination should be permissible under the antitrust laws. As one panelist noted, a tie enabling price discrimination could have anticompetitive effects unrelated to the price discrimination.⁹⁸

The Department agrees that tying should not be illegal under section 2 merely because it enables price discrimination.

D. Technological Ties

One issue deserving special mention concerns technological tying. Incorporating new features into products to increase their value to consumers is a hallmark of innovative competition—even if innovation makes obsolete separate standalone products designed to meet the same consumer needs. Cars and computers are but two examples of products where manufacturers have added features that were once considered separate products.

Unduly broad application of a per se prohibition on tying could freeze product innovation and prevent transition to more efficient, integrated products. Computer users might, for example, still be using separate floppy disks on computers rather than integrated hard drives. Rules potentially condemning technological ties thus present a particularly serious threat of chilling innovation and, moreover, raise severe remedial difficulties.⁹⁹

Panelists voiced strong sentiment that using the antitrust laws to mandate product-design choices presents an acute risk of hurting consumers by thwarting innovation. For instance, one panelist asserted that “it makes more sense to intervene on contractual ties rather than product design ties, because in product design ties, you are getting into the . . . internal workings of the firm.”¹⁰⁰ Similarly, another panelist noted that “condemning tying through contracts likely poses fewer risks of false positives than condemning . . . product design.”¹⁰¹ Yet another stressed that “a product design decision . . . is far more apt to have an

⁹⁵ See *id.* at 16 (Waldman); *id.* at 110 (Willig).

⁹⁶ *Id.* at 109 (Willig); see also *Ill. Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 44–45 (2006) (observing that, “while price discrimination may provide evidence of market power, . . . it is generally recognized that it also occurs in fully competitive markets”).

⁹⁷ This chapter does not consider the legality of price discrimination under the Robinson-Patman Act, which prohibits price discrimination that, among other things, “injure[s] competition.” *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 220 (1993).

⁹⁸ See Nov. 1 Hr’g Tr., *supra* note 2, at 110 (Willig).

⁹⁹ See, e.g., Dennis W. Carlton, *The Relevance for Antitrust Policy of Theoretical and Empirical Advances in Industrial Organization*, 12 GEO. MASON L. REV. 47, 53–54 (2003) (“I find useful the distinction between exclusionary restrictions imposed on others (e.g., dealers) and exclusionary restrictions created by unilateral action (e.g., product design and vertical integration). The antitrust laws have traditionally been much more hostile to restrictions on third parties than to restrictions that result from transactions within the firm (e.g., vertical integration). This is a reasonable approach if one believes that it is more costly to intervene into the activities within a firm than into activities between firms.”); Michael J. Meurer, *Vertical Restraints and Intellectual Property Law: Beyond Antitrust*, 87 MINN. L. REV. 1871, 1911 (2003) (“Courts are reluctant to recognize tying claims based on product design choices because they fear they will discourage socially valuable innovation.”); Joseph Gregory Sidak, *Debunking Predatory Innovation*, 83 COLUM. L. REV. 1121, 1148 (1983) (noting “the likelihood that desirable incentives for innovation would be jeopardized”).

¹⁰⁰ Nov. 1 Hr’g Tr., *supra* note 2, at 22 (Waldman); see also Carlton & Waldman, *supra* note 5, at 38 (noting that “[f]ear of antitrust scrutiny could easily prevent an innovator from introducing new desirable products”).

¹⁰¹ Nov. 1 Hr’g Tr., *supra* note 2, at 60 (Popofsky).

efficiency rationale” and that “it is right to give more respect to the implementation of the tie through product design.”¹⁰² Another similarly urged that “you are better off not trying to chase this particular business conduct” in light of the threat of “error costs.”¹⁰³

Courts have made similar observations. The D.C. Circuit, for instance, has noted that “[a]ntitrust scholars have long recognized the undesirability of having courts oversee product design, and any dampening of technological innovation would be at cross-purposes with antitrust law.”¹⁰⁴ That court also has noted that “tying . . . may produce efficiencies that courts have not previously encountered,” particularly in “pervasively innovative . . . markets.”¹⁰⁵ The Fifth Circuit similarly has warned against any liability standard that “would enmesh the courts in a technical inquiry into the justifiability of product innovations.”¹⁰⁶

Commentators likewise express concern about the potential of rules condemning technological ties to chill procompetitive conduct. A treatise warns that “[a]n antitrust rule prohibiting a firm from improving its own invention simply because the improvement turns out *ex post* not to be much of an improvement at all and when it makes rivals’

complementary products obsolete would chill innovation unnecessarily.”¹⁰⁷ Judge Posner has noted the “particularly acute evidentiary and remedial difficulties” presented by technological-tying cases, where courts may be called upon to assess the merits of technical engineering issues.¹⁰⁸ Similarly, Professors Carlton and Waldman advocate that “greater deference” be given to “efficiencies achieved through physical integration” because “the cost of interfering inside a firm—where many unspecified relationships and transactions are not mediated by the price system—is likely to be higher than interfering in the contractual relations between two firms.”¹⁰⁹

The Department agrees with courts and panelists urging restraint in the area of product design and believes that great caution should be exercised before condemning a technological tie under the antitrust laws. Firms make many decisions about the design of their products, the vast majority of which—including those made by monopolists—raise no competitive concern. Moreover, economic understanding about technological tying’s competitive effects is often particularly challenging, heightening the risk of mistaken condemnation of procompetitive (or competitively neutral) activity.¹¹⁰ In addition, a key feature of technological progress is the introduction of new products that perform functions that previously required multiple products. Finally, the Department agrees that remedying anticompetitive technological ties appropriately can often be difficult, requiring courts to make judgments about unusually complicated, forward-looking business issues and thereby heightening the risk that a remedy will hurt, rather than help, consumers. Private firms, rather than the Department or courts, are better equipped to design products that respond best to consumer demands and rapidly

¹⁰² *Id.* at 139–40 (Willig); *see also id.* at 78 (Willig) (noting the “need to be especially careful when the practices at issue do affect innovation, because after all, innovation . . . is particularly valuable to consumer welfare”). *But see id.* at 136 (Feldman) (stating that she “would be very wary of something that says we focus only on contractual ties and not technological ties”).

¹⁰³ Sherman Act Section 2 Joint Hearing: Conduct as Related to Competition Hr’g Tr. 87, May 8, 2007 [hereinafter May 8 Hr’g Tr.] (Sidak).

¹⁰⁴ *United States v. Microsoft Corp.*, 147 F.3d 935, 948 (D.C. Cir. 1998).

¹⁰⁵ *United States v. Microsoft Corp.*, 253 F.3d 34, 93 (D.C. Cir. 2001) (en banc) (per curiam).

¹⁰⁶ *Response of Carolina, Inc. v. Leasco Response, Inc.*, 537 F.2d 1307, 1330 (5th Cir. 1976); *see also, e.g.*, *Digital Equip. Corp. v. Uniq Digital Techs., Inc.*, 73 F.3d 756, 761–62 (7th Cir. 1996) (Easterbrook, J.); *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147, 1179 (1st Cir. 1994); *Klamath-Lake Pharm. Ass’n v. Klamath Med. Serv. Bureau*, 701 F.2d 1276, 1290 (9th Cir. 1983).

¹⁰⁷ 3A AREEDA & HOVENKAMP, *supra* note 84, ¶ 776, at 258 (2d ed. 2002).

¹⁰⁸ Richard A. Posner, *Vertical Restraints and Antitrust Policy*, 72 U. CHI. L. REV. 229, 233 (2005).

¹⁰⁹ Carlton & Waldman, *supra* note 5, at 38.

¹¹⁰ *See, e.g.*, Abbott & Salinger, *supra* note 63, at 10–14.

changing technologies.

That is not to say that all technological ties should be per se lawful. Condemnation might be appropriate, for example, if the technological integration is a sham that serves no purpose other than to exclude competitors.¹¹¹

E. Tying Should Not Be Per Se Illegal

Tying is one of the few remaining antitrust areas where a rule of per se illegality exists. In antitrust law, a per se rule is appropriate only if courts, having had sufficient experience with a practice, can determine with confidence that the practice is anticompetitive in almost all circumstances when applying the rule of reason.¹¹² Echoing the views of the many legal scholars, commentators, economists, and others who have questioned for decades whether tying should be accorded per se treatment, panelists criticized existing tying standards. No panelist at the hearings endorsed the Supreme Court's current per se framework,¹¹³ and other commentators single it out for particular criticism.¹¹⁴ Their rationale is that

tying often has procompetitive benefits and thus does not fall appropriately into any category of per se treatment, which is typically reserved for conduct "that would always or almost always tend to restrict competition and decrease output."¹¹⁵

The Supreme Court has moved away from per se rules in other contexts. In 1977, the Court overturned the per se rule for nonprice vertical restraints.¹¹⁶ In 1997, the Court overturned a per se rule for maximum resale price maintenance.¹¹⁷ And, in 2007, the Court overturned the per se rule against minimum resale price maintenance.¹¹⁸ In those cases, the Court determined that the practices could in many circumstances benefit consumers, counseling against applying a rule of per se illegality.¹¹⁹

Commentators and panelists agree that the per se framework for assessing the legality of a tie under the antitrust laws should be abandoned.¹²⁰ The Supreme Court itself recently recognized that "many tying arrangements . . . are fully consistent with a free, competitive market."¹²¹ The Department agrees that a rule of per se illegality for tying is misguided because tying has the potential to help consumers and cannot be said with any confidence to be anticompetitive in almost all

¹¹¹ See, e.g., May 8 Hr'g Tr., *supra* note 103, at 90-91, 96-97 (Melamed); *id.* at 93-95 (Creighton); see also *United States v. Microsoft Corp.*, 147 F.3d 935, 949 (D.C. Cir. 1998) ("[I]f there is no suggestion that the product is superior to the purchaser's combination in some respect, it cannot be deemed integrated.").

¹¹² See *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705, 2713 (2007).

¹¹³ See, e.g., Nov. 1 Hr'g Tr., *supra* note 2, at 23 (Evans) (advocating "ending per se liability for tying"); *id.* at 36 (Russell) (advocating abandoning "the per se rule for tying," which "is enough of a per se rule that it still causes substantial harm and confusion and harm to consumer welfare"); *id.* at 76 (Willig) ("I, too, am against per se treatment of tying under the antitrust laws. I, too, think there is no business or economic or indeed any logical justification for such a treatment by the courts."); *id.* at 98 (Feldman) (noting agreement to "knock out" per se treatment of tying); see also May 8 Hr'g Tr., *supra* note 103, at 86 (Sidak) (agreeing that the desirability of abandoning per se treatment of tying is "uncontroversial"); *id.* (Eisenach); *cf. id.* at 87 (Sidak) ("[T]echnological tying with respect to product innovations ought to be per se legal . . .").

¹¹⁴ See, e.g., HOVENKAMP, *supra* note 64, at 118 (characterizing the "per se rule against tying" as "completely senseless"); Evans & Salinger, *supra* note 81, at 85 ("As a matter of theoretical and empirical

economics, the modified per se test is not capable of identifying anticompetitive tying except by happenstance.").

¹¹⁵ *Broad. Music, Inc. v. CBS*, 441 U.S. 1, 19-20 (1979).

¹¹⁶ *Cont'l T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 57-59 (1977).

¹¹⁷ *State Oil Co. v. Kahn*, 522 U.S. 3, 22 (1997).

¹¹⁸ *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 127 S. Ct. 2705, 2725 (2007).

¹¹⁹ See also *United States v. Microsoft Corp.*, 253 F.3d 34, 94, 95 (D.C. Cir. 2001) (en banc) (per curiam) (declining to apply a per se rule to "bundling in platform software markets" because "wooden application of per se rules in this litigation may cast a cloud over platform innovation in the market for PCs, network computers and information appliances").

¹²⁰ See *supra* notes 113-14.

¹²¹ *Ill. Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 45 (2006).

circumstances.

The Department agrees that a rule of per se illegality for tying is misguided because tying has the potential to help consumers and cannot be said with any confidence to be anticompetitive in almost all circumstances.

When actual or probable harm to competition is shown, tying should be illegal only when (1) it has no procompetitive benefits, or (2) if there are procompetitive benefits, the tie produces harms substantially disproportionate to those benefits.

IV. Conclusion

Tying typically benefits consumers by allowing firms to lower costs and better satisfy consumer demand. Because it is often procompetitive, the Department agrees with the vast majority of commentators that tying should not be judged under a rule of per se illegality.

In place of the per se framework, the Department endorses a structured analysis, the first step of which should be to determine whether the tie has the potential to harm competition and consumers. In situations where harm to competition is implausible – for instance, where defendant lacks monopoly power (or any reasonable prospect of acquiring it through a tie) or where the tie is imposed solely to allow price discrimination – courts should uphold the arrangement.

Further, the Department believes that when actual or probable harm to competition is shown, tying should be illegal only when (1) it has no procompetitive benefits, or (2) if there are procompetitive benefits, the tie produces harms substantially disproportionate to those benefits. The Department does not believe that a trivial benefit should outweigh substantial anticompetitive effects. The Department believes that this is the appropriate standard in view of the uncertainty that can surround tying's competitive effects and the costs of inadvertently imposing antitrust liability on conduct that either helps or does not harm consumers.

CHAPTER 6

BUNDLED DISCOUNTS AND SINGLE-PRODUCT LOYALTY DISCOUNTS

I. Bundled Discounts

A. Introduction

Bundled discounting is the practice of offering discounts or rebates contingent upon a buyer's purchase of two or more different products, including bundled rebates where the amount of rebates a customer receives is based on the quantities of multiple products bought over some period.¹ Bundled discounting is common, usually benefits consumers, and generally does not raise antitrust concerns.²

¹ The offering of discounts or rebates conditioned upon the level or share of purchases of a single product is addressed *infra* part II. Also, conditioning the sale of one product upon the purchase of another is tying, which is the subject of chapter 5. One of the ways that firms tie is through what economists call "pure bundling," which is selling two or more products together in fixed proportions and not selling any of the products separately. This chapter addresses the situation where the products are available separately as well as in a bundle, a practice economists call "mixed bundling." See generally DENNIS W. CARLTON & JEFFREY M. PERLOFF, *MODERN INDUSTRIAL ORGANIZATION* 321–24 (4th ed. 2005).

² See, e.g., Sherman Act Section 2 Joint Hearing: Academic Testimony Hr'g Tr. 136, Jan. 31, 2007 (Rubinfeld) (stating that bundled discounting is "quite ubiquitous and often is procompetitive"); Sherman Act Section 2 Joint Hearing: Loyalty Discounts Session Hr'g Tr. 59, Nov. 29, 2006 (Kattan) (stating that "the prevalence" of bundled discounts and discounts having a retroactive feature "by firms that don't have market power and have no hope of excluding competitors would suggest . . . that there is a good possibility that the efficiency explanation for these practices is the dominant one"); *id.* at 122–23 (Crane) (stating that "bundled discounting is pervasive and has many pro-competitive or competitively neutral reasons" and that the pervasiveness of a practice suggests there are often good explanations for it);

But even though the practice typically results in consumers paying lower prices in the short term, bundled discounting by a monopolist may nonetheless harm competition in some circumstances.³

There have been very few federal court decisions – and no Supreme Court decisions – analyzing bundled discounts under section 2, and the standards used in those decisions are not entirely consistent.⁴ The United States took the position in its 2004 brief recommending against certiorari in *LePage's Inc. v. 3M*⁵ that "although the business community and consumers would benefit from clear, objective guidance on the application of Section 2 to bundled rebates . . . it would be preferable to allow the case law and economic analysis to develop further."⁶ Since then, there has been

Sherman Act Section 2 Joint Hearing: Tying Session Hr'g Tr. 29, Nov. 1, 2006 (Evans) (noting that "when practices are common in pretty competitive markets, . . . there should be a presumption that these practices are procompetitive"); RICHARD A. POSNER, *ANTITRUST LAW* 253 (2d ed. 2001) ("If the practice is one employed widely in industries that resemble the monopolist's but are competitive, there should be a presumption that the monopolist is entitled to use it as well.").

³ See *infra* Part I(C)(1). See generally Nov. 29 Hr'g Tr., *supra* note 2, at 7–23 (Nalebuff); Patrick Greenlee et al., *An Antitrust Analysis of Bundled Loyalty Discounts*, 26 INT'L J. INDUS. ORG. 1132 (2008); Barry Nalebuff, *Bundling As a Way to Leverage Monopoly* (Yale Sch. of Mgmt., Working Paper No. ES-36, 2004) [hereinafter Nalebuff, *Bundling*]; Barry Nalebuff, *Loyalty Rebates* (Oct. 29, 2006) (hearing submission); Janusz Ordovery & Greg Shaffer, *Exclusionary Discounts* (Aug. 25, 2006) (hearing submission).

⁴ See *infra* Part I(B).

⁵ 324 F.3d 141 (3d Cir. 2003) (en banc).

⁶ Brief for the United States as Amicus Curiae at 19,

additional case law as well as an explosion of discourse and debate among legal and economic academics and practicing lawyers about the economic effects of and proper legal approach to bundled discounts.⁷

This chapter explores whether appropriate standards for analyzing bundled discounting by a monopolist are now more discernable. It examines the case law and the potential anticompetitive and procompetitive effects of bundled discounting. The chapter also discusses ways to analyze bundled discounting under section 2, including whether there are appropriate safe harbors that can be used in that analysis.

B. Background

Relatively few decisions address the legality of bundled discounting under section 2. As discussed below, most, but not all, courts that have considered the issue employ some type of a cost-based test to determine if the price of the bundle is below some measure of costs, but no consensus exists regarding the particular form of that test.

One of the earliest cases involving bundled discounts was *SmithKline Corp. v. Eli Lilly & Co.*⁸ In that case, before SmithKline entered the market, Lilly had used a volume-rebate plan to sell four patented antibiotics known as cephalosporins to nonprofit hospitals.⁹ When SmithKline licensed a fifth cephalosporin from

a foreign firm and sold it in competition with Lilly, Lilly responded by licensing the same drug and selling it as Kefzol.¹⁰ Lilly then modified its rebate plan by simultaneously reducing the rebate offered by roughly three percent and adding a “bonus dividend” of three percent provided that a hospital bought specified minimum quantities of three specific cephalosporins.¹¹ Lilly expected that hospitals would meet the target on its two dominant cephalosporins and would have to purchase the minimum quantities specified for Kefzol to qualify for the bonus dividend.¹²

The court found that SmithKline would have had to offer a rebate of more than twenty percent on its one product to match Lilly’s bundled rebate.¹³ If SmithKline had lowered its price to Lilly’s effective level, the court concluded, SmithKline’s drug would not have been sufficiently profitable to justify remaining in the market, even if SmithKline had been able to “reduce its costs of goods to Lilly’s level.”¹⁴ Thus, Lilly’s bundled rebates would have excluded SmithKline even if the latter firm were an equally efficient producer, and the court held that Lilly had violated section 2 when it used its monopoly power in two products to exclude the “slightly less efficient” SmithKline from the market for the competitive product.¹⁵

About twenty years after *SmithKline*, a different federal court analyzing a similar bundled-pricing plan found that the plan did not violate section 2. *Ortho Diagnostic Systems, Inc. v. Abbott Laboratories, Inc.* involved five assays that blood donor centers (BDCs) required to test blood for various viruses.¹⁶ Only defendant Abbott made and sold all five assays, and it had seventy to ninety percent of sales of four of them.¹⁷ The Council of

3M v. LePage’s Inc., 542 U.S. 953 (2004) (No. 02-1865), available at <http://www.usdoj.gov/atr/cases/f203900/203900.pdf>.

⁷ See, e.g., 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 749b2 (Supp. 2007); Daniel A. Crane, *Mixed Bundling, Profit Sacrifice, and Consumer Welfare*, 55 EMORY L.J. 423 (2006); Greenlee et al., *supra* note 3; Thomas A. Lambert, *Evaluating Bundled Discounts*, 89 MINN. L. REV. 1688 (2005); Nalebuff, *Bundling*, *supra* note 3; Timothy J. Muris, *Antitrust Law & Economics: Exclusionary Behavior and Bundled Discounts* (Nov. 29, 2006) (hearing submission). See generally Nov. 29 Hr’g Tr., *supra* note 2, at 23–40 (Lambert) (describing various tests suggested by commentators).

⁸ 427 F. Supp. 1089 (E.D. Pa. 1976), *aff’d*, 575 F.2d 1056 (3d Cir. 1978).

⁹ *Id.* at 1093–94.

¹⁰ *Id.* at 1093.

¹¹ *Id.* at 1105.

¹² *Id.* at 1106.

¹³ *Id.*

¹⁴ *Id.* at 1108–09.

¹⁵ *Id.* at 1128–29.

¹⁶ 920 F. Supp. 455, 458 (S.D.N.Y. 1996).

¹⁷ *Id.* at 459.

Community Blood Bank Centers solicited bids on a contract to supply assays to member BDCs, asking for different pricing schedules depending on whether the BDC bought all five assays from the chosen seller.¹⁸ Abbott won the contract with pricing schedules that gave significant discounts on each assay if a BDC bought all five from Abbott.¹⁹ Ortho alleged that BDCs “‘felt that they had to buy’” at least two assays from Abbott and maintained that the discount plan created a significant incentive to buy all five from Abbott.²⁰

Drawing on *SmithKline*, the court framed the key question as “whether a firm that enjoys a monopoly on one or more of a group of complementary products, but which faces competition on others, can price all of its products above average variable cost and yet still drive an equally efficient competitor out of the market.”²¹ The court explained that a plaintiff “must allege and prove either that (a) the monopolist has priced below its average variable cost or (b) the plaintiff is at least as efficient a producer of the competitive product as the defendant, but that the defendant’s pricing makes it unprofitable for the plaintiff to continue to produce” the product.²² Because Ortho did not claim that it could not sell its products at a profit as a result of Abbott’s bundled discounting, the court found no section 2 violation.²³

Virgin Atlantic Airways Ltd. v. British Airways

PLC,²⁴ while primarily viewed as a single-product loyalty discount case,²⁵ also involved a bundled-discount claim. British Airways had entered into incentive agreements with travel agents and corporate customers that bundled routes by setting various targets for all British Airways routes or regional groups of routes and providing incentive payments each time a target was met.²⁶ Virgin Atlantic alleged that a corporate customer that purchased tickets on British Airways monopoly routes thus had an incentive to purchase British Airways tickets on routes where Virgin Atlantic competed, even though Virgin Atlantic charged less on those routes.²⁷ The court cited *Ortho* as holding “that there would be an antitrust violation if the competitive product in the bundle were sold for a price below average variable cost after the discounts on the monopoly items in the bundle were subtracted from the price of that competitive product.”²⁸ However, Virgin had little or no factual evidence that this situation had ever arisen in the varied bundling patterns, and the court refused to impose liability merely on the theoretical possibility of below-cost pricing.²⁹

In each of these cases, the court analyzed the discount based on the relationship between defendant’s prices and its costs to produce the goods that made up the bundle. The 2003 *LePage’s* decision represents a departure from this practice.³⁰ In *LePage’s*, a manufacturer of private-label transparent tape charged that 3M maintained a monopoly in the market for transparent tape through a bundled-rebate program for large retail chains.³¹ That program conditioned certain rebates on retail customers meeting multiple target-growth rates for their

¹⁸ *Id.* at 459–60.

¹⁹ *Id.* at 460–62.

²⁰ *Id.* at 461 (quoting court papers).

²¹ *Id.* at 467.

²² *Id.* at 469. While *Ortho* focused on whether the actual plaintiff was an equally efficient competitor, the Ninth Circuit’s decision in *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883, 905–08 (9th Cir. 2008), discussed below, concluded that the focus should instead be on whether a hypothetical equally efficient producer of the competitive product could meet the defendant’s discount. Commentators similarly criticize focusing on the actual plaintiff’s costs, rather than on those of a hypothetical equally efficient competitor. See, e.g., AREEDA & HOVENKAMP, *supra* note 7, ¶ 749a, at 241–42; Lambert, *supra* note 7, at 1729.

²³ 920 F. Supp. at 469–70.

²⁴ 69 F. Supp. 2d 571 (S.D.N.Y. 1999), *aff’d*, 257 F.3d 256 (2d Cir. 2001).

²⁵ Single-product loyalty discounts are discussed *infra* part II.

²⁶ 69 F. Supp. 2d at 574.

²⁷ *Id.* at 580.

²⁸ *Id.* at 580 n.8.

²⁹ *Id.* at 580–81.

³⁰ 324 F.3d 141 (3d Cir. 2003) (en banc).

³¹ *Id.* at 147.

purchases of 3M products in diverse product lines, such as home-care products, home-improvement products, and stationery products.³² The rebate program allegedly shifted purchases away from LePage's private-label tape and towards 3M's branded and private-label tape by inducing customers to meet targets for purchases of 3M tape or risk losing rebates on 3M's other products.³³ LePage's alleged that it would have to compensate customers for the loss of rebates across those product lines, not just for the loss of tape-specific rebates, to defeat this shift.³⁴ LePage's also argued that 3M's bundled rebates and other conduct shielded 3M's higher-priced Scotch brand tape against competition from LePage's private-label tape and thereby helped to maintain 3M's transparent-tape monopoly.³⁵ The jury found 3M liable for monopoly maintenance in violation of section 2.³⁶

The Third Circuit ultimately affirmed the judgment in an en banc decision. Notably, the court did not require LePage's to prove that either it or a hypothetical equally efficient competitor could not meet the discount without pricing below cost. Rather, the jury instructions, which the Third Circuit upheld, provided that that conduct is illegal under section 2 when it "'has made it very difficult or impossible for competitors to engage in fair competition.'"³⁷

Other courts, looking for more objective, cost-based standards such as those suggested by *Ortho* and other decisions, have disagreed with *LePage's*. In *Masimo Corp. v. Tyco Health Care Group, L.P.*, for example, the court vacated a jury finding of liability based on bundled discounts.³⁸ Disagreeing with the reasoning of *LePage's*, the court concluded "that as a general matter, absent evidence of predatory pricing or

tying, the practice of offering a discount on two or more bundled products is not anticompetitive under Section 2."³⁹ And in *Information Resources, Inc. v. Dun & Bradstreet Corp.*,⁴⁰ the court made no mention of *LePage's*, but rather cited *Virgin Atlantic* for the proposition that "[w]hen price discounts in one market are bundled with the price charged in a second market, the discounts must be applied to the price in the second market in determining whether that price is below that product's average variable cost."⁴¹ Similarly, in *Invacare Corp. v. Respironics, Inc.*, the court granted defendant summary judgment on section 2 claims where plaintiff and others bundled the same products as defendant and there was no allegation that defendant's bundles were priced below cost.⁴²

In *PeaceHealth*, the Ninth Circuit also disagreed with *LePage's* and applied a cost-based standard in evaluating bundled discounts.⁴³ *PeaceHealth* and *McKenzie* (the predecessor to *Cascade Health Solutions*) were competing providers of primary and secondary acute-care hospital services. *PeaceHealth* also provided tertiary-care services, in which it had a very high market share (approaching ninety percent in certain sub-specialties); *McKenzie* did not provide tertiary services.⁴⁴ *McKenzie*, which asserted that it could provide primary- and secondary-care services at a cost lower than *PeaceHealth's*,⁴⁵ brought monopolization and attempted-monopolization claims against *PeaceHealth* based on evidence that *PeaceHealth* offered bundled-service packages to some customers (insurance companies). These bundled offerings provided discounts on all services if insurance companies

³² *Id.* at 154.

³³ *Id.* at 157, 160–61.

³⁴ *Id.* at 161.

³⁵ *Id.* at 162.

³⁶ *Id.* at 163.

³⁷ *Id.* at 168 (quoting trial court).

³⁸ No. CV 02-4770 MRP, 2006 WL 1236666, *14 (C.D. Cal. Mar. 22, 2006).

³⁹ *Id.* at *13. However, the court also affirmed the jury's finding of liability based on single-product discounts, without applying a price-cost test. See *infra* Part II.

⁴⁰ 359 F. Supp. 2d 307 (S.D.N.Y. 2004).

⁴¹ *Id.*

⁴² No. 1:04 CV 1580, 2006 WL 3022968, *12 (N.D. Ohio Oct. 23, 2006).

⁴³ *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2008).

⁴⁴ *Id.* at 891.

⁴⁵ *Id.* at 897.

made PeaceHealth their sole preferred provider for primary, secondary, and tertiary care.⁴⁶

In analyzing PeaceHealth's bundled offerings, the Ninth Circuit rejected the *Lepage's* non-cost based approach in explaining that "the fundamental problem . . . is that it . . . concludes that all bundled discounts offered by a monopolist are anticompetitive with respect to its competitors who do not manufacture an equally diverse product line" and that it fails to consider whether such discounts may be procompetitive.⁴⁷ The Ninth Circuit also noted that the Supreme Court, which in *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*⁴⁸ and *Weyerhaeuser Co. v. Ross-Simmons Hardware Lumber Co.*⁴⁹ applied a cost-based test to predatory-pricing and predatory-bidding claims, respectively, "forcefully suggested that we should not condemn prices that are above some measure of incremental cost."⁵⁰ The court reviewed various applications of a price-cost test and ultimately adopted a "discount attribution" standard, under which defendant is not liable under section 2 where, when the full amount of its discount on the bundled offering is allocated to the competitive product or products, the resulting price is above defendant's incremental cost to produce the competitive product or products.⁵¹

Thus, the handful of federal courts analyzing bundled discounts under section 2 have developed conflicting standards. In particular, while the Third Circuit's 2003 en banc decision in *LePage's* did not apply an objective, cost-based test for determining the legality of bundled discounts under section 2, other cases, both before and after *LePage's*—including *PeaceHealth*—have applied a cost-based standard, albeit not always focusing on the same costs. As many panelists stressed, this lack of legal clarity makes

antitrust counseling and compliance difficult.⁵²

C. Analysis

Commentators and panelists recognize the ubiquity of bundled discounting and the benefits that can flow from it. But they also agree that, under certain circumstances, a monopolist's bundled discounting can potentially harm consumers.⁵³ However, there is no consensus among courts or commentators on the appropriate analysis of such potential harm.⁵⁴ This part of the chapter discusses the two principal theories of competitive harm from bundled discounting by a monopolist, the potential procompetitive benefits of bundled discounting, and a framework for analyzing bundled discounts under section 2, including potential safe harbors.

1. Theories of Competitive Harm

One theory of harm from bundled discounts is similar to the theory of harm from price predation of a single product and applies where bundle-to-bundle competition is reasonably possible—whether because an individual competitor can provide all the

⁵² See, e.g., Sherman Act Section 2 Joint Hearing: Conduct as Related to Competition Hr'g Tr. 14, May 8, 2007 [hereinafter May 8 Hr'g Tr.] (Rill); *id.* at 75 (Melamed); Sherman Act Section 2 Joint Hearing: Business Testimony Hr'g Tr. 63–64, 83, Feb. 13, 2007 [hereinafter Feb. 13 Hr'g Tr.] (Stern); Nov. 29 Hr'g Tr., *supra* note 2, at 167 (Crane).

⁵³ See generally Crane, *supra* note 7, at 443–47; Daniel L. Rubinfeld, *3M's Bundled Rebates: An Economic Perspective*, 72 U. CHI. L. REV. 243, 252–62 (2005); Greenlee et al., *supra* note 3, at 15; Nalebuff, *Bundling*, *supra* note 3; Muris, *supra* note 7, at 28–35. But see May 8 Hr'g Tr., *supra* note 52, at 61 (Muris) ("[E]mpirically we know almost nothing that tells us that there are anticompetitive problems from bundling.").

⁵⁴ See generally Sherman Act Section 2 Joint Hearing: Section 2 Policy Issues Hr'g Tr. 153–54, May 1, 2007 [hereinafter May 1 Hr'g Tr.] (Jacobson) (describing bundled discounting as having aspects of predatory pricing, tying, and exclusive dealing); Nov. 29 Hr'g Tr., *supra* note 2, at 75 (Sibley) ("[I]f there is a general legal theory of bundled discounts . . . it is not predatory pricing and it is not always going to be the same as tying either. It is going to be something else, and I don't know what it is."); AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b2.

⁴⁶ *Id.* at 892.

⁴⁷ *Id.* at 899.

⁴⁸ 509 U.S. 209 (1993).

⁴⁹ 127 S. Ct. 1069 (2007).

⁵⁰ *PeaceHealth*, 515 F.3d at 901.

⁵¹ *Id.* at 906–10. It is not entirely clear whether the court's standard was for a safe harbor or for liability.

products in the bundle, multiple competitors can team together to provide their own bundle, or sophisticated customers can assemble their own bundles. The primary difference is that with bundling there are multiple products, in contrast to one product in the predatory-pricing context. In either case, the below-cost pricing may force competitors to exit the market, after which a firm potentially could charge supracompetitive prices. Without below-cost pricing, equally efficient competitors would be able to match the bundled price, and competition would not be harmed.

A second theory of competitive harm may apply when no rival can offer a competing bundle. In the simplest case, Firm A has a monopoly in Product X and bundles X with Product Y, at a discount. Firm B only sells Product Y, and no one other than Firm A sells X. In this situation, Firm A's bundled discounting can have anticompetitive effects similar to those flowing from some anticompetitive ties. Specifically, it may allow Firm A to use its monopoly power in X to obtain a second monopoly in Y, or it may assist Firm A in maintaining its monopoly in X.

The tying theory of bundled-discounting harm can further be illustrated with a hypothetical from the *Ortho* opinion.⁵⁵ The hypothetical assumes that only A makes conditioner, that both A and B make shampoo, and that consumers must use both products. A's average variable costs are \$2.50 for conditioner and \$1.50 for shampoo, while B's average variable cost for shampoo is \$1.25. A prices conditioner and shampoo at \$5 and \$3 if bought separately, but offers a bundled price of \$5.25 if the products are bought as a package. This is above A's average variable cost of \$4 for both products. However, in order for B to compete for shampoo sales, it must persuade the customer to buy its shampoo while paying the unbundled price of \$5 for A's conditioner; this means that B can charge no more than \$0.25 for shampoo, which is below both A's average variable cost for shampoo and B's own lower average variable cost.

The harm to the competitive process in this hypothetical does not come about in the same way as it does with predatory pricing, because A is not charging a price—either for the goods that make up the bundle or for the bundle itself—that is less than its average variable cost for both products. Rather, the structure and level of A's prices result in all or most purchasers buying both products from Firm A, because the price of the bundle is lower than the prices customers would have to pay to acquire the bundled goods outside the bundle. Because the anticompetitive potential of such conduct does not arise from the monopolist charging below-cost prices, but from linking the two products, the impact of the conduct described in the hypothetical resembles that of tying more than that of predatory pricing.

2. Potential Procompetitive Benefits

Commentators have pointed out many efficiencies potentially associated with bundled discounting. In much the same way that tying can lower a firm's costs,⁵⁶ bundled discounting can lower a firm's costs. As one commentator explains, many of these discounting practices "are explained by economies of scale or scope in either manufacturing or transacting."⁵⁷ Bundled discounting also can allow businesses both to induce existing customers to try new product or service offerings and give retailers incentives to promote particular products and services.⁵⁸ Firms may also use bundled discounting to price discriminate in a way that

⁵⁶ See *supra* Chapter 5, Part III(B).

⁵⁷ AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b; see also Daniel A. Crane, *Multiproduct Discounting: A Myth of Nonprice Predation*, 72 U. CHI. L. REV. 27, 40 (2005) ("Diversified firms may achieve economies of scope or scale, reduce transaction costs or stimulate demand by selling products in a package . . ." (footnotes omitted)); David S. Evans & Michael Salinger, *Why Do Firms Bundle and Tie? Evidence from Competitive Markets and Implications for Tying Law*, 22 YALE J. ON REG. 37, 41 (2005) ("Bundling—offering two or more products at a single price—can provide efficiencies such as marginal cost savings, quality improvement, and customer convenience.").

⁵⁸ Nov. 29 Hr'g Tr., *supra* note 2, at 111–12 (Muris); see also Crane, *supra* note 7, at 430–43; Muris, *supra* note 7, at 3–7.

⁵⁵ 920 F. Supp. 455, 467 (S.D.N.Y. 1996).

increases output and economic efficiency.⁵⁹

3. Safe Harbors

Because of the ubiquity of bundled discounting and the disagreement as to the proper antitrust analysis, panelists noted that there would be a substantial benefit from greater clarity and more administrable rules.⁶⁰ In particular, the Third Circuit's decision in *LePage's*, upholding jury instructions stating that conduct is illegal under section 2 when it "has made it very difficult or impossible for competitors to engage in fair competition,"⁶¹ has been roundly criticized for its failure to provide any useful guidance.⁶² Many commentators suggest that clear, administrable standards for analyzing bundled discounting must start with some kind of price-cost safe harbor or screen,⁶³ and many panelists agreed.⁶⁴

⁵⁹ See, e.g., AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b2, at 263–64 ("[B]undling may take advantage of the fact that different customers have different demand elasticities for individual goods. By bundling them . . . output can go up . . . and production and distribution costs can decline.").

⁶⁰ See, e.g., May 8 Hr'g Tr., *supra* note 52, at 14, 76–77 (Rill); *id.* at 75–76 (Melamed); *id.* at 78 (Creighton); May 1 Hr'g Tr., *supra* note 54, at 18–19 (Kolasky); *id.* at 19 (Jacobson); *id.* at 31–32 (Baer); *id.* at 144–145 (Kolasky); Feb. 13 Hr'g Tr., *supra* note 52, at 63–64 (Stern); Nov. 29 Hr'g Tr., *supra* note 2, at 167–68, 170 (Crane). Similarly, the Antitrust Modernization Commission (AMC), before going on to recommend a three-part test for bundled discounts including a price-cost safe harbor, first concluded that "[t]he lack of clear standards regarding bundling . . . may discourage conduct that is procompetitive or competitively neutral and thus may actually harm consumer welfare." ANTITRUST MODERNIZATION COMM'N, REPORT AND RECOMMENDATIONS 94 (2007), available at http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf.

⁶¹ 324 F.3d 141, 168 (3d Cir. 2003) (en banc) (quoting trial court).

⁶² See, e.g., May 8 Hr'g Tr., *supra* note 52, at 60–61 (Pitofsky, Muris); *id.* at 78 (Creighton); May 1 Hr'g Tr., *supra* note 54, at 18–19 (Kolasky); Nov. 29 Hr'g Tr., *supra* note 2, at 86–89 (Lambert, Kattan); *id.* at 166–68 (Crane); see also ANTITRUST MODERNIZATION COMM'N, *supra* note 60, at 97 (criticizing the decision as "too vague and therefore . . . likely to chill welfare-enhancing bundled discounts or rebates" (footnote omitted)).

⁶³ See, e.g., ANTITRUST MODERNIZATION COMM'N,

In *PeaceHealth*, the Ninth Circuit focused on the question whether a price-cost test was needed and invited supplemental amicus curiae briefs addressing whether a plaintiff bringing a section 2 claim based on bundled discounting "must prove that the defendant's prices were below an appropriate measure of the defendant's cost."⁶⁵ The vast majority of the amicus briefs supported adoption of a price-cost screen.⁶⁶ As discussed above, the *PeaceHealth* decision ultimately adopted a price-cost test.⁶⁷

Support for a price-cost safe harbor for bundled discounting, however, is not universal. For example, while almost all the *PeaceHealth* amici supported a price-cost test, one brief suggested that cost-based tests ignore situations in which less efficient competitors constrain a monopolist's pricing and argued: "Because bundled discounts need not necessarily be below cost to harm competition, the proper legal standard should focus on the conduct's effect on competition rather than its relationship to defendant's cost structure."⁶⁸

In addition, some panelists suggested that a price-cost safe harbor would be inappropriate

supra note 60, at 99–100; AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b2, at 252–57; Crane, *supra* note 7, at 480–84; Muris, *supra* note 7, 41–60; Carl Shapiro, Exclusionary Conduct: Testimony Before the Antitrust Modernization Commission 18 (Sept. 29, 2005) (unpublished manuscript), available at http://govinfo.library.unt.edu/amc/commission_hearings/pdf/Shapiro_Statement.pdf.

⁶⁴ See Nov. 29 Hr'g Tr., *supra* note 2, at 95–99, 185–94. One panelist who stated that defendant's satisfying an appropriate price-cost test would be "pretty convincing" nonetheless suggested that the price-cost test should not necessarily be part of plaintiff's burden. *Id.* at 186–88 (Tom).

⁶⁵ Mar. 20, 2007 Order, *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2008) (Nos. 05-35627, 05-36153, 05-36202).

⁶⁶ See, e.g., *infra* notes 75, 83 and accompanying text.

⁶⁷ 515 F.3d 883, 909–10 (9th Cir. 2008).

⁶⁸ Brief of Amici Curiae American Antitrust Institute, Consumer Federation of America and Consumers Union Supporting McKenzie-Williamette and Affirmance at 21, *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2008) (Nos. 05-36153, 05-36202); see also *id.* at 24.

because there could be situations in which the bundled price might not truly be a cost savings to the consumer.⁶⁹ They posit that there may be instances where there is not any real price cut involved because “a firm with monopoly power raises the standalone price of its monopoly product—presumably to some above-monopoly level—and then introduces a bundled-rebate program offering a ‘sham’ discount.”⁷⁰ In this situation, the bundled discount does not result in lower prices. In particular, one panelist stated that, given certain assumptions about the markets, one can determine whether consumer welfare has gone up or down as a result of bundled discounting, and thus perhaps whether section 2 has been violated, simply by determining whether the out-of-bundle price of the monopoly good is higher than its pre-bundled price. In that case, he maintained, “you don’t need to know anything about costs.”⁷¹

However, other panelists questioned whether the frequency of such illusory discounts is sufficient to shape legal rules.⁷² In particular, one panelist questioned both the likelihood of fictitious discounts and the ability to distinguish them from the more typical bundled discounts that do provide customers the benefit of lower prices.⁷³ Product attributes may have changed,⁷⁴ or prices may have moved for a variety of supply and demand conditions

independent of the bundling or just because a firm with monopoly power decides it was not charging the correct monopoly price.

The Department believes that sound, administrable rules for bundled discounting by a monopolist would be valuable and that screens or safe harbors have the potential to provide more certainty in this area without harming antitrust enforcement. Two different price-cost safe harbors for bundled discounting have been the subject of the majority of the commentary and discussion: the total-bundle predation-based (or aggregate or *Brooke Group*) safe harbor and the discount-allocation (or *Ortho* or AMC) safe harbor. We turn to them now.

a. The Total-Bundle Predation-Based Safe Harbor

One proposed safe harbor would protect a firm’s bundled discounting where the discounted price of the bundle exceeds an appropriate measure of the aggregate cost of the bundle’s constituent products. This approach would mirror that followed in predatory-pricing cases, analyzing defendant’s price and cost for the entire bundle.⁷⁵

This safe harbor would allow firms significant latitude in pricing bundles. “[T]he primary advantages of such a rule would be that it is administrable and predictable, and would be the least likely to pose undue risks of overdetering procompetitive behavior.”⁷⁶ Support for this safe harbor does not rely on the conclusion that a bundle priced above an appropriate measure of cost can never be anticompetitive. Rather, like the approach in *Brooke Group*, it is based on the reasoning that above-cost bundled discounting very often benefits consumers and “is beyond the practical ability of a judicial tribunal to control without courting intolerable risks of chilling legitimate

⁶⁹ May 1 Hr’g Tr., *supra* note 54, at 142–43 (Elhauge); Nov. 29 Hr’g Tr., *supra* note 2, at 69–70 (Nalebuff); *id.* at 170–71 (Tom).

⁷⁰ Rubinfeld, *supra* note 53, at 252 (citing authors of contractual-tying theory).

⁷¹ Nov. 29 Hr’g Tr., *supra* note 2, at 95 (Sibley).

⁷² *Id.* at 71–74 (Kattan, Lambert).

⁷³ *Id.* at 71 (Kattan). He also suggested that a price-cost safe harbor could still be applied and may be adequate to address the concerns raised by the sham or fictitious-discount models. *Id.* at 93; *see also id.* at 93 (Sibley) (suggesting that *SmithKline* was a case in which a price-cost safe harbor was in fact applied to what may have been a fictitious discount).

⁷⁴ Nov. 29 Hr’g Tr., *supra* note 2, at 71 (Kattan) (suggesting difficulty in assessing whether the bundling caused out-of-bundle prices to increase, because of other changes (e.g., quality, performance, and product attributes) that may take place over the same period).

⁷⁵ Muris, *supra* note 7, at 46–60; *see, e.g.*, Brief of Pacific Bell Telephone Company (D/B/A AT&T California) and Visa U.S.A. Inc. as Amici Curiae Supporting Reversal, *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2008) (Nos. 05-35627, 05-35640, 05-36153, 05-36202).

⁷⁶ Muris, *supra* note 7, at 30.

price cutting.”⁷⁷ As one panelist explained this view, “[I]t is simply too difficult to separate the pro-competitive wheat from the anticompetitive chaff and [trying to do so] will end up chilling procompetitive bundled discounting . . . so the best approach is to have a per se legality rule for above-cost bundled discounts, very much along the lines of the *Brooke Group* rule.”⁷⁸

The AMC considered but did not endorse the total-bundle predation-based safe harbor. The AMC Report noted testimony before it that this rule “ignores the effects of bundling insofar as it permits bundled discounts where a monopolist lowered its price in a competitive market below the monopolist’s average variable cost for the competitively priced product.”⁷⁹ Similarly, one panelist criticized the total-bundle predation-based safe harbor because it

assumes either (1) that above-cost bundled discounts are so unlikely to exclude equally or more efficient competitors that the search for exclusionary bundled discounts is not worth the effort, or (2) that there is no alternative evaluative approach that is easily administrable and is unlikely to overdeter proconsumer discounts. Both assumptions are probably untrue.⁸⁰

One treatise suggests applying a total-bundle predation-based safe harbor only in instances in which it is likely that other significant rivals would offer a comparable bundle.⁸¹ Where such bundle-to-bundle competition is possible, equally efficient competitors would be able to match an above-cost bundled price.⁸²

⁷⁷ *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 223 (1993).

⁷⁸ Nov. 29 Hr’g Tr., *supra* note 2, at 26–27 (Lambert) (describing but not endorsing the rule).

⁷⁹ ANTITRUST MODERNIZATION COMM’N, *supra* note 60, at 98 (citing AMC testimony of Steven Salop).

⁸⁰ Lambert, *supra* note 7, at 1705; *see also* Nov. 29 Hr’g Tr., *supra* note 2, at 27 (Lambert).

⁸¹ *See AREEDA & HOVENKAMP, supra* note 7, ¶ 749b, at 245–46, 258–59.

⁸² *Id.* at 246 (“A rule condemning above-cost package discounts in this situation would run into all the

b. The Discount-Allocation Safe Harbor

A number of courts and commentators have sought to develop legal standards that reflect the possibility that a monopolist’s bundled discounting could pass a predation-based test applied to the entire bundle and still exclude an equally efficient producer of one or more products in the bundle. These efforts have resulted in the development of the discount-allocation safe harbor, which compares an appropriate measure of defendant’s cost for the competitive product in a bundle to defendant’s “imputed price” of that product: the price after allocating to the competitive product all discounts and rebates attributable to the entire bundle.⁸³

One treatise supports a discount-allocation safe harbor in certain cases.⁸⁴ A number of panelists at the hearings also expressed qualified support for it,⁸⁵ and the *PeaceHealth*

problems that predatory pricing law faces with respect to single-product pricing.”).

⁸³ *See, e.g.,* Brief of *Amici Curiae* Law Professors in Support of Defendant-Appellant and Cross-Appellee PeaceHealth Supporting Reversal of the Verdict Concerning Bundled Discounts, *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2008) (Nos. 05-35627, 05-35640, 05-36153, 05-36202) [hereinafter Law Professors’ *Amici* Brief]; Brief of *Amici Curiae* Genentech, Inc., Honeywell International Inc., Kimberly-Clark Corp., Kraft Foods, Inc., The Coca-Cola Company, and United Technologies Corp. in Support of Appellant/Cross-Appellee PeaceHealth, 515 F.3d 883 (9th Cir. 2008) (Nos. 05-035627, 05-35640) [hereinafter Genentech et al. *Amici* Brief].

⁸⁴ AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b, at 250–59 (supporting a discount-allocation safe harbor in instances where no significant rivals offer or are likely to offer the same package and viewing it as analogous to tying’s requirement that two products are actually tied together).

⁸⁵ *See, e.g.,* May 8 Hr’g Tr., *supra* note 52, at 59 (Rill) (preferring the aggregate-cost rule but suggesting as an alternative a discount-allocation safe harbor); *id.* at 64 (Melamed) (supporting what he described as AMC Commissioner Carlton’s approach of using this safe harbor and applying a no-economic-sense test to conduct outside it); *id.* at 68–70 (Rule) (supporting the safe harbor and, for conduct outside it, focusing on exclusion or foreclosure); Nov. 29 Hr’g Tr., *supra* note 2, at 21, 94, 97–98 (Nalebuff), *id.* at 65 (Kattan); *id.* at 77

decision adopted this rule.⁸⁶ A panelist who supported this safe harbor maintained that its price-cost test is administrable because “determining average variable cost . . . presents a relatively tractable problem, even though it is a fairly complicated one It leads to predictable results.”⁸⁷ Proponents of a discount-allocation safe harbor also contend that it “brings discipline and structure to pretrial dispositive motions and directed verdict motions, a required matrix for expert reports and testimony, and a frame for jury instructions.”⁸⁸

One panelist, however, saw both operational and analytical difficulties with a discount-allocation test. Operationally, he saw it as creating “something of a daunting task . . . [with] a margin or opportunity for error . . . that I think is quite substantial.”⁸⁹ A commentator similarly suggests that “[t]he test is almost certainly not administrable.”⁹⁰ He contends that it may be difficult to measure both the discount in multi-product bundle situations, particularly when consumers purchase various combinations of products in the bundle, and the cost of the competitive product, particularly given the difficulty of identifying and allocating joint costs for goods in a bundle.⁹¹

In addition, the equally efficient competitor concept that is the foundation for the discount-allocation safe harbor may pose theoretical problems.⁹² For example, if there are economies of scale, the monopolist may have lower costs

simply because it presently has higher volume. It may similarly have lower costs where there are economies of scope involved in offering multiple products. One panelist, who opposed the discount-allocation safe harbor and supported the *Brooke Group* rule, asked: “[A]ll else equal, how can a firm that offers you less of what you want be equally efficient with a firm that offers you more?”⁹³ He stated that these problems with the equally efficient competitor concept in this context call into question the underlying premise of the discount-allocation safe harbor.⁹⁴

The AMC proposed a three-part test for bundled discounting.⁹⁵ The first “screen” of that test in effect sets forth a discount-allocation safe harbor. It requires plaintiff to show that “after allocating all discounts and rebates attributable to the entire bundle of products to the competitive product, the defendant sold the competitive product below its incremental cost for the competitive product.”⁹⁶ If plaintiff cannot show price below cost after this discount allocation, the safe harbor applies and the inquiry ends.⁹⁷

The AMC concluded that its discount-allocation screen provides clarity to businesses and is sufficiently administrable for courts to apply.⁹⁸ The AMC also viewed this screen as subjecting to scrutiny under section 2 only those bundled discounts that “could exclude a hypothetical equally efficient competitor.”⁹⁹ The AMC recognized that this would permit bundled discounts that could exclude a less efficient competitor that had nevertheless provided some constraint on pricing.¹⁰⁰

(Sibley); *id.* at 121, 128–29 (Crane); *id.* at 160, 188–91 (Ordoover); *see also id.* at 151–57 (Tom) (questioning whether a safe-harbor approach rather than use of presumptions is appropriate).

⁸⁶ 515 F.3d 883, 903 (9th Cir. 2008). Some other case law appears to suggest it as well. *See supra* Part I(B).

⁸⁷ Nov. 29 Hr’g Tr., *supra* note 2, at 62–63 (Kattan).

⁸⁸ Law Professors’ Amici Brief, *supra* note 83, at 15.

⁸⁹ May 8 Hr’g Tr., *supra* note 52, at 58 (Rill); *see also id.* at 58–60 (concluding that it nonetheless might be appropriate if employed as a safe harbor).

⁹⁰ Aaron M. Panner, *Bundled Discounts and the Antitrust Modernization Commission*, ESAPIENCE CENTER FOR COMPETITION POLICY, July 2007, at 6.

⁹¹ *Id.* at 5–7.

⁹² *See* Brief for the United States as Amicus Curiae, *supra* note 6, at 13 n.10; Chapter 3, Part III(C).

⁹³ Nov. 29 Hr’g Tr., *supra* note 2, at 113 (Muris).

⁹⁴ May 8 Hr’g Tr., *supra* note 52, at 61 (Muris).

⁹⁵ ANTITRUST MODERNIZATION COMM’N, *supra* note 60, at 99.

⁹⁶ *Id.*

⁹⁷ *Id.* at 100.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Compare, e.g.,* May 1 Hr’g Tr., *supra* note 54, at 143–44 (Elhauge) (noting both that a less efficient rival may constrain a monopolist’s pricing and that a monopolist can raise its rivals’ costs by denying it

However, the AMC reasoned that the difficulties of assessing those circumstances, the lack of predictability and administrability of any standard that would capture them, and the undesirability of a test that would protect less efficient competitors made reliance on the hypothetical equally efficient competitor concept appropriate for bundled-pricing practices.¹⁰¹

As is evident from the above discussion, bundled discounts share characteristics of both predatory pricing and tying. Professor Hovenkamp suggests that they “are best analyzed by a model that draws a little from each area.”¹⁰² The Department agrees and sets forth below two safe harbors for bundled discounts, one applicable to a predation theory and one applicable to a tying theory.

The Department believes that where bundle-to-bundle competition is reasonably possible, the potential competitive harm of bundled discounting mirrors that of predatory pricing. The price-cost safe harbor in this instance should therefore mirror the predatory-pricing safe harbor: the bundled discount should be

lawful if the price of the bundle is not below an appropriate measure of cost of the bundle.¹⁰³ In addition, as in ordinary predatory-pricing analysis, a showing that recoupment is likely should be required.

The Department believes that where bundle-to-bundle competition is reasonably possible, the potential competitive harm of bundled discounting mirrors that of predatory pricing. The price-cost safe harbor in this instance should therefore mirror the predatory-pricing safe harbor.

Where bundle-to-bundle competition is not reasonably possible because of the inability of any substantial competitor or group of competitors to provide a similar range of items, the Department believes that the potential competitive harm of bundled discounting more closely resembles that from tying than that from predatory pricing. In these circumstances, the Department believes that a discount-allocation safe harbor that compares an appropriate measure of a monopolist’s cost for the competitive product in a bundle to its imputed price of that product—the price after allocating to the competitive product all discounts and rebates attributable to the entire bundle—is the appropriate approach. A plaintiff, therefore, would be required to show that defendant sold the competitive product at an imputed price that was below its incremental cost of that product.¹⁰⁴

economies of scale), and Steven C. Salop, Avoiding Error in the Antitrust Analysis of Unilateral Refusals to Deal 5 (Sept. 21, 2005) (unpublished manuscript), available at http://govinfo.library.unt.edu/amc/commission_hearings/pdf/Salop_Statement_Revised%209-21.pdf (“Entry by higher cost . . . competitors can provide competition to a monopolist and cause prices to fall and output to rise, which increases consumer welfare and allocative efficiency.”), with AREEDA & HOVENKAMP, *supra* note 7, ¶ 749a, at 242 (“Requiring the defendant’s pricing policies to protect the trade of higher cost rivals is overly solicitous of small firms and denies customers the benefits of the defendant’s lower costs.”), and *id.* ¶ 749b1, at 249 (“[N]o firm, not even a monopolist, is a trustee for another firm’s economies of scale. To force such a firm to hold a price umbrella over its rivals . . . in order to protect the rivals’ inefficiently small production, would be a blatant example of protecting competitors at the expense of consumers.”).

¹⁰¹ ANTITRUST MODERNIZATION COMM’N, *supra* note 60, at 100. The AMC also noted that it was not “recommending application of [its three-part test] outside the bundled pricing context, for example in tying or exclusive dealing cases.” *Id.* at 114 n.157.

¹⁰² AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b2, at 251.

¹⁰³ See *supra* chapter 4, part I (C)(3) for a discussion of the appropriate cost measures to apply in predatory-pricing cases.

¹⁰⁴ See also ANTITRUST MODERNIZATION COMM’N, *supra* note 60, at 99 (stating that “after allocating all discounts and rebates attributable to the entire bundle of products to the competitive product, the defendant sold the competitive product below its incremental cost for the competitive product”). Where there are multiple competitive products in such a bundle, the Department believes that the discount-allocation safe harbor should apply to all of the monopolist’s competitive products together. For example, if the monopolist produces monopoly good X and competitive goods Y and Z, the discount-allocation safe harbor should apply to goods Y and Z together, regardless of whether plaintiff or any

Where bundle-to-bundle competition is not reasonably possible, the Department believes that a discount-allocation safe harbor is appropriate.

The Department recognizes that it is theoretically possible for anticompetitive conduct to come within the discount-allocation safe harbor, particularly where the bundled discount denies competitors the ability to attain economies of scale. The hypothetical equally efficient competitor concept on which the safe harbor is based is imperfect. However, the Department believes that the risk of false negatives posed by employing the safe harbor is insufficient to warrant further consideration of conduct that comes within the safe harbor, given the administrative costs of proceeding, the risk of erroneous condemnations of conduct, and, perhaps most importantly, the potential chilling effect on legitimate price discounting.¹⁰⁵

4. Analysis of Bundled Discounts Falling Outside a Safe Harbor

An often overlooked concern with adopting any safe harbor is that conduct falling outside the safe harbor might inappropriately give rise to a negative presumption about the conduct.¹⁰⁶

other rival produces both goods Y and Z. Because goods Y and Z are competitive, a rival could offer these goods in a package even if the rival did not itself produce both goods. Equally efficient producers of Y and Z could jointly offer a Y-Z package and would not be foreclosed by the monopolist's bundled offering if the monopolist came within the discount-allocation safe harbor as applied to Y-Z together.

¹⁰⁵ The AMC and others have been especially concerned about the risk of false positives in prosecuting bundled discounting, relative to the likelihood of false negatives. See, e.g., ANTITRUST MODERNIZATION COMM'N, *supra* note 60, at 94–100; Nov. 29 Hr'g Tr., *supra* note 2, at 55–64 (Kattan); AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b2, at 243–45; Crane, *supra* note 7, at 465–68; Muris, *supra* note 7, at 8. But see Roy T. Englert, Jr., *Defending the Result in Lepage's v. 3M: A Response to Other Commentators*, 50 ANTITRUST BULL. 481, 485–86, 497 (2005) (suggesting that there may be more reason to worry about false negatives relative to false positives for bundled pricing than with predatory pricing).

¹⁰⁶ Two AMC Commissioners, although joining the

Several panelists observed that bundled discounts can exclude equally efficient competitors while increasing consumer welfare.¹⁰⁷ One panelist cautioned that where defendant fell outside a price-cost safe harbor, “you would still want some sensible explanation of how this gives the defendant power over price, how prices go up as a result.”¹⁰⁸ A safe harbor can be counterproductive if businesses or courts assume improperly that failing to come within it creates a presumption of anticompetitive conduct.

A safe harbor can be counterproductive if businesses or courts assume improperly that failing to come within it creates a presumption of anticompetitive conduct.

A safe harbor should, therefore, not be misunderstood as a demarcation between legal and illegal conduct. Rather, it is a simple statement of conduct that is clearly legal. Failure to come within it does not by itself indicate harm to competition. If defendant's pricing falls outside the discount-allocation safe harbor, then the bundled discounting is potentially exclusionary. A bundled discount that falls outside the discount-allocation safe harbor still has to be analyzed for competitive effects.¹⁰⁹

AMC's unanimous recommendation on how to treat bundled discounting, expressed concern that many pricing schemes where exclusion is not an issue would fall outside the safe harbor and thus be subject to further scrutiny. See ANTITRUST MODERNIZATION COMM'N, *supra* note 60, at 99 n.*; see also *id.* at 398–99 (if the AMC's discount-allocation safe harbor is adopted by courts, there should not be a negative presumption from failing it).

¹⁰⁷ See, e.g., Nov. 29 Hr'g Tr., *supra* note 2, at 41, 43–45 (Sibley); *id.* at 59–60, 92 (Kattan); *id.* at 118 (Muris).

¹⁰⁸ *Id.* at 201 (Tom); see also May 8 Hr'g Tr., *supra* note 52, at 69–70 (Rule) (stressing the importance of focusing on the extent of the exclusion of competition for pricing that falls outside the safe harbor); *id.* at 72 (Melamed) (“I assume everybody agrees here we have to have a rigorous competitive effects test.”).

¹⁰⁹ As discussed above, the Department believes that

The third prong of the AMC's three-pronged test¹¹⁰ requires plaintiff to show that "the bundled discount or rebate program has had or is likely to have an adverse effect on competition."¹¹¹ The AMC Report does not describe how an actual or likely adverse effect on competition would be shown. An amicus brief filed in *PeaceHealth* signed by, among others, two AMC Commissioners, purports to describe the analysis under the AMC's third prong as a rule-of-reason analysis, stating that courts would determine whether the pricing practice, net of efficiencies it may create, is likely to increase prices, reduce output, or otherwise impair competition substantially in a relevant market. Under this approach, the impact on rivals must be found to be so substantial, and the ability of others to enter or expand so limited, that rivals can no longer operate as a meaningful constraint on

ordinary predatory-pricing analysis should apply if bundle-to-bundle competition is reasonably possible.

¹¹⁰ The second prong of the AMC's test requires plaintiff to show that defendant is likely "to recoup [its] short-term losses." ANTITRUST MODERNIZATION COMM'N, *supra* note 60, at 99. This requirement effectively serves as another screen. However, the Department believes this requirement is logically problematic, because a defendant that fails the first discount-allocation prong is not necessarily incurring any short-term losses from offering bundled discounts, so there may not be any short-term losses to recoup. The *PeaceHealth* court rejected the recoupment prong of the AMC test on the ground that, as opposed to predatory pricing, "exclusionary bundling does not necessarily involve any loss of profits for the bundled discounter," making it "analytically [un]helpful to think in terms of recoupment of a loss that did not occur." 515 F.3d 883, 910 n.21 (9th Cir. 2008). One AMC Commissioner has suggested that the recoupment prong was inserted largely to make the AMC's bundled-discounting test look more like the *Brooke Group* test for predatory pricing and that, while a recoupment safe harbor is part of the AMC recommendation, he "wouldn't pay an awful lot of attention to it." May 1 Hr'g Tr., *supra* note 54, at 155–56 (Jacobson). Moreover, if the competitive harm that may flow from bundled discounts (where bundle-to-bundle competition is not possible) is not really from predatory pricing, there would appear to be little reason to try to mirror the *Brooke Group* predatory-pricing test.

¹¹¹ ANTITRUST MODERNIZATION COMM'N, *supra* note 60, at 99.

defendant's monopoly power.¹¹² The brief does not provide further detail as to exactly what a plaintiff would have to show to establish this part of its case under the AMC's test.

Panelists addressed the required extent of impact on rivals, considering whether a rival's exit is required for the competitive process to be harmed. Some panelists contended that a plaintiff should not have to show that competitors exited the market, noting that harm to competition can occur even if competitors remain. For example, one panelist stated that "if you are able to keep your rivals at 10 and 15 percent, they may choose not to invest in this business, not to try to expand it . . . and there can be tremendous harm in the long run."¹¹³ Another suggested that bundled discounting is harmful when it allows a competitor to operate profitably but at a scale sufficiently constricted so as to render it much less constraining of the market outcome.¹¹⁴

While agreeing that competitive harm could occur even if rivals were not driven to exit the market, other panelists cautioned against antitrust intervention in these instances, especially considering that bundled discounting offers lower prices immediately to consumers. One panelist suggested that the need for efficient legal rules and the concern for false positives dictate that "[a]s a practical matter, we ought to be cautious if the exclusion is partial."¹¹⁵ Another concluded that plaintiff's claim should fail if the allegedly aggrieved rival is continuing to operate profitably in the market for the competitive good, even if at a much lower volume or market share than previously.¹¹⁶

Another topic of debate was how to treat non-exclusionary explanations for discounting. The AMC Report did not address this question, except in the Separate Statement of Commissioner Carlton. He explained that, in

¹¹² Genentech et al. Amici Brief, *supra* note 83, at 19, 20.

¹¹³ Nov. 29 Hr'g Tr., *supra* note 2, at 102 (Nalebuff).

¹¹⁴ *Id.* at 177–79 (Ordovery).

¹¹⁵ *Id.* at 179 (Muris).

¹¹⁶ *Id.* at 99–100 (Lambert).

the standard predation model, “it is odd for price to be below marginal cost in the absence of a predatory goal”¹¹⁷ but that in the context of bundling:

it is *not* odd to have the firm fail the first prong of the AMC test in the absence of a predatory goal. The reason is that bundling can be used as a method of price discrimination and it can be optimal for a firm, with no predation motivation, to set prices that fail the first prong.¹¹⁸

Accordingly, he suggested allowing a defense for bundled discounting based on legitimate business reasons unrelated to predation and that there should be no presumption against pricing that fails the first prong.¹¹⁹ One panelist suggested that Commissioner Carlton’s Separate Statement effectively articulates a no-economic-sense test for bundled discounts falling outside the discount-allocation safe harbor.¹²⁰

Another panelist similarly suggested that “any explanation that the defendant could offer that’s accepted as the true explanation that is not an exclusionary explanation should be legitimate.”¹²¹ He agreed that this sounded like employing a no-economic-sense test to pricing outside the safe harbor and observed that while a profit-sacrifice or no-economic-sense test may be difficult to apply as a starting point, it may make sense as a defense.¹²²

One treatise states that “[c]onsideration of competitively benign explanations is particularly critical when the challenged practice is a discount, because low prices are

the most important goal of antitrust policy.”¹²³ Thus, “Any proven explanation for a package discount that does not depend on exclusion of rivals should indicate legality.”¹²⁴ Among the explanations noted are economies of scale or scope and price discrimination. “Bundling explained by price discrimination and/or scale economies is ‘exclusionary’ only in the quixotic sense that any practice that increases a seller’s output is exclusionary. If this firm sells more, then very likely someone else is selling less.”¹²⁵

One panelist suggested, however, that allowing bundled discounts whenever there was any non-exclusionary explanation could ultimately lead to consumers paying higher prices—that efficiency justifications may not lower the monopolist’s costs sufficiently to offset anticompetitive effects.¹²⁶ More generally, two other panelists voiced concern about relying on evidence of either anticompetitive intent or business justification. One panelist stated that “trying to . . . look for evidence of intent one way or the other is sufficiently manipulable or hideable that I’m worried about playing that game.”¹²⁷ Another stated a preference for relying on a test focusing on two objective factors: whether price was below cost and, if so, whether competitors were excluded.¹²⁸

The Department believes that where bundle-to-bundle competition is not reasonably possible, bundled discounting outside the safe

¹¹⁷ ANTITRUST MODERNIZATION COMM’N, *supra* note 60, at 398.

¹¹⁸ *Id.* (emphasis in original).

¹¹⁹ *Id.* at 399 (further suggesting that a defense showing that the challenged pricing was used either for many years (so that predation was unlikely) or during a time with no possibility of predation should suffice).

¹²⁰ May 8 Hr’g Tr., *supra* note 52, at 64 (Melamed).

¹²¹ Nov. 29 Hr’g Tr., *supra* note 2, at 202 (Crane).

¹²² *Id.*; see also May 8 Hr’g Tr., *supra* note 52, at 64 (Melamed) (“You ought to allow the defendant and the plaintiff to duke it out over whether the bundling made economic sense.”); Nov. 29 Hr’g Tr., *supra* note 2, at 182, 202 (Ordovery).

¹²³ AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b2, at 262.

¹²⁴ *Id.* Hovenkamp’s acceptance of “any proven explanation” for bundled discounting differs from his general definition of unlawful exclusionary conduct, which does not allow any proven benefits to outweigh competitive harms but instead condemns conduct where the harms produced are disproportionate to the benefits. *Id.* ¶ 651a, at 72 (2d ed. 2002). Hovenkamp’s acceptance of “any proven explanation” for bundled discounts appears to be based on the immediate lowering of prices to consumers provided by such discounts.

¹²⁵ *Id.* ¶ 749b2, at 265.

¹²⁶ Nov. 29 Hr’g Tr., *supra* note 2, at 203 (Tom).

¹²⁷ *Id.* at 103–04 (Nalebuff).

¹²⁸ See *id.* at 103 (Kattan).

harbor should not be presumed anticompetitive. Rather, plaintiff must demonstrate actual or probable harm to competition. A significant consideration in this regard is whether rivals remain and are likely to remain in the market. Rivals' continued presence in the market casts serious doubt on the existence of anticompetitive effects—consumers continue to benefit from the bundled discounting as well as rivals' presence.¹²⁹ Accordingly, the Department believes that if rivals have not exited the market as a result of the bundled discounting and if exit is not reasonably imminent, courts should be especially demanding as to the showing of harm to competition.

Further, the Department believes that, when actual or probable harm to competition is shown, bundled discounting by a monopolist that falls outside the discount-allocation safe harbor should be illegal only when (1) it has no procompetitive benefits, or (2) if there are procompetitive benefits, the discount produces harms substantially disproportionate to those benefits. This standard requires plaintiffs to show that the anticompetitive harms of a monopolist's bundled discounting substantially outweigh its procompetitive benefits in those instances in which there are both anticompetitive effects and non-exclusionary explanations for the conduct. The Department does not believe that a trivial benefit should outweigh substantial anticompetitive effects.

The Department believes that, when actual or probable harm to competition is shown, bundled discounting by a monopolist that falls outside the discount-allocation safe harbor should be illegal only when (1) it has no procompetitive benefits, or (2) if there are procompetitive benefits, the discount produces harms substantially disproportionate to those benefits.

D. Conclusion

A monopolist's bundled discounts or rebates may, in certain circumstances, produce anticompetitive effects. At the same time, however, overly broad prohibitions against bundled discounting may inhibit pricing practices that benefit consumers. Clear and administrable standards are needed to enable firms to know in advance if bundled discounting may subject them to antitrust liability.

The Department believes that the development of clear, administrable standards for analyzing bundled discounts would be furthered by use of an appropriate price-cost safe harbor. The particular price-cost safe harbor that should be used depends on whether bundle-to-bundle competition is reasonably possible. If it is, the potential competitive harm of bundled discounting mirrors that caused by predatory pricing, so the appropriate price-cost safe harbor should look to whether the discounted price of the entire bundle exceeds an appropriate measure of cost of all the products constituting the bundle. For pricing outside this safe harbor, a plaintiff should have to show harm to competition sufficient to establish a likelihood of recoupment.

Where bundle-to-bundle competition is not reasonably possible, the potential competitive harm more closely resembles the harm that can arise from tying. Such harm may occur where the bundled discounting would cause customers to purchase the monopolist's bundle instead of buying only the monopoly product from the monopolist and purchasing the competitive product from an equally efficient competitor. The discount-allocation safe

¹²⁹ It is possible that a plaintiff will lose sufficient sales due to bundled discounting so that even though it remains in the market, it could be a significantly less vigorous competitor. Those allegations are easy to make but deserve careful scrutiny. For example, although plaintiff's average costs almost certainly will rise if it loses sales due to bundled discounting, its marginal costs may not significantly increase and thus its competitive significance may not be diminished even though it is operating at a reduced scale. Cf. Nov. 29 Hr'g Tr., *supra* note 2, at 179 (Tom) (suggesting "looking for the rival's marginal cost to be raised in such a way that the perpetrator can raise prices"). Moreover, other rivals may still be able to compete vigorously in the market.

harbor is an appropriate screen for determining whether those consequences are possible. The discount-allocation safe harbor compares an appropriate measure of defendant's cost for the competitive product (or products) in a bundle to the imputed price of that product (or products), which is the price after allocating all discounts and rebates attributable to the entire bundle to the competitive product (or products).

If the conduct falls outside the discount-allocation safe harbor, further analysis is required. Failure to come within the safe harbor should not create a presumption of anticompetitive effects. Where bundle-to-bundle competition is not reasonably possible, bundled discounting should only be condemned with an adequate showing of actual or probable harm to competition. A significant factor in this regard is whether rivals remain or are likely to remain in the market and, if so, whether the bundling significantly increases their marginal costs. Further, the Department believes that a proven procompetitive explanation for such a bundled discount should defeat a section 2 challenge to the bundled discount unless the anticompetitive harms are substantially disproportionate to the benefits.

II. Single-Product Loyalty Discounts

A. Introduction

In some instances, a seller may offer discounts (or rebates) on all units of a single product conditioned upon the level of purchases.¹³⁰ These are sometimes called "all-units" or "first-dollar" discounts, because they apply to all of the customer's purchases, rather than just the units beyond the level of purchases required to obtain them.¹³¹ The

discounts may be conditioned, for example, on the quantity of product purchased (e.g., a twenty percent discount on all units bought this year with the purchase of eighty units) or on the percentage of needs purchased (e.g., a twenty percent discount on all units with the purchase of eighty percent of buyer's total annual needs). The discounting seller may offer such discounts to all customers¹³² or to a single customer.¹³³ This report uses the term "single-product loyalty discounts" to refer to these kinds of discounts and focuses on situations where the firm engaging in the practice has monopoly power (or the prospect thereof) over the product in question.¹³⁴

Even when offered by firms with monopoly power, or by firms that have the prospect of achieving such power, single-product loyalty discounts can benefit consumers by reducing prices and increasing output beyond what the monopolist would otherwise have charged or produced, leading to more efficient resource allocation. A manufacturer may use these discounts to induce a retailer to provide brand-specific merchandising or otherwise increase its selling efforts.¹³⁵ Such discounts

Similarly, a sandwich shop may charge \$5 for a sandwich and give customers a frequent-buyer card that offers a free sandwich after the card has been stamped ten times. Under this type of loyalty-reward program, a customer pays \$5 each for sandwiches 1-10, nothing for sandwich 11, and then \$5 again for sandwich 12. This chapter does not address such practices.

¹³² See, e.g., *Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039 (8th Cir. 2000).

¹³³ See, e.g., *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227 (1st Cir. 1983) (Breyer, J.).

¹³⁴ One panelist suggested that single-product loyalty discounts, unlike exclusive-dealing contracts, "are not found in nature" and occur only with "firms which have substantial positions in the market." May 8 Hr'g Tr., *supra* note 52, at 82 (Creighton). Another panelist questioned whether there is evidence to support the assertion "that unlike bundling and exclusive dealing which we find everywhere, loyalty discounts are somehow a practice that we only find with firms with very large market shares." *Id.* at 84 (Muris).

¹³⁵ See David E. Mills, *Market Share Discounts* (Aug. 8, 2008) (unpublished working paper), available at <http://www.virginia.edu/economics/papers/mills/>

¹³⁰ The offering of discounts or rebates contingent upon a buyer's purchase of two or more different products—or bundled discounting—is addressed in part I of this chapter.

¹³¹ The applicability of the discount to *all units* distinguishes the situation from various pricing schedules that consumers frequently face. For example, a record club might offer "buy two albums at full price, and get all additional albums at 50% off." In that situation, the discounts do not go back to the first units.

may also reduce costs of production by, for example, reducing a manufacturer's sales fluctuations. More generally, "non-linear pricing" (pricing that deviates from charging a constant price per unit) "can reflect real economic savings that are difficult to measure . . . or simply may be [a] way[] that firms choose to compete for the most desirable customers."¹³⁶ As with other types of discounts, loyalty discounts offered by firms with monopoly power may arise as part of the normal competitive process and need not have any exclusionary effect.¹³⁷

However, as with predatory pricing, single-product loyalty discounts may be anticompetitive in certain circumstances, such as where the resulting price of all units sold to a customer is below an appropriate measure of cost. Further, commentators and panelists generally agree that even where a single-product loyalty discount is above cost when measured against all units, such a discount may in theory produce anticompetitive effects, especially if customers "must carry a certain percentage of the leading firm's products"¹³⁸ and the discount is structured to induce purchasers to buy all or nearly all needs beyond that "uncontestable" percentage from the leading firm.¹³⁹ Some noted that "if the

financial benefits of a market-share discount are effectively concentrated on the decision whether to buy a relatively small number of marginal units, even prices that technically are 'above cost' on average effectively may be below cost as to those marginal units."¹⁴⁰ These discounts may effectively foreclose such a large portion of available business that competitors cannot achieve efficient scale, thereby enabling the dominant firm to acquire or maintain monopoly power.¹⁴¹

Although there is general agreement that a monopolist's above cost (on all units) single-product loyalty discounts can be anticompetitive, there is no consensus on how likely that is. Further, there are questions as to how a court or enforcer should go about determining whether a particular single-product loyalty discount is anticompetitive, as well as how a business deciding whether to offer such a discount can know at the time whether the discount might later be deemed illegal. One question is whether the focus should be on whether the dominant firm is covering the cost of producing all units sold to a customer or on covering the cost of the additional sales induced by the discount. Another question is at

Market%20Share%20Discounts.pdf.

¹³⁶ Dennis W. Carlton, *A General Analysis of Exclusionary Conduct and Refusal to Deal—Why Aspen and Kodak Are Misguided*, 68 ANTITRUST L.J. 659, 664 (2001).

¹³⁷ See, e.g., Sreya Kolay et al., *All-Units Discounts in Retail Contracts*, 13 J. ECON. & MGMT. STRATEGY 429 (2004); Patrick Greenlee & David Reitman, *Competing with Loyalty Discounts* (Jan. 7, 2006) (unpublished working paper), available at <http://www.wcas.northwestern.edu/csio/Conferences/Papers2006/GreenleeandReitmanpaper.pdf>.

¹³⁸ Feb. 13 Hr'g Tr., *supra* note 52, at 106 (Stern) (stating that it may be appropriate to distinguish this situation from situations in which "suppliers can essentially compete to supply the entire demand of the customer").

¹³⁹ See Willard K. Tom et al., *Anticompetitive Aspects of Market-Share Discounts and Other Incentives to Exclusive Dealing*, 67 ANTITRUST L.J. 615, 627 (2000) (arguing that discounts can be used to achieve total or partial exclusivity where a "dominant firm is so well

established among ultimate consumers that its customers . . . have a base, inelastic demand for the firm's products").

¹⁴⁰ *Id.* at 636; see also Nov. 29 Hr'g Tr., *supra* note 2, at 199 (Tom) (questioning whether it is preferable to "look at the incremental sales that were induced by the loyalty program and look at the revenues from those incremental sales and compare it to incremental cost" or "apply a Brooke Group test" comparing "all of the sales, all of the revenues" to "all of the costs for all of the sales"); Robert H. Lande, *Should Predatory Pricing Rules Immunize Exclusionary Discounts?*, 2006 UTAH L. REV. 863, 870-74, 877-80 (providing hypothetical examples of all-unit discounts resulting in below-cost pricing on marginal units).

¹⁴¹ See May 8 Hr'g Tr., *supra* note 52, at 82-83 (Creighton); Nov. 29 Hr'g Tr., *supra* note 2, at 79-84 (Nalebuff); *id.* at 84 (Sibley); *id.* at 99-100 (Lambert); Tom et al., *supra* note 139, at 633-34; see also AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b, at 248 (recognizing that there may be situations where an above-cost single-product discount "increases the dominant firm's sales so much that it denies rivals economies of scale because they cannot get their own output high enough").

what level are the quantities of sales induced by the practice likely to have significant anticompetitive effect.

These issues, as well as concerns common to all types of single-firm conduct, including the need to develop administrable rules that appropriately balance the risk of false positives and false negatives, are reflected in the relatively limited case law and commentary on single-product loyalty discounts and in the views expressed by panelists. This chapter discusses these cases and perspectives and presents the Department's current thinking on how single-product loyalty discounts should be analyzed.

B. Background

As with bundled discounting, no single-product loyalty discount antitrust case has yet reached the Supreme Court. The three appellate decisions addressing this practice emphasize the importance of factual evidence of an anticompetitive effect (rather than simply of an effect on a competitor) and the substantial judicial concern about deterring beneficial price cuts.

The earliest case, *Barry Wright Corp. v. ITT Grinnell Corp.*,¹⁴² involved the market for snubbers, which are safety devices used in nuclear power plants. Pacific Scientific had most of the market for snubbers (over eighty percent).¹⁴³ Grinnell, which accounted for about half of snubber purchases, had been trying to help plaintiff Barry Wright become an alternative source of supply.¹⁴⁴ Pacific Scientific then offered Grinnell a large discount if it would agree to purchase large quantities of snubbers, and Grinnell agreed. The specified amounts constituted most, but not all, of Grinnell's anticipated purchases over a two-year period.¹⁴⁵ Barry Wright subsequently abandoned its attempt to enter the market and sued, alleging that the discount violated section 2.¹⁴⁶

Both the district court and the court of appeals rejected the claim. In the First Circuit opinion, then-Judge Breyer explained that, under conventional price-cost tests for predatory pricing, Pacific's discount was not predatory because the resulting price was above any relevant measure of Pacific's cost.¹⁴⁷ The theoretical possibility that such prices could harm competition did not justify the risk of deterring procompetitive price cutting by entertaining that possibility in litigation. As the court cautioned:

[U]nlike economics, law is an administrative system the effects of which depend upon the content of rules and precedents only as they are applied by judges and juries in courts and by lawyers advising their clients. Rules that seek to embody every economic complexity and qualification may well, through the vagaries of administration, prove counterproductive, undercutting the very economic ends they seek to serve. . . . [W]e must be concerned lest a rule . . . that authorizes a search for a particular type of undesirable pricing behavior end up by discouraging legitimate price competition.¹⁴⁸

The court thus concluded "that the Sherman Act does not make unlawful prices that exceed both incremental and average costs."¹⁴⁹

In *Concord Boat Corp. v. Brunswick Corp.*,¹⁵⁰ several boat builders challenged Brunswick's discount program on stern-drive engines. Brunswick manufactured and sold the engines for recreational boats and had a large market share (about seventy-five percent).¹⁵¹ Brunswick (like its competitors) offered market-share discounts. Boat builders who agreed to buy a certain percentage of their engine requirements from Brunswick for a certain period received a

¹⁴⁷ *Id.* at 233.

¹⁴⁸ *Id.* at 234.

¹⁴⁹ *Id.* at 236. Even if price exceeding both incremental and average costs was not determinative, then-Judge Breyer noted that there was evidence that the discount enabled Pacific to operate more efficiently, because it led to a firm order that allowed Pacific to utilize its excess snubber capacity. *Id.*

¹⁵⁰ 207 F.3d 1039 (8th Cir. 2000).

¹⁵¹ *Id.* at 1044.

¹⁴² 724 F.2d 227 (1st Cir. 1983) (Breyer, J.).

¹⁴³ *Id.* at 229.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *Id.* at 229–30.

discount off the list price for *all* engines purchased.¹⁵² Because some of the boat builders' customers apparently preferred Brunswick engines, the boat builders arguably had to purchase a significant percentage of their engine needs from Brunswick; nevertheless, the discounts might well have led them to purchase higher quantities from Brunswick than they otherwise would have. There was, however, evidence that at least two customers who previously had purchased more than eighty percent of their engines from Brunswick switched to a competitor for more than seventy percent of their purchases.¹⁵³

In concluding that plaintiffs had not offered sufficient evidence for a jury to determine that Brunswick's market-share discounts were anticompetitive, the Eighth Circuit emphasized that Brunswick's discounted prices were above cost.¹⁵⁴ The court also found that Brunswick's discounts were not exclusive-dealing agreements (buyers could purchase forty percent of requirements from other sellers while still receiving loyalty discounts from Brunswick) and other engine sellers could—and did—compete with Brunswick by offering better discounts.¹⁵⁵ While Brunswick offered testimony that the discounts served procompetitive purposes beyond simply lowering prices (for example, by increasing the predictability of demand and thus lowering manufacturing costs),¹⁵⁶ the court of appeals relied simply on "Brunswick's business justification . . . that it was trying to sell its product."¹⁵⁷

*Virgin Atlantic Airways Ltd. v. British Airways PLC*¹⁵⁸ also involved an unsuccessful challenge to a first-dollar discount program. British

Airways (BA) offered incentive programs that provided travel agencies with commissions, and corporate customers with discounts, for meeting specified thresholds for sales of BA tickets. The discounts applied to all sales, not just those beyond the target threshold.¹⁵⁹ Virgin claimed that the result was below-cost pricing on certain transatlantic routes where it and BA competed.¹⁶⁰

Both the district court and the court of appeals concluded that Virgin failed to show below-cost pricing.¹⁶¹ Virgin's expert had assumed that the incentive agreements had generated additional flights to carry increased passenger load and compared the incremental costs of those flights with the revenues they generated.¹⁶² The courts, however, were not sufficiently persuaded that the assumption reflected reality and concluded that "the issue of whether British Airways is selling below-cost tickets to the marginal passengers on the five routes at issue in this case is a fact-rooted question as to which Virgin has not submitted direct evidence."¹⁶³

Although plaintiff lost each of these three appellate cases, private litigants continue to challenge single-product loyalty discounts. In *Masimo Corp. v. Tyco Health Care Group, L.P.*,¹⁶⁴ the district court sustained the jury's verdict that market-share discounts and sole-source arrangements violated the antitrust laws and ordered a new trial on damages.¹⁶⁵ Tyco had offered hospitals increased discounts on the purchase of pulse oximetry sensors in exchange for commitments to buy a greater percentage of their oximetry needs from Tyco. A typical offer involved 40 percent off all sensors if the hospital bought 90 percent or more of its

¹⁵² *Id.*

¹⁵³ *Id.* at 1059.

¹⁵⁴ *See id.* (Brunswick's above-cost prices left ample room for new competitors to enter the market and lure customers away with superior discounts); *id.* at 1062 (questioning the district court's rejection of Brunswick's contention that above-cost discounts are per se lawful).

¹⁵⁵ *Id.* at 1062–63.

¹⁵⁶ *Id.* at 1047.

¹⁵⁷ *Id.* at 1062.

¹⁵⁸ 69 F. Supp. 2d 571 (S.D.N.Y. 1999), *aff'd*, 257 F.3d 256 (2d Cir. 2001).

¹⁵⁹ *Id.* at 574.

¹⁶⁰ *Id.* at 576.

¹⁶¹ 257 F.3d at 269; 69 F. Supp. 2d at 580.

¹⁶² 69 F. Supp. 2d at 575–77.

¹⁶³ *Id.* at 580.

¹⁶⁴ No. CV 02-4770 MRP, 2006 WL 1236666 (C.D. Cal. Mar. 22, 2006).

¹⁶⁵ *Id.* at **11, 15. The court, however, vacated the jury's findings of liability based on bundled discounts and co-marketing arrangements. *Id.* at *14.

requirements from Tyco, and a 16 to 18 percent discount if less than 90 percent.¹⁶⁶ Masimo argued that the possible loss of Tyco's maximum discounts on all of a hospital's sensor purchases functioned as a penalty, forcing hospitals to deal exclusively with Tyco.¹⁶⁷ The court held that the jury reasonably could have concluded that the market-share discounts "were designed to and did maintain monopoly power" in violation of section 2¹⁶⁸ and constituted illegal exclusive dealing in violation of section 1 and section 3 of the Clayton Act.¹⁶⁹ The court did not analyze or discuss whether Tyco's prices were above any relevant measure of its costs.

In *J.B.D.L. Corp. v. Wyeth-Ayerst Laboratories, Inc.*,¹⁷⁰ another district court case, the court granted summary judgment for defendant Wyeth on section 1 and section 2 claims alleging exclusive dealing and anticompetitive loyalty rebates on Wyeth's sales of Premarin, a "conjugated estrogen" product and the largest selling product for estrogen replacement therapy.¹⁷¹ The key allegation was that Wyeth's contracts with pharmacy benefit managers (PBMs) effectively foreclosed competition from Cenestin, a conjugated estrogen product the FDA approved in 1999 for short-term use.¹⁷² Wyeth's contracts with PCS Health Services, a PBM, and with some other PBMs, placed Premarin in their Core Formulary and provided that all rebates paid under the contracts were contingent on Premarin's being listed as the Core Formulary's "exclusive

conjugated estrogen" (the sole CE clause).¹⁷³

Conceding monopoly power for purposes of its summary judgment motion, Wyeth argued that its PBM contracts were not actionable under section 2 by direct-purchaser plaintiffs absent predatory pricing, and that its prices were not predatory in the "classic sense of below-cost pricing to squeeze out a competitor."¹⁷⁴ The court concluded that

absent explicit, controlling appellate authority that Wyeth's conduct in executing [the PBM] contracts, a practice that is widespread throughout the larger and unique pharmaceutical market in the U.S., runs afoul of the guiding principles of Section 2 liability, this Court believes that the approach adopted by the Eighth Circuit in *Concord Boat* is correct. Wyeth's pricing behavior "plus" — in this case the "plus" factor being the "sole CE" contract clause — did not violate Section 2 of the Sherman Act.¹⁷⁵

In the absence of a Supreme Court decision in a single-product loyalty discount case, it is difficult to discern the precise legal standard that a particular court will apply. Nonetheless, most of the handful of lower court decisions analyzing these discounts have applied some type of price-cost test.

C. Analysis

Compared to the voluminous legal and economic commentary analyzing bundled discounting (and other unilateral conduct, such as predatory pricing and tying), there has been relatively little commentary regarding single-product loyalty discounts. Those who have commented on this subject generally agree that these discounts are most often procompetitive: for example, a manufacturer may use these discounts to induce services from distributors or retailers¹⁷⁶ or "to compete

¹⁶⁶ *Id.* at **4-5.

¹⁶⁷ *Id.*

¹⁶⁸ *Id.* at *11.

¹⁶⁹ *Id.* at **5-6 ("The jury was free to conclude that Tyco's Market Share Discounts, in practical effect, offered hospitals their best discount only if they dealt with Tyco exclusively. . . . Although the Market Share Discount agreements appear to have been terminable on short notice on their face, the jury could reasonably have concluded that in practice they were not.").

¹⁷⁰ Nos. 1:01-CV-704, 1:03-CV-781, 2005 WL 1396940 (S.D. Ohio June 13, 2005), *aff'd on other grounds*, 485 F.3d 880 (6th Cir. 2007).

¹⁷¹ *Id.* at *1.

¹⁷² *Id.* at **1-2.

¹⁷³ *Id.* at **3-4.

¹⁷⁴ *Id.* at *11.

¹⁷⁵ *Id.* at *17. The court granted summary judgment for Wyeth on the section 1 exclusive-dealing claim, finding that plaintiffs could not establish the necessary substantial foreclosure of competition. *Id.* at **10-11.

¹⁷⁶ See Mills, *supra* note 135, at 26.

for the most desirable customers.”¹⁷⁷ There is also agreement that, as with standard predatory pricing, these discounts can be anticompetitive where they bring the total price on all units sold to a customer below an appropriate measure of cost and there is the likelihood of recoupment.

While commentators agree that single-product loyalty discounts are most often procompetitive, they also agree that these discounts can be anticompetitive where they bring the total price on all units sold below an appropriate measure of cost and there is a likelihood of recoupment.

Some panelists and commentators have further posited that single-product loyalty discounts that are above cost when measured against all units sold to a customer can be anticompetitive where a monopolist’s customers “must carry a certain percentage of the leading firm’s products”¹⁷⁸ and the discount is structured so as to induce purchasers to buy all or nearly all needs beyond that uncontestable percentage from the monopolist.¹⁷⁹

Some panelists and commentators believe that single-product loyalty discounts, under certain circumstances, can be anticompetitive, even where the resulting price on all units sold is above an appropriate measure of cost.

Commentators’ analyses of above-cost (on all units) single-product loyalty discounts depend on their view of the likelihood of these discounts harming competition and the feasibility of addressing that harm with an administrable test that does not chill desirable,

procompetitive discounting. For example, based on concerns regarding administrability and chilling procompetitive conduct, Professor Hovenkamp would apply “antitrust’s ordinary predatory pricing rule” to all single-product loyalty discounts, finding the discount “lawful if the price [on all units sold] after all discounts are taken into account exceeds the defendant’s marginal cost or average variable cost.”¹⁸⁰

As discussed below, other commentators believe that the Hovenkamp test would result in an unacceptable level of false negatives in situations where rivals cannot compete with the monopolist for all or almost all sales. Some of these commentators have suggested that single-product loyalty discounts should perhaps be analyzed in the same manner as bundled discounts are analyzed in situations where bundle-to-bundle competition is not possible. For example, they suggest applying the total discount on all sales to the sales in the contestable portion of the market to determine if the discount falls outside the price-cost safe harbor and, if it does fall outside the safe harbor, determining if anticompetitive foreclosure effects result.¹⁸¹ Others recommend an approach that would evaluate “market share discounts structured to produce total or partial exclusivity . . . according to the same economic principles that govern exclusive dealing.”¹⁸²

1. Predatory-Pricing Analysis

Professor Hovenkamp would apply “antitrust’s ordinary predatory pricing rule” to all single-product loyalty discounts, comparing the price (after all discounts are taken into account) to the cost of all units sold to a customer.¹⁸³ While conceding that there may be

¹⁸⁰ AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b, at 245.

¹⁸¹ See, e.g., Lande, *supra* note 140, at 878, 880 (suggesting that Professor Hovenkamp’s attribution test for bundled discounts “easily could be used to evaluate the discounts involving just the marginal, contested units for one product, a virtually identical situation,” but suggesting that a rule banning all “all-units” discounts would be a preferable way of handling single-product loyalty discounts).

¹⁸² Tom et al., *supra* note 139, at 615.

¹⁸³ AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b, at

¹⁷⁷ Carlton, *supra* note 136, at 664.

¹⁷⁸ See Feb. 13 Hr’g Tr., *supra* note 52, at 106 (Stern); see also Nov. 29 Hr’g Tr., *supra* note 2, at 79 (Nalebuff) (describing *Concord Boat* as a case in which defendant “had a monopoly for some share of the market based on installed base”).

¹⁷⁹ See *supra* text accompanying notes 138–39.

circumstances in which an above-cost (when measured against all units sold to a customer) loyalty discount might be anticompetitive as a result of denying rivals economies of scale,¹⁸⁴ courts and juries could not, in his view, apply such theories without creating an intolerable risk of chilling procompetitive behavior.¹⁸⁵ The principle that “[d]iscounting is presumptively procompetitive and should be condemned only in the presence of significant market power and proven anticompetitive effects”¹⁸⁶ guides Professor Hovenkamp’s analysis.¹⁸⁷

A number of panelists supported Professor Hovenkamp’s approach, primarily based on concerns about administrability and risks of chilling desirable discounting behavior. Thus, one panelist, while not disputing that single-product loyalty discounts could theoretically have anticompetitive effects where they deny rivals the opportunity to achieve efficient scale, stated that sufficient information about economies of scale is “almost impossible” to come by. He supported Professor Hovenkamp’s approach, concluding:

I can’t think as a lawyer of a way to design a rule that doesn’t have a chilling effect if we are having to focus on what is minimum efficient scale and what amount of a discount is permissible before you usurp so much business that you prevent someone from achieving minimum efficient scale. I think that is too hard to administer.¹⁸⁸

Other panelists also supported employing predatory-pricing rules in analyzing single-product loyalty discounts.¹⁸⁹ One

panelist stressed the need for discipline in litigation in supporting a predatory-pricing approach to single-product loyalty discounts,¹⁹⁰ concluding that “whatever the appropriate measure of cost is, if that cost is recouped on the overall sale to a client, then the discount that created the overall sale should be legal.”¹⁹¹ Another panelist stressed the need for administrable tests that firms can apply on the basis of information that is available to them. In particular, responding to panelists who expressed concern about loyalty discounts in situations in which a large percentage of each buyer’s needs is met by the monopolist and effectively not contestable, he suggested that it would be “incredibly complicated” to determine what portion of sales was not contestable (inframarginal) and what portion was contestable (marginal).¹⁹²

However, some panelists were critical of the predatory-pricing approach. As described below, a number of panelists and commentators expressed concern that this approach would fail to identify instances of anticompetitive foreclosure.

In addition, one critic of the predatory-pricing approach suggests that Professor Hovenkamp’s conclusions rest on plausible but unproven assumptions about the relative importance of procompetitive and anticompetitive effects of single-product loyalty discounts.¹⁹³ For example, he asks whether the assertion that most discounting practices are procompetitive is “still true when these discounts are given by monopolists, by monopolists for the first time facing the prospect of significant new entry, or by would-be monopolists that are targeting rivals?

245.

¹⁸⁴ See *id.* ¶ 749b, at 248.

¹⁸⁵ See *id.* ¶ 749b, at 245, 248–50.

¹⁸⁶ *Id.* ¶ 749b, at 245.

¹⁸⁷ *Id.* ¶ 749b.

¹⁸⁸ Nov. 29 Hr’g Tr., *supra* note 2, at 99–100 (Lambert); see also *id.* at 60–65 (Kattan) (supporting Professor Hovenkamp’s approach and stressing the need for pricing rules that are administrable and enable firms to base pricing decisions on an objective measure).

¹⁸⁹ See, e.g., May 8 Hr’g Tr., *supra* note 52, at 81–82 (Rule) (stating that he is “not aware of any good case that’s ever been pointed to where a loyalty discount has really had an anticompetitive effect” and that applying

a *Brooke Group* test will dispose of virtually all cases); Feb. 13 Hr’g Tr., *supra* note 52, at 156–57 (Sewell) (Hovenkamp approach is “a clear and sensible rule”); Sherman Act Section 2 Joint Hearing: International Issues Hr’g Tr. 116, Sept. 12, 2006 (Bloom) (suggesting using price above average avoidable cost as a safe harbor).

¹⁹⁰ Nov. 29 Hr’g Tr., *supra* note 2, at 196 (Crane).

¹⁹¹ *Id.* at 198.

¹⁹² *Id.* at 83 (Kattan).

¹⁹³ Lande, *supra* note 140, at 863–64.

Where is the empirical evidence that discounts in these situations usually are procompetitive?"¹⁹⁴

That commentator also suggests that single-product loyalty discounts can be "sham discounts" and discusses a hypothetical in which a monopolist faced with new entry essentially threatens customers with a higher price unless they meet the threshold needed to obtain a "discount" that merely allows them to continue paying what they have been.¹⁹⁵ He concludes that it is premature to devise and adopt a comprehensive test that antitrust analysis could be saddled with for decades; these discounts "should, for now, be evaluated under the rule of reason."¹⁹⁶ The most that he believes should be considered at this point are a few "modest presumptions of legality or illegality."¹⁹⁷

2. Foreclosure Analysis

A number of panelists and commentators expressed concern that using a predatory-pricing test to analyze single-product loyalty discounts would fail to identify certain instances in which these discounts might result in harmful foreclosure. They have suggested that single-product loyalty discounts can be anticompetitive where customers must buy a certain percentage of their needs from the monopolist and the discount is structured so as to induce them to buy all or nearly all needs beyond that uncontestable percentage from the monopolist as well.¹⁹⁸ Accordingly, some panelists suggested treating a situation in which rivals can "essentially compete to supply the entire demand of the customer or the entire demand in the marketplace" differently than a situation in which "the customer must carry a certain percentage of the leading firm's products."¹⁹⁹

Some panelists and commentators have suggested that single-product loyalty discounts can be anticompetitive where customers must buy a certain percentage of their needs from the monopolist and the discount is structured so as to induce them to buy all or nearly all needs beyond that uncontestable percentage from the monopolist as well.

In accordance with this approach, some panelists viewed single-product loyalty discounts as more analogous to bundled discounts, where bundle-to-bundle competition is not possible, than to predatory pricing.²⁰⁰ In particular, one panelist suggested that focusing on whether the overall price for all units exceeded an appropriate measure of cost was inconsistent with a test for bundled discounts that would attribute the entire discount across multiple products to the competitive product. He suggested that it might be more appropriate to look at the sales "that were induced by the loyalty program and look at the revenues from those . . . sales" and compare them to the cost of the program, rather than to "apply a Brooke Group test that says you take all of the sales, all of the revenues and compare it to all of the costs for all of the sales."²⁰¹

Another panelist suggested that an overall

¹⁹⁴ *Id.* at 865.

¹⁹⁵ *See id.* at 870–74.

¹⁹⁶ *Id.* at 882–83.

¹⁹⁷ *Id.* at 876.

¹⁹⁸ *See supra* text accompanying notes 138–39.

¹⁹⁹ Feb. 13 Hr'g Tr., *supra* note 52, at 106 (Stern); *see also* Nov. 29 Hr'g Tr., *supra* note 2, at 79–80 (Nalebuff).

²⁰⁰ *See* Nov. 29 Hr'g Tr., *supra* note 2, at 195 (Ordovery) (resisting distinguishing single-product discounts from bundled discounts because "[i]f you believe in the competitive equilibrium model, every good is a single different thing"); *id.* at 197 (Tom) ("[I]t can be very difficult to distinguish single product from multiproduct situations as a theoretical matter."); *see also* Lande, *supra* note 140, at 878 (arguing that Professor Hovenkamp's attribution test for bundled discounts "easily could be used to evaluate the discounts involving just the marginal, contested units for one product, a virtually identical situation").

²⁰¹ Nov. 29 Hr'g Tr., *supra* note 2, at 199 (Tom); *see id.* at 197 (suggesting that a Brooke Group test would be warranted only if based on conclusions regarding "administrability and cost of false positives and false negatives . . . because there are certainly plenty of possibility proofs that show that you can have anticompetitive effects in this situation even with overall price exceeding overall cost").

price for all units exceeding cost should not necessarily be conclusive of legality, but should result in a “burden-shifting exercise” whereby a plaintiff could attempt to show “discontinuities or jumps in the loyalty schedule and [that] they have potentially serious competitive effects.”²⁰² He suggested that a ban on negative marginal pricing—instances in which the buyer pays less overall when its purchases include the additional increment—would be preferable to a ban on pricing below cost, because it would be relatively easy to implement, though it would not detect all exclusionary pricing.²⁰³

Other panelists and commentators suggested that “loyalty discounts can be an issue under Section 2 if they’re really equivalent to exclusive dealing.”²⁰⁴ These commentators argue that “market-share discounts structured to produce total or partial exclusivity should be judged according to the same economic principles that govern exclusive dealing” and should be condemned under existing case law “if they produce anticompetitive effects without counterbalancing procompetitive effects.”²⁰⁵ They view the relevant issue as being “the structure and effects of the price scheme” and thus contend that “complex pricing structures, designed to create incentives toward exclusive dealing, are not per se legal merely because each element in the structure is above the seller’s cost.”²⁰⁶

A statement in the Department’s 1994 Competitive Impact Statement in the *Microsoft* licensing case reflected similar concerns:

While the Department recognizes that

volume discount pricing can be and normally is pro-competitive, volume discounts also can be structured by a seller with monopoly power (such as Microsoft) in such a way that buyers, who must purchase some substantial quantity from the monopolist, effectively are coerced by the *structure* of the discount schedule (as opposed to the level of the price) to buy all or substantially all of the supplies they need from the monopolist. Where such a result occurs, the Department believes that the volume discount structure would unlawfully foreclose competing suppliers from the marketplace—in this case, competing operating systems—and thus may be challenged.²⁰⁷

Similarly, a number of panelists expressed concern about the potential use of single-product loyalty discounts to deny a monopolist’s rivals the scale necessary to enter or remain in a market.²⁰⁸ One panelist stated that “it is a question about whether or not in a particular case they can be used to keep rivals from gaining efficient scale” and queried whether “there are markets in which achieving sufficient scale is critical and the purpose of the loyalty discount is really to foreclose that.”²⁰⁹ Another panelist suggested there could be problems with these discounts because it may not always be realistic for a rival to replace one hundred percent of the monopolist’s sales to a customer, and in such circumstances the discounts may prevent a rival from achieving a reasonable scale.²¹⁰ Some conclude that a rule

²⁰² *Id.* at 194 (Ordovery).

²⁰³ See Ordovery & Shaffer, *supra* note 3, at 20.

²⁰⁴ Feb. 13 Hr’g Tr., *supra* note 52, at 105 (Sheller) (distinguishing discounts conditioned on buying one-hundred percent of needs from those conditioned on sixty to seventy percent); see also *id.* at 201 (Wark) (suggesting that loyalty discounts should be analyzed in a predatory-pricing context unless “you can equate the loyalty program with making it exclusive, then maybe you have to analyze it in an exclusive dealing context”).

²⁰⁵ Tom et al., *supra* note 139, at 615.

²⁰⁶ *Id.* at 636–37.

²⁰⁷ Competitive Impact Statement at 18, United States v. Microsoft Corp., 56 F.3d 1448 (D.C. Cir. 1995) (Nos. 95-5037, 95-5039), available at <http://www.usdoj.gov/atr/cases/f0000/0045.pdf> (noting that, while the Department considered relief limiting the manner in which Microsoft could structure discounts, it would not require such relief because it did not have evidence that Microsoft had in fact structured volume discounts to achieve anticompetitive ends) (emphasis in original).

²⁰⁸ See May 8 Hr’g Tr., *supra* note 52, at 82–83 (Creighton); Nov. 29 Hr’g Tr., *supra* note 2, at 79–84 (Nalebuff); *id.* at 99–100 (Lambert); *id.* at 194–96 (Ordovery); *id.* at 196–97 (Tom).

²⁰⁹ May 8 Hr’g Tr., *supra* note 52, at 82–83 (Creighton).

²¹⁰ See Nov. 29 Hr’g Tr., *supra* note 2, at 79–80

of reason assessment might condemn discounts that effectively lock up such a large portion of available business that competitors cannot achieve substantial scale economies that significantly reduce their marginal costs or have sales volumes sufficient to make investments in quality improvements possible.²¹¹

Professor Carlton has acknowledged that non-linear pricing could achieve the same ends as exclusive dealing but has suggested that antitrust intervention “should be used rarely and apply only to extreme pricing conditions.”²¹² He observed that volume discounts and special deals for big buyers are ubiquitous, and that “[a]ttacking such common competitive behavior would likely create much turmoil and chill competition.”²¹³ While not suggesting a specific test to apply to conduct that induces partial or total exclusivity, Professor Carlton cautioned: “If antitrust does pursue contracts that create de facto exclusivity, it would be wise to limit attention to those contracts with extreme pricing terms like those of the Microsoft [1995 consent decree] type, where it is unambiguous that incremental price is below marginal cost for many buyers.”²¹⁴

Similarly, while recognizing that in extreme cases single-product discount schemes might bear some resemblance to exclusive dealing, Professor Hovenkamp stressed two important differences. First, such discounts will be less exclusionary than exclusive-dealing contracts where a buyer is able to earn the discount

without purchasing everything from the seller. Second, unlike exclusive-dealing arrangements, there is no contract, dealership, or franchise involved in most loyalty-discount programs, so the penalty for not meeting the percentage or quantity threshold is simply the loss of the discount and not a breach of contract suit or termination of a franchise.²¹⁵ Moreover, because the buyer is not facing loss of its dealership or franchise, “an equally efficient rival should be able to steal the sale as long as the fully discounted price is above cost.”²¹⁶

Professor Hovenkamp also suggests that one of the problems with the theory that single-product loyalty discounts might deprive rivals of efficient scale is that the seller could, instead of offering a structured discount, simply offer the lower price on all purchases, and that this would take even more sales away from rivals.²¹⁷ However, it is not clear that simply offering the lower price on all units would necessarily take more sales away from rivals, particularly if buyers were committed to the monopoly seller for some level of purchases.²¹⁸

²¹⁵ AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b1, at 247–48.

²¹⁶ Herbert Hovenkamp, *The Law of Exclusionary Pricing*, COMPETITION POL’Y INT’L, Spring 2006, at 21, 28; see also May 8 Hr’g Tr., *supra* note 52, at 80 (Pitofsky) (suggesting that loyalty discounts present less of a problem than exclusive dealing because they tend to be only partially exclusive and therefore exclude less, and the customer can switch at any time, losing only its discount).

²¹⁷ AREEDA & HOVENKAMP, *supra* note 7, ¶ 749b1, at 249.

²¹⁸ For example, assume a customer who is a retailer expects to sell 100 widgets, believes that it must carry 80 of the monopolist’s widgets, and is currently paying \$10 per widget. A new entrant appears, offering widgets to the customer for \$7. On these assumptions, if the monopolist keeps the price at \$10 but offers to charge \$8 per widget if the customer buys 100, the customer will choose to buy all 100 widgets from the monopolist – since it must buy 80 and will pay the same total (\$800) whether it buys 80 or 100, it is essentially getting the last 20 widgets free. If the monopolist instead had simply lowered the price to \$8, the customer would have continued to purchase 80 widgets from the monopolist and bought 20 from the new entrant.

(Nalebuff).

²¹¹ See Tom et al., *supra* note 139, at 622–23.

²¹² Carlton, *supra* note 136, at 664.

²¹³ *Id.*

²¹⁴ *Id.* at 665 (footnote omitted). The 1995 Microsoft consent decree forbade Microsoft from using “per processor” contracts, under which an Original Equipment Manufacturer (OEM) paid Microsoft a royalty based on the total number of computers it sold, regardless of the number of such computers containing Microsoft operating systems. The Department’s Competitive Impact Statement stated: “In effect, the royalty payment to Microsoft when no Microsoft product is being used acts as a penalty, or tax, on the OEM’s use of a competing PC operating system.” Competitive Impact Statement, *supra* note 207, at 5.

One panelist asserted that it would be difficult in any given case to determine what constitutes “efficient scale” and that any rule addressing this potential problem would be too difficult to administer.²¹⁹ Another panelist contended that it would be “incredibly complicated” to determine in specific cases what part of the market, if any, is uncontestable.²²⁰ However, another panelist suggested that it may be possible to “calculate which units have negative prices associated with them” (so that the buyer pays less overall when its purchases include the additional increment needed to obtain the discount) and “what level of entry you would need to achieve if you were a new entrant and wanted to cover costs.”²²¹

Some panelists suggested that, although single-product loyalty discounts theoretically can be structured to induce some degree of foreclosure, analysis of these discounts under section 2 should focus on their actual or likely competitive effects. For example, one panelist stated that although “[t]here are many instances in which, if you allocate the discount . . . to a handful of sales in order to make the discount look like it is below cost, you will be talking about a volume of sales too small to have an impact on competition.”²²² Accordingly, he suggested that by looking “at competitive effects, you often can allay the concerns about loyalty discounts.”²²³ Another panelist suggested focusing on “the

exclusionary impact”²²⁴ and expressed doubt as to whether there has ever been a loyalty-discount program found to have produced actual anticompetitive effects.²²⁵ A written comment submitted for the hearings regarding single-product loyalty discounts also stressed focusing on competitive effects: “Inadequate attention to demonstrable competitive effects could create law that preserves inefficient competitors while sacrificing competition.”²²⁶

D. Conclusion

The Department believes that the standard predatory-pricing approach to single-product loyalty discounts has a number of advantages. Compared to other possible approaches described above, a predatory-pricing rule would be relatively easy for courts and enforcers to administer and would provide businesses with the clarity necessary to conform their conduct to the law using information available to them. Further, this approach has a relatively low risk of chilling desirable, procompetitive price competition that immediately benefits consumers. The Department likely would apply a standard predatory-pricing test in analyzing most single-product loyalty discounts. However, in light of views from panelists and others suggesting that above-cost single-product loyalty discounts can be structured to have anticompetitive effects under certain circumstances, and the relatively limited case law and commentary on these types of discounts, the Department believes that further assessment of the real-world impact of these discounts is necessary before concluding that standard predatory-pricing analysis is appropriate in all cases.

²¹⁹ Nov. 29 Hr’g Tr., *supra* note 2, at 99–100 (Lambert).

²²⁰ *Id.* at 83 (Kattan).

²²¹ *Id.* at 84 (Sibley). One panelist whose company is plaintiff in ongoing litigation argued more broadly that “a retrospective discount or rebate . . . is usually, when deployed by a monopolist, not a rebate or discount at all. It’s a price coupled with the threat of a price increase.” Sherman Act Section 2 Joint Hearing: Business Testimony Hr’g Tr. 176–77, Jan. 30, 2007 (McCoy). However, another panelist whose company is defendant in that litigation argued that “really the way to look at loyalty discounts is these are incentives to buy. These are not punishments for failure to buy.” Feb. 13 Hr’g Tr., *supra* note 52, at 201 (Sewell).

²²² May 8 Hr’g Tr., *supra* note 52, at 83 (Melamed).

²²³ *Id.* at 83–84.

²²⁴ *Id.* at 81–82 (Rule).

²²⁵ *Id.* at 82.

²²⁶ International Chamber of Commerce, Single-Firm Conduct as Related to Competition 3 (Jan. 11, 2006) (hearing submission).

The Department believes that the standard predatory-pricing approach to single-product loyalty discounts has a number of advantages, including its administrability, clarity, and reduced risk of chilling procompetitive price competition. The Department likely would apply this approach in most cases, but thinks further assessment is necessary before concluding that it is appropriate in all cases.

The Department believes that the competitive effects of any single-product loyalty-discount program should be evaluated carefully before it is condemned under section 2. Situations in which above-cost (on all units) single-product loyalty discounts result in significant foreclosure effects appear to be rare. Theoretical anticompetitive effects appear possible only where some significant portion of the market is uncontestable due to factors external to the parties, most likely end-user demand. The Department believes that an approach requiring courts to determine whether a portion of a market is uncontestable and to quantify that portion, as well as to analyze whether a discount deprived plaintiff of efficient scale, would be difficult to administer. More importantly, such an approach would not provide much clarity to firms deciding whether to offer discounts and likely would chill desirable price competition.

The Department emphasizes that, in any situation in which a foreclosure-based approach is used, plaintiff should be required to demonstrate that the discount forecloses a significant amount of the market and harms competition. Further, as with bundled discounting, plaintiff's (and any other rivals') ability to remain in the market should be a significant factor in assessing competitive harm. When harm to competition is implausible, courts should uphold the discount. Also, as with bundled discounting, where plaintiff demonstrates actual or probable harm to competition, a single-product loyalty discount should be illegal only when (1) it has no procompetitive benefits, or (2) if there are procompetitive

benefits, the discount produces harms substantially disproportionate to those benefits. The Department does not believe that a trivial benefit should outweigh substantial anticompetitive effects.

The Department emphasizes that, in any situation in which a foreclosure-based approach is used, plaintiff should be required to demonstrate that the discount forecloses a significant amount of the market and harms competition.

CHAPTER 7

UNILATERAL, UNCONDITIONAL REFUSALS TO DEAL WITH RIVALS

I. Introduction

Companies are generally under no antitrust obligation to sell or license their products to, or provide their assets for use by, another company. As the Supreme Court explained almost a century ago, “as a general matter, the Sherman Act ‘does not restrict the long recognized right of [a] trader or manufacturer engaged in an entirely private business, freely to exercise [its] own independent discretion as to parties with whom [it] will deal.’”¹ Notwithstanding this general principle, courts, including the Supreme Court, have held that, under certain circumstances, the antitrust laws require a monopolist to deal with a rival.

There is a continuing debate over the application of section 2 to situations involving a refusal to deal with a rival. If a monopolist has something that a rival wants to use to make more, different, or better products, it can appear that consumers would be better off if the monopolist were forced to deal with its rival. But if the monopolist is forced to deal with the rival, the monopolist’s incentives to spend the necessary time and resources to innovate may be diminished. Moreover, the incentives of other firms to invest and innovate, considering the potential future returns on their investments, may be diminished if they believe they will be forced to share a successful innovation. If the incentives to innovate are diminished, consumers are likely harmed in the long run. Additionally, if forced sharing is required, difficult decisions must be made on precisely what needs to be shared, at what price, and under what other terms. These issues have led a number of commentators and

panelists to call into question whether the antitrust laws should ever require a firm to deal with a rival.²

This chapter reviews the law regarding unilateral, unconditional refusals to deal with a rival, analyzes the legal and economic arguments, and then addresses the appropriate role of antitrust where there is an allegation that a unilateral, unconditional refusal to deal violates section 2. It does not address conditional refusals to deal with rivals. In those situations, “[t]he proper focus of antitrust is . . . not on the . . . refusal . . . to deal, but on the competitive consequence of whatever conduct this leads other parties to engage in.”³ That is, antitrust should focus on the conditions, such as tying or exclusivity, not on the refusal. Consequently, those situations raise “very different competitive concerns.”⁴ Nor does the chapter cover refusals to deal that are a part of an agreement with one or more competitors to allocate customers or markets or fix prices, situations covered by section 1 of the Sherman Act. This chapter concerns only what are referred to as unilateral, unconditional refusals to deal with rivals—essentially cases limited to allegations that a company will never sell or license to a rival or will do so only for a price that is alleged

² See, e.g., Sherman Act Section 2 Joint Hearing: Refusals to Deal Panel Hr’g Tr. 32, July 18, 2006 [hereinafter July 18 Hr’g Tr.] (Pate); *id.* at 104 (Whitener); HERBERT HOVENKAMP, *THE ANTITRUST ENTERPRISE* 244–48, 270 (2005); RICHARD A. POSNER, *ANTITRUST LAW* 242 (2d ed. 2001).

³ Dennis W. Carlton & Ken Heyer, *Appropriate Antitrust Policy Towards Single-Firm Conduct* 13 (Econ. Analysis Group, Working Paper No. EAG 08–2, 2008), available at <http://www.usdoj.gov/atr/public/eag/231610.pdf>.

⁴ July 18 Hr’g Tr., *supra* note 2, at 8 (Kolasky); see also *id.* at 72 (Whitener).

¹ *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 408 (2004) (quoting *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919)).

to be too high. In addition, the essential-facilities doctrine is briefly discussed.

II. Background

The general right of a firm freely to determine with whom it will and will not deal was first established by the Supreme Court nearly nine decades ago. In its 1919 *Colgate* decision, the Supreme Court observed that “[i]n the absence of any purpose to create or maintain a monopoly, the [Sherman Act] does not restrict the long recognized right of [a] trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal.”⁵ The Court reaffirmed that principle eighty-five years later in *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, where, citing *Colgate*, the Court affirmed dismissal of an action alleging that non-compliance with state and federal regulations mandating the sale of services to rivals violated section 2.⁶ In *Trinko*, the Court noted that, “as a general matter,” the antitrust laws impose no duty upon a firm to deal with rivals.⁷

Despite the Court’s recognition of a firm’s general right to deal or not to deal with whom it chooses, the Court has in a few decisions found that the antitrust laws required a dominant firm to deal with a rival. For example, eight years after *Colgate*, the Court determined there was sufficient circumstantial evidence to allow a jury to decide if Kodak illegally maintained its monopoly through its refusal to sell photography equipment to independent retailers at traditional “dealers’ discounts” after Kodak opened its own retail outlets.⁸

In 1973, in *Otter Tail Power Co. v. United States*, the Supreme Court held that the antitrust laws required a firm to sell electric service at “wholesale” to towns seeking to replace Otter Tail as the franchised suppliers of retail electric service with their own municipal power systems.⁹ Rejecting Otter Tail’s business justification defense that it needed to keep its lines free to serve its own existing and potential retail customers and noting that “[t]here were no engineering factors” preventing Otter Tail from providing the electricity to the towns, the Court concluded that the “refusals to sell at wholesale . . . were solely to prevent municipal power systems from eroding its monopolistic position.”¹⁰

Twelve years later in *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, the Court found an unlawful refusal to deal with a rival in a decision subsequently described by the Court as being “at or near the outer boundary of § 2 liability.”¹¹ The Court found that a firm operating three of four mountain ski areas in Aspen, Colorado, violated section 2 by refusing to continue cooperating with the firm that owned the fourth ski area in offering a combined four-area ski pass.¹² In reaching this conclusion, the Court focused on defendant’s refusal to sell its rival any lift tickets, even at retail prices,¹³ and its refusal to accept retail-price coupons for its mountains issued by its rival, even though the coupons would have provided defendant “with immediate benefits and would have satisfied its potential customers.”¹⁴ Characterizing the refusal to continue offering a joint ticket as “a decision by

⁵ 250 U.S. at 307.

⁶ 540 U.S. at 408, 416.

⁷ *Id.* at 408.

⁸ *Eastman Kodak Co. v. S. Photo Materials Co.*, 273 U.S. 359, 375 (1927). Although not in the context of a unilateral refusal to deal, the Court also found a duty to deal when addressing the refusal of a joint venture to include one of its member’s competitors. See *Associated Press v. United States*, 326 U.S. 1, 18–19 (1945). This chapter does not address those issues. See *e.g.*, Dennis

W. Carlton, *A General Analysis of Exclusionary Conduct and Refusal to Deal—Why Aspen and Kodak Are Misguided*, 68 ANTITRUST L.J. 659, 660–61 (2001) (noting that “the duty to deal that a joint venture of rivals has” implicates “different issues than those raised by the duty to deal that a single firm should have”).

⁹ 410 U.S. 366, 368 (1973); see *id.* at 381–82.

¹⁰ *Id.* at 378.

¹¹ *Trinko*, 540 U.S. at 409.

¹² *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 606, 611 (1985).

¹³ *Id.* at 593.

¹⁴ *Id.* at 610.

a monopolist to make an important change in the character of the market,"¹⁵ the Court found that the evidence (including, in particular, the cessation of a prior course of voluntary dealing, which the Court presumed to have been profitable) permitted the jury to conclude "that there were no valid business reasons for the refusal."¹⁶

In 1992, the Supreme Court addressed another refusal to continue dealing with a rival in *Eastman Kodak Co. v. Image Technical Services, Inc.*¹⁷ Both Kodak and independent service operators (ISOs) traditionally serviced Kodak copying equipment. ISOs sued after Kodak began limiting their ability to obtain replacement parts.¹⁸ The Court found that a jury should determine whether Kodak violated the antitrust laws. While discussing Kodak's policies under the rubric of tying and in the context of allegations that went well beyond a unilateral, unconditional refusal to deal, the Court observed that although "[i]t is true that as a general matter a firm can refuse to deal with its competitors," that right "is not absolute; it exists only if there are legitimate competitive reasons for the refusal."¹⁹

A split among circuits followed. After remand in *Kodak* itself, a jury found that Kodak violated section 2 when it stopped selling replacement parts to ISOs.²⁰ The Ninth Circuit affirmed, approving a jury instruction that the antitrust laws prohibit a refusal to deal "that unnecessarily excludes or handicaps competitors in order to maintain a monopoly."²¹ Some, but not all, of Kodak's parts were patented, and the court held that "a monopolist's 'desire to exclude others'" from using its patented work "'is a presumptively valid business justification'" for any refusal to license.²² The

court found that the ISOs had rebutted the presumption, concluding that the jury "would have found Kodak's presumptively valid business justification rebutted on the grounds of pretext."²³

The Federal Circuit "decline[d] to follow" the Ninth Circuit's approach in a similar action concerning Xerox's refusal to continue selling patented materials to ISOs.²⁴ Distinguishing the Supreme Court's *Kodak* decision on the ground that "no patents had been asserted in defense of the antitrust claims" in that case, the court agreed with Xerox's assertion that the patent laws granted Xerox the right to refuse to sell to ISOs. It held that "[i]n the absence of any indication of illegal tying, fraud in the Patent and Trademark Office, or sham litigation, the patent holder may enforce the statutory right to exclude others from making, using, or selling the claimed invention free from liability under the antitrust laws."²⁵

Many prominent commentators criticize this refusal-to-deal jurisprudence. For example, one asserts that *Aspen Skiing* and *Kodak* "suffer from confused economic reasoning."²⁶ Others similarly observe that "[a]ntitrust has twisted itself in knots in *Kodak* and other complementary market/aftermarket cases."²⁷ Another laments that "*Kodak* was a failed experiment in a type of economic engineering where antitrust has no place."²⁸ And another concludes that the Court's decision in *Aspen Skiing* "is bound to create systematic error."²⁹ Even commentators

Sys. Support Corp., 36 F.3d 1147, 1187 (1st Cir. 1994)).

²³ *Id.* at 1219-20.

²⁴ *In re Indep. Serv. Orgs. Antitrust Litig.*, 203 F.3d 1322, 1327 (Fed. Cir. 2000).

²⁵ *Id.*

²⁶ Carlton, *supra* note 8, at 659.

²⁷ Kenneth L. Glazer & Abbott B. Lipsky, Jr., *Unilateral Refusals to Deal Under Section 2 of the Sherman Act*, 63 ANTITRUST L.J. 749, 797 (1995).

²⁸ HOVENKAMP, *supra* note 2, at 310.

²⁹ Frank H. Easterbrook, *On Identifying Exclusionary Conduct*, 61 NOTRE DAME L. REV. 972, 973 (1986); see also, e.g., Ronald A. Cass & Keith N. Hylton, *Preserving Competition: Economic Analysis, Legal Standards and Microsoft*, 8 GEO. MASON L. REV. 1, 27 (1999) (stating that *Aspen Skiing* "has been roundly criticized");

¹⁵ *Id.* at 604.

¹⁶ *Id.* at 605.

¹⁷ 504 U.S. 451 (1992).

¹⁸ *Id.* at 458-59.

¹⁹ *Id.* at 483 n.32.

²⁰ *Image Technical Servs., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1201 (9th Cir. 1997).

²¹ *Id.* at 1209 (emphasis omitted).

²² *Id.* at 1218 (quoting *Data Gen. Corp. v. Grumman*

who agree with the result in *Aspen Skiing* concede that the decision lacks a “coherent analytical framework.”³⁰

In its most recent decision dealing with an alleged refusal to deal, the Supreme Court declined to find a duty to deal.³¹ *Trinko* involved an alleged failure by Verizon to share its local telephone network with competitors as required by the 1996 Telecommunications Act (1996 Act).³² The Court first held that the 1996 Act did not create new claims extending beyond existing antitrust standards and then held that Verizon’s conduct did not constitute an illegal refusal to deal under the antitrust laws. According to the Court:

Firms may acquire monopoly power by establishing an infrastructure that renders them uniquely suited to serve their customers. Compelling such firms to share

the source of their advantage is in some tension with the underlying purpose of antitrust law, since it may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities. Enforced sharing also requires antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing—a role for which they are ill suited. Moreover, compelling negotiation between competitors may facilitate the supreme evil of antitrust: collusion. Thus, as a general matter, the Sherman Act “does not restrict the long recognized right of [a] trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal.”³³

The Supreme Court in *Trinko* cautioned that forcing a monopolist to deal with a rival may “lessen the incentive for the monopolist, the rival, or both to invest in . . . economically beneficial facilities.”

Herbert Hovenkamp, *The Monopolization Offense*, 61 OHIO ST. L.J. 1035, 1044–45 (2000) (noting that the implications of *Aspen* and *Kodak* “are problematic to say the least”); Michael Jacobs, *Introduction: Hail or Farewell? The Aspen Case 20 Years Later*, 73 ANTITRUST L.J. 59, 68 (2005) (asserting that the “problematic aspects of *Aspen* lead to a conclusion that the case is an anomaly” and that “*Aspen* was a poor tool for crafting important doctrine under Section 2; the Court’s opinion did little to clarify the meaning of Section 2, and much to obscure it”); William E. Kovacic, *The Antitrust Paradox Revisited: Robert Bork and the Transformation of Modern Antitrust Policy*, 36 WAYNE L. REV. 1413, 1456 (1990) (noting that “many commentators have criticized [*Aspen Skiing*’s] result and reasoning”); James B. Speta, *Antitrust and Local Competition Under the Telecommunications Act*, 71 ANTITRUST L.J. 99, 135 (2003) (describing the *Aspen Skiing* decision as “much criticized”). But see Jonathan B. Baker, *Promoting Innovation Competition Through the Aspen/Kodak Rule*, 7 GEO. MASON L. REV. 495, 496–97 (1999) (arguing that the “*Aspen/Kodak* rule . . . is likely to promote innovation”).

³⁰ Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals’ Costs to Achieve Power Over Price*, 96 YALE L.J. 209, 213 (1986) (stating that the *Aspen Skiing* Court “felt its way through murky precedent to what the Justices’ instincts told them” was the “correct result[.]” (internal quotation marks omitted)).

³¹ *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 416 (2004).

³² Telecommunications Act of 1996, Pub. L. No. 104–104, 110 Stat. 56 (codified as amended in scattered sections of 47 U.S.C.).

While recognizing that “[t]he high value that we have placed on the right to refuse to deal with other firms does not mean that the right is unqualified,”³⁴ the Court also said it is important to be “very cautious in recognizing . . . exceptions” to that right “because of the uncertain virtue of forced sharing and the difficulty of identifying and remedying anticompetitive conduct by a single firm.”³⁵ The Court further said that an allegedly anticompetitive refusal to deal “should be deemed irremedia[ble] by antitrust law when compulsory access requires the court to assume the day-to-day controls characteristic of a regulatory agency.”³⁶

³³ *Trinko*, 540 U.S. at 407–08 (quoting *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919)).

³⁴ *Id.* at 408 (quoting *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 601 (1985)).

³⁵ *Id.* at 408.

³⁶ *Id.* at 415 (quoting Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841, 853 (1990) (alteration in original)); see also Areeda, *supra*, at 855 (“No court should impose

III. Analysis

A. Using the Antitrust Laws to Require a Monopolist to Deal with a Rival

Recent jurisprudence and academic and policy thinking on unilateral, unconditional refusals to deal with rivals focus on several key principles.

- Antitrust law generally does not restrict a firm's right to choose those with which it will deal.³⁷
- Antitrust laws protect the competitive process for the benefit of consumers, not the fortunes of any particular competitor.³⁸
- Although compelling a firm to deal with a rival can increase short-term static competition, it can also diminish or eliminate incentives for firms (both the monopolist and other firms) to innovate in the future.³⁹
- Judges and juries (and antitrust enforcers) are ill-equipped to act as industry regulators deciding the terms on which a firm should be required to sell its products or services.⁴⁰

Using the antitrust laws to require a monopolist to deal with a rival creates a tension between static and dynamic welfare considerations. If a monopolist is forced to deal with a rival, consumers may immediately benefit from short-term price reductions or additional product options. These static benefits, however, are likely to come at a high cost—the loss or diminution of dynamic, long-

a duty to deal that it cannot explain or adequately and reasonably supervise.”).

³⁷ *E.g.*, *Colgate*, 250 U.S. at 307 (explaining that the Sherman Act generally “does not restrict the long recognized right of [a] trader or manufacturer engaged in an entirely private business, freely to exercise [its] own independent discretion as to parties with whom [it] will deal”).

³⁸ *E.g.*, *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 488 (1977) (“The antitrust laws . . . were enacted for ‘the protection of competition not competitors.’” (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962))).

³⁹ *See Trinko*, 540 U.S. at 407–08.

⁴⁰ *See id.* at 408.

term efficiencies.

It is nearly universally accepted that innovation—creating new ways of satisfying consumer demand or lowering costs—is key to increasing welfare.⁴¹ Because innovation drives economic growth,⁴² diminishing incentives to innovate can harm consumers. Thus, two commentators explain, “an essential element of appropriate antitrust policy is to allow a firm to capture as much of the surplus that, by its own investment, innovation, industry or foresight, the firm has itself brought into existence.”⁴³

Forcing a firm—even a monopolist—to deal with a rival on terms it would not choose “may lessen the incentive for the monopolist, the rival, or both” to innovate in the future.⁴⁴ That is, any firm would have to consider that its investment in a superior or desirable product or service might have to be shared with rivals on terms set by a court at the behest of the rival. In addition, before investing in developing their own improved products to compete in the market, rivals would consider whether they could instead convince a court to give them access to a competitor's product. In light of these potentially skewed investment and innovation decisions and their detrimental impact on economic growth and welfare, the Supreme Court in *Trinko* underscored “the uncertain virtue of forced sharing.”⁴⁵ Panelists generally agreed that there likely are few circumstances where forced sharing would help consumers in the long run.⁴⁶

⁴¹ *See, e.g.*, WILLIAM J. BAUMOL, *THE FREE-MARKET INNOVATION MACHINE* 20 (2002).

⁴² *See, e.g.*, Robert M. Solow, *Technical Change and the Aggregate Production Function*, 39 *REV. ECON. & STAT.* 312, 316 (1957).

⁴³ Carlton & Heyer, *supra* note 3, at 1.

⁴⁴ *Trinko*, 540 U.S. at 408. *But cf.* July 18 Hr'g Tr., *supra* note 2, at 44 (Salop) (stating that “monopolists have weaker innovation incentives”).

⁴⁵ 540 U.S. at 408.

⁴⁶ *See, e.g.*, Sherman Act Section 2 Joint Hearing: Conduct as Related to Competition Hr'g Tr. 123, May 8, 2007 [hereinafter May 8 Hr'g Tr.] (Rule); July 18 Hr'g Tr., *supra* note 2, at 26 (Pitofsky) (“Let me start with the proposition that the general rule is and must be no general duty to deal.”); *id.* at 107 (Salop) (stating that “very few refusals to deal would be actionable under

Panelists generally agreed that there likely are few circumstances where forced sharing would help consumers in the long run.

As one panelist observed:

[I]ndependent competition among competitors who are not relying upon one another for assistance or even for pulled punches in the competitive process is what best produces innovative products at low prices. . . . The uncertainty that is caused by indeterminate liability rules and duties to assist competitors [is] likely to retard desirable investment.⁴⁷

Refusal-to-deal claims often involve a refusal to license intellectual-property rights, a setting raising particular concerns about the dampening of innovation incentives.⁴⁸ Recently, the Department and the FTC issued a Report dealing with antitrust enforcement and intellectual property, an entire chapter of which was devoted to whether there should be antitrust liability for a refusal to license patents.⁴⁹ In that Report, the agencies concluded that “liability for mere unilateral refusals to license will not play a meaningful part in the interface between patent rights and antitrust protections.”⁵⁰

In addition to the concern about long-run harm to consumers from forced sharing, there is also a concern, noted by the Court in *Trinko*, that courts would have to engage in price regulation, defining “the terms on which cooperation or related transactions will take place.”⁵¹ As the Supreme Court explained in

my view”).

⁴⁷ July 18 Hr’g Tr., *supra* note 2, at 30 (Pate).

⁴⁸ See, e.g., U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND PROTECTING COMPETITION 23–24 (2007), available at <http://www.usdoj.gov/atr/public/hearings/ip/222655.pdf>.

⁴⁹ See *id.* at 15–32.

⁵⁰ *Id.* at 30.

⁵¹ George A. Hay, *Trinko: Going All the Way*, 50 ANTITRUST BULL. 527, 539 (2005); see also, e.g., July 18 Hr’g Tr., *supra* note 2, at 24 (Pitofsky) (“[I]f you

Trinko, and panelists and commentators alike have emphasized, this is a task for which judges, juries, and antitrust enforcers are very poorly suited.⁵² Because commercial relationships are typically complex and fluid, “[a]n antitrust court is unlikely to be an effective day-to-day enforcer of . . . detailed sharing obligations.”⁵³ As one commentator explains, “[O]nce we get into the issue of fair compensation for the manufacturer’s past R&D expenditures or simply fair compensation for his creative success, we are in a hopeless situation. . . . How would a court ever assess how much a firm should be fairly rewarded for its creative efforts?”⁵⁴

mandate disclosure, you have not just the decision about mandating, you have a decision about at what royalty, what terms, what timing, and so forth.”); *id.* at 76 (Whitener) (stating that “we have to call it what it is, which is price regulation of every firm that is being forced to share”); *id.* at 110 (Walton) (asking “how do we get this pricing”).

⁵² 540 U.S. 398, 408 (2004) (“Enforced sharing . . . requires antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing—a role for which they are ill suited.”); see also, e.g., ANTITRUST MODERNIZATION COMM’N, REPORT AND RECOMMENDATION 102 (2007), available at http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf (“[F]orced sharing requires courts to determine the price at which such sharing must take place, thereby transforming antitrust courts into price regulators, a role for which they are ill suited.”); July 18 Hr’g Tr., *supra* note 2, at 30 (Pate) (stating that courts “are not very well equipped” to set prices); *id.* at 92 (Walton) (reporting that General Motors and the FTC “argued for 19 years” about what were “reasonable” terms of dealing); Hovenkamp, *supra* note 29, at 1044 (observing that “antitrust courts are not public utility agencies”).

⁵³ *Trinko*, 540 U.S. at 415; see also POSNER, *supra* note 2, at 242 (“Where the refusal to deal is unilateral, the only effective remedy is an order that the defendant do business with the victim of the refusal to deal. The antitrust court becomes charged with the supervision of an ongoing commercial relationship, a function that courts are not equipped to perform effectively.”).

⁵⁴ George A. Hay, *A Monopolist’s “Duty to Deal”: The Briar Patch Revisited*, 3 SEDONA CONF. J. 1, 5 (2002); see also May 8 Hr’g Tr., *supra* note 46, at 114 (Sidak) (stating that “regulating price . . . is fundamentally not something that a court can do”).

Due to the difficulties of devising judicially manageable remedies and the risk that a remedy mandating forced sharing might diminish welfare, some commentators conclude that the antitrust laws should never compel rivals to deal.

In view of these remedial difficulties and the risk that a remedy mandating forced sharing might diminish welfare, some commentators conclude that the antitrust laws should never compel rivals to deal. Judge Posner, for example, concludes that “it cannot be sound antitrust law that, when Congress refuses or omits to regulate some aspect of a natural monopolist’s behavior, the antitrust court will step in and, by decree, supply the missing regulatory regime.”⁵⁵ Professor Hovenkamp raises the same concern, contending that forcing a firm to cooperate with rivals is appropriately dealt with through regulation, not the antitrust laws.⁵⁶ Several panelists agreed.⁵⁷

⁵⁵ POSNER, *supra* note 2, at 243–44.

⁵⁶ See HOVENKAMP, *supra* note 2, at 270 (concluding that “[w]hile price-regulated monopoly may sometimes be appropriate, that decision must be made by a legislature, and never via the antitrust laws,” because “a compulsory sales rule turns the defendant into a public utility and places the court in the indefensible position of price regulator”); Sherman Act Section 2 Joint Hearing: Welcome and Overview of Hearings Hr’g Tr. 51, June 20, 2006 (Hovenkamp) (stating that courts should “get out of the business” of forcing firms to deal with competitors under the antitrust laws).

⁵⁷ See, e.g., May 8 Hr’g Tr., *supra* note 46, at 112 (Rule) (explaining that “in the area of refusals to deal, particularly if you are talking about unconditional unilateral refusals to deal, the circumstances under which you would ever be concerned . . . are so limited and so rare that that’s precisely the kind of place you would want to have a rule of per se legality”); July 18 Hr’g Tr., *supra* note 2, at 59–71 (Walton) (describing the history of the FTC’s investigation of GM’s failure to deal with independent crash-part dealers and its own dealers on the same terms and stressing that the FTC ultimately found no violation in part because it did not want to commit extensive resources to reviewing GM’s interpretations of to whom and at what price it could sell); *id.* at 72 (Whitener) (arguing that “unconditional refusals to deal with competitors simply do not

Despite identifying these concerns with forced sharing, the Supreme Court in *Trinko* stated that the right to refuse to deal with rivals is not “unqualified” and reserved the possibility that a refusal to cooperate with rivals “[u]nder certain circumstances . . . can constitute anticompetitive conduct and violate §2.”⁵⁸ Some commentators agree.⁵⁹ Some panelists also agreed, asserting that a per se rule of legality could either unacceptably risk failing to prevent or stop anticompetitive conduct⁶⁰ or lead to more sectoral regulation in the place of antitrust.⁶¹

The Supreme Court in *Trinko* stated that the right to refuse to deal with rivals is not “unqualified.”

One panelist opined that a monopolist’s decision to stop cooperating with a rival

constitute exclusionary conduct”).

⁵⁸ 540 U.S. at 408.

⁵⁹ See, e.g., Areeda, *supra* note 36, at 845 n.21 (stating that distinctions between unilateral conduct and concerted refusals to deal “do not mean that a monopolist should never be required to deal”); Carlton, *supra* note 8, at 660 (“Although it is understandable why some could take the position that the evidence to date on refusals to deal is so ambiguous that there should be no antitrust restrictions, I do not take such an extreme view. I start from the premise that there can be a legitimate role for antitrust restrictions on refusals to deal.”); A. Douglas Melamed, *Exclusionary Conduct Under the Antitrust Laws: Balancing, Sacrifice, and Refusals to Deal*, 20 BERKELEY TECH. L.J. 1247, 1266 (2005) (advocating application of the profit-sacrifice test as a means of prohibiting inefficient refusals to deal while avoiding antitrust intervention when forced sharing would be inefficient).

⁶⁰ Steven C. Salop, *Refusals to Deal* 4 (July 18, 2006) (hearing submission); see also May 8 Hr’g Tr., *supra* note 46, at 110 (Melamed) (stating that “we ought not to have a per se lawful rule because when an AT&T refuses to deal with a rival even though it deals with others interconnecting into the market or when an Aspen refuses to accept tickets sold at retail prices to a competitor, there ought to be some room to say now we know he has gone too far”); July 18 Hr’g Tr., *supra* note 2, at 25 (Pitofsky) (questioning giving “free rei[]n for the monopolist”).

⁶¹ Sherman Act Section 2 Joint Hearing: Policy Issues Hr’g Tr. 116, May 1, 2007 [hereinafter May 1 Hr’g Tr.] (McDavid).

without legitimate justification is “a perfectly legitimate basis for inferring harm to competition.”⁶² Another panelist noted, however, that there is no reason to believe that “a course of conduct that was once entered into remains efficient forever.”⁶³ Hearing testimony further cautioned that a duty of continued dealing could discourage any dealing in the first place.⁶⁴ In light of these latter concerns, the Department believes that a firm’s termination of a prior course of dealing generally should not be a significant factor in assessing whether the antitrust laws impose a duty to deal with a rival.

In addition, some panelists disagreed that the difficulty of crafting administrable, effective remedies supports a rule of per se legality.⁶⁵ Some suggested that a court may set terms of dealing without excessive difficulty in certain circumstances, for example by using the terms at which sales are made to other companies as a benchmark.⁶⁶

⁶² *Id.* at 115 (Baker).

⁶³ July 18 Hr’g Tr., *supra* note 2, at 37 (Pate); *see also* May 1 Hr’g Tr., *supra* note 61, at 113 (Elhauge) (terming reliance on termination of a course of dealing a “misbegotten notion”).

⁶⁴ July 18 Hr’g Tr., *supra* note 2, at 37–38 (Pate); *see also* *Olympia Equip. Leasing Co. v. W. Union Tel. Co.*, 797 F.2d 370, 375 (7th Cir. 1986) (Posner, J.) (“If [defendant] had known that by taking steps to promote competition it would be laying itself open to an antitrust suit . . . it probably would not have taken them.”).

⁶⁵ May 8 Hr’g Tr., *supra* note 46, at 109 (Melamed) (“Answering the liability question with the remedy question is a mistake.”); *id.* at 117 (Pitofsky) (“I am upset with the following process of thinking. This is a very, very difficult issue and the remedy is extremely difficult to work out and, therefore, let’s call it per se legal. I don’t think that’s the way antitrust law should proceed.”).

⁶⁶ *Id.* at 110 (Melamed) (suggesting that “a contemporary discriminating benchmark” is likely to be necessary for demonstrating a refusal to deal); May 1 Hr’g Tr., *supra* note 61, at 116 (Kolasky) (noting that sales to others provide basis for an administrable remedy); July 18 Hr’g Tr., *supra* note 2, at 25 (Pitofsky) (“Sometimes the remedy is easy. Perhaps the monopolist has already been licensing other people, but refuses to license potential competitors. It’s not common, but it happens.”); *id.* at 57 (Salop) (“Market

Panelists who supported potential liability for refusals to deal proposed a number of different tests for assessing when a firm should be required to accept a rival’s offer to deal. Two panelists endorsed tests ultimately balancing procompetitive and anticompetitive effects of a refusal to deal.⁶⁷ A third panelist favored a test under which a monopolist would be compelled to accept offers to deal with a rival above a “protected profits benchmark,” that is, a price that would compensate the defendant for its loss of monopoly profits from customers that shift from dealing with the defendant to dealing with the plaintiff.⁶⁸ Two other panelists endorsed focusing the inquiry on whether the practice “would make no economic sense for the defendant but for its tendency to eliminate or lessen competition.”⁶⁹

After reviewing and considering the case law and commentary, as well as the panelists’ views, the Department believes that there is a significant risk of long-run harm to consumers from antitrust intervention against unilateral, unconditional refusals to deal with rivals, particularly considering the effect of economy-wide disincentives and remedial difficulties. Then-Judge Breyer’s assessment of the difficulties inherent in establishing whether a price is illegally high under the antitrust laws applies with equal force to evaluating the sufficiency of an offer in refusal-to-deal cases:

[H]ow is a judge or jury to determine a “fair price?” Is it the price charged by other suppliers of the [monopoly] product? None exist. Is it the price that competition “would have set” were the [market] not monopolized? How can the court determine this price without examining costs and demands, indeed without acting like a rate-setting regulatory agency, the rate-setting proceedings of which often last for several years? . . . Must it be [sufficient]

prices often provide a good benchmark.”).

⁶⁷ July 18 Hr’g Tr., *supra* note 2, at 16 (Kolasky); *id.* at 21–22, 25–26 (Pitofsky).

⁶⁸ *Id.* at 48 (Salop).

⁶⁹ May 8 Hr’g Tr., *supra* note 46, at 115 (Melamed); R. Hewitt Pate, *Refusals to Deal and Essential Facilities* 23 (July 18, 2006) (hearing submission).

for all independent competing firms to make a “living profit,” no matter how inefficient they may be? If not, how does one identify the “inefficient” firms? And how should the court respond when costs or demands change over time, as they inevitably will?⁷⁰

The Department thus concludes that antitrust liability for unilateral, unconditional refusals to deal with competitors should not play a meaningful part in section 2 enforcement.⁷¹

B. The Essential-Facilities Doctrine

The essential-facilities doctrine derives from the 1912 *United States v. Terminal Railroad Ass’n of St. Louis* decision in which the Supreme Court condemned a consortium’s combination of railroad facilities necessary to carry freight traffic or passengers across the Mississippi River at St. Louis. Rather than order dissolution, the Court held that the consortium could continue so long as it either admitted other railroads into the consortium or agreed to charge railroads that were not in the consortium fees that would “place every such [railroad] upon as nearly an equal plane . . . as that occupied by the [consortium members].”⁷²

Although the case involved a joint venture among competitors, lower courts have drawn from *Terminal Railroad* the essential-facilities doctrine—the proposition that the antitrust laws require a single firm in control of a facility essential to its competitors to provide reasonable access to the facility if possible.⁷³ In *MCI*, the Seventh Circuit set forth a leading

formulation of the doctrine, under which a plaintiff must prove four elements to establish liability and defendant’s obligation to provide access: “(1) control of the essential facility by a monopolist; (2) a competitor’s inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility.”⁷⁴

Aspen Skiing contains the Supreme Court’s first explicit mention of the essential-facilities doctrine. The Tenth Circuit had affirmed liability on multiple grounds, including the theory that the joint lift ticket constituted an essential facility to which plaintiff had a right of access.⁷⁵ The Supreme Court declined “to consider the possible relevance of the ‘essential facilities’ doctrine” and affirmed on other grounds.⁷⁶ In *Trinko*, the Supreme Court similarly declined “either to recognize . . . or to repudiate” the doctrine, noting that, even if it were to exist, it would be inapplicable where government regulations included “extensive provision for access” to the allegedly essential facility.⁷⁷

Many commentators criticize the essential-facilities doctrine, noting that the doctrine fails to provide clear guidance as to what constitutes a facility, what makes a facility essential, and what constitutes a denial of access.⁷⁸ Similarly,

⁷⁰ *Town of Concord v. Boston Edison Co.*, 915 F.2d 17, 25 (1st Cir. 1990) (Breyer, C.J.).

⁷¹ This is consistent with the conclusion of the 2007 report of the Department and the FTC regarding antitrust enforcement and intellectual property. See U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, *supra* note 48, at 32.

⁷² *United States v. Terminal R.R. Ass’n of St. Louis*, 224 U.S. 383, 411 (1912).

⁷³ See, e.g., *MetroNet Servs. Corp. v. Qwest Corp.*, 383 F.3d 1124, 1128–29 (9th Cir. 2004); *MCI Commc’ns Corp. v. AT&T*, 708 F.2d 1081, 1132–33 (7th Cir. 1983); *Hecht v. Pro-Football, Inc.*, 570 F.2d 982, 992–93 (D.C. Cir. 1977); *United States v. AT&T*, 524 F. Supp. 1336, 1360–61 (D.D.C. 1981).

⁷⁴ *MCI*, 708 F.2d at 1132–33; see also *Hecht*, 570 F.2d at 992 (“The essential facility doctrine . . . states that ‘where facilities cannot practicably be duplicated by would-be competitors, those in possession of them must allow them to be shared on fair terms.’” (citations omitted)); July 18 Hr’g Tr., *supra* note 2, at 96 (Pitofsky) (stating that “virtually every lower court adheres to” the Seventh Circuit’s definition of essential facilities set forth in the 1983 *MCI* decision).

⁷⁵ *Aspen Highlands Skiing Corp. v. Aspen Skiing Co.*, 738 F.2d 1509, 1520–21 (10th Cir. 1984), *aff’d*, 472 U.S. 585 (1985).

⁷⁶ 472 U.S. at 611 n.44.

⁷⁷ 540 U.S. 398, 411 (2004).

⁷⁸ See, e.g., 3A PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW*, ¶ 771c, at 173 (2d ed. 2002) (noting that “the essential facility doctrine is both harmful and unnecessary and should be abandoned”); Areeda, *supra* note 36, at 852 (“Compulsory access, if it exists at all, is and should be very exceptional.”); Donald I. Baker, *Compulsory Access to Network Joint*

many panelists recommended that it be expressly repudiated,⁷⁹ although some others supported a limited application of the doctrine in “extraordinary cases.”⁸⁰

As critics of the doctrine have observed, each MCI factor raises difficult issues for courts. For example, a court must determine what constitutes a facility and how critical access to the facility is to effective competition.⁸¹ The second MCI element, asking whether a competitor can reasonably duplicate the facility, may require the court to determine whether the costs of duplicating the facility are reasonable.⁸² The third element, denial of

Ventures Under the Sherman Act: Rules or Roulette?, 1993 UTAH L. REV. 999, 1006 (stating that “competition among networks, rather than judicial compulsion, should be the preferred option”); Michael Boudin, *Antitrust Doctrine and the Sway of Metaphor*, 75 GEO. L.J. 395, 402 (1986) (noting “embarrassing weakness” of essential facilities doctrine); Abbott B. Lipsky, Jr. & J. Gregory Sidak, *Essential Facilities*, 51 STAN. L. REV. 1187, 1195 (1999) (stating that “mandatory access remedies, such as the essential facilities doctrine, do not fit comfortably within antitrust law”); Gregory J. Werden, *The Law and Economics of the Essential Facility Doctrine*, 32 ST. LOUIS U. L.J. 433, 480 (1987) (asserting that “courts should reject the doctrine”).

⁷⁹ July 18 Hr’g Tr., *supra* note 2, at 116 (Kolasky) (“I think the essential facilities doctrine should be abandoned all together.”); *id.* (Whitener) (stating that he “would eliminate the doctrine”).

⁸⁰ *Id.* at 99 (Salop); *see also id.* at 26 (Pitofsky) (stating that essential facilities doctrine is needed to deal with “bottleneck monopol[ies]”); *id.* at 98–99 (Salop) (asserting that there is no reason a court should not step in when, by “an accident of history,” an industry that should be regulated is not, and urging that, although regulation by courts is “rare,” that is “not to say that it should never be done”).

⁸¹ *See, e.g.,* Lipsky & Sidak, *supra* note 78, at 1212 (“[E]ssentiality’ and the ‘practicability of duplication’ are issues that can depend on matters of degree. . . . It may be difficult indeed to determine whether exclusion from the use of a particular facility will mean inconvenience, extinction, or some intermediate degree of harm to the excluded competitor.”); Werden, *supra* note 78, at 452–53 (discussing lack of clarity in case law regarding what constitutes a facility).

⁸² *See* Lipsky & Sidak, *supra* note 78, at 1211–13; *see also* Fishman v. Estate of Wirtz, 807 F.2d 520, 540 (7th Cir. 1986) (finding a basketball arena to be an essential facility because it “was not duplicable without an expenditure that would have been unreasonable in light

access, may appear uncomplicated when an absolute denial is involved, but can become complex when a more limited denial is alleged or when parties merely disagree on the price or other terms at which access to some asset can be bought.⁸³ Some cases suggest that essential facilities must be made available on terms that are “just and reasonable”⁸⁴ or “nondiscriminatory,”⁸⁵ but they do not provide any useful guidance on when terms of access will be regarded to be “unreasonable.”⁸⁶ Analysis of this issue may involve evaluation of the outcome of price negotiations between the monopolist and its competitor, making judicial administrability difficult.⁸⁷ Finally, evaluating the feasibility of providing the facility may require the court to make difficult judgments about the impact of forced sharing on the efficient and safe functioning of the facility.⁸⁸

More basically, commentators point out that the concerns about innovation incentives and judicial capacity arising in refusal-to-deal cases apply equally in essential-facility cases. For

of the size of the transaction such duplication would have facilitated”).

⁸³ *See* Werden, *supra* note 78, at 456 (discussing the difficulties of evaluating “less overt methods of disadvantaging a competitor” than complete denial of access to a facility).

⁸⁴ *United States v. Terminal R.R. Ass’n of St. Louis*, 224 U.S. 383, 411 (1912).

⁸⁵ *MCI Commc’ns v. AT&T*, 708 F.2d 1081, 1148 (7th Cir. 1983).

⁸⁶ *See, e.g.,* Werden, *supra* note 78, at 456 (“The cases provide no guidance as to when terms of access are unreasonable.”).

⁸⁷ *See, e.g., id.*

⁸⁸ *See, e.g.,* State of Ill. *ex rel.* Burris v. Panhandle E. Pipe Line Co., 935 F.2d 1469, 1483 (7th Cir. 1991) (stating that the feasibility requirement “excuses refusals to provide access [to an essential facility] justified by the owner’s legitimate business concerns”); Hecht v. Pro-Football, Inc., 570 F.2d 982, 992–93 (D.C. Cir. 1977) (“The antitrust laws do not require that an essential facility be shared if such sharing would be impractical or would inhibit the defendant’s ability to serve its customers adequately.”); *see also* Thomas E. Kauper, *Section Two of the Sherman Act: The Search for Standards*, 93 GEO. L.J. 1623, 1626 n.21 (2005) (“Recent cases indicate that sharing even an essential facility is not required where there is an efficiency reason for not doing so.”).

example, a firm may be unwilling to assume the risk and costs of creating a facility if it could later be compelled to share that facility on terms it would not otherwise have chosen.⁸⁹ Moreover, commentators note that courts granting relief under the doctrine would face the nettlesome task of setting prices and other terms of dealing.⁹⁰ In short, the consequences of forcing a firm to deal with its rivals do not disappear with the substitution of the rubric essential facilities for refusals to deal.

The Department agrees that the essential-facilities doctrine is a flawed means of deciding whether a unilateral, unconditional refusal to deal harms competition. The doctrine is essentially a “label that beguiles some commentators and courts into pronouncing a duty to deal without analyzing [its] implications.”⁹¹ In addition to the ambiguities and difficulties of application discussed above, the doctrine does not explicitly require harm to competition, rather than to competitors; does not require that conferring access substantially improve competition; and does not expressly allow for a full consideration of legitimate business justifications. As Professor Areeda put it, essential facilities “is less a doctrine than an

epithet, indicating some exception to the right to keep one’s creations to oneself, but not telling us what those exceptions are.”⁹²

The Department agrees that the essential-facilities doctrine is a flawed means of deciding whether a unilateral, unconditional refusal to deal harms competition.

IV. Conclusion

The Department believes that there is a significant risk of long-run harm to consumers from antitrust intervention against unilateral, unconditional refusals to deal with rivals, particularly considering the effects of economy-wide disincentives and remedial difficulties. The Department thus concludes that antitrust liability for unilateral, unconditional refusals to deal with rivals should not play a meaningful part in section 2 enforcement.

The Department believes that antitrust liability for unilateral, unconditional refusals to deal with rivals should not play a meaningful part in section 2 enforcement.

⁸⁹ See e.g., Areeda, *supra* note 36, at 851 (“Required sharing discourages building facilities . . . even though they benefit consumers.”); Paul D. Marquardt & Mark Leddy, *The Essential Facilities Doctrine and Intellectual Property Rights: A Response to Pitofsky, Patterson, and Hooks*, 70 ANTITRUST L.J. 847, 856 (2003) (“If innovation did not carry the promise of potential economic return, there would of course be much less of it.”). Cf. AREEDA & HOVENKAMP, *supra* note 78, ¶ 771b, at 172 (stating that forced sharing of an essential facility “discourages firms from developing their own alternative inputs”).

⁹⁰ See e.g., Frank H. Easterbrook, *When Is It Worthwhile to Use Courts to Search for Exclusionary Conduct?*, 2003 COLUM. BUS. L. REV. 345, 352 (“A duty to [share an essential facility] leaves the price term open, so it fails to handle monopoly unless the court becomes a rate regulator—and few think that the isolated examples of judicial rate regulation, such as the blanket license decree for copyrights, have been successful.” (footnote omitted)); Lipsky & Sidak, *supra* note 78, at 1248 (stating that courts “feel ill-equipped[] to prescribe and monitor price, terms, and condition of access”).

⁹¹ AREEDA & HOVENKAMP, *supra* note 78, ¶ 772a, at 175.

⁹² Areeda, *supra* note 36, at 841.

CHAPTER 8

EXCLUSIVE DEALING

I. Introduction

Exclusive dealing describes an arrangement whereby one party's willingness to deal with another is contingent upon that other party (1) dealing with it exclusively or (2) purchasing a large share of its requirements from it.¹

Exclusive dealing is common and can take many forms.² It often requires a buyer to deal exclusively with a seller. For example, a manufacturer may agree to deal with a distributor only if the distributor agrees not to carry the products of the manufacturer's competitors.³ And many franchise outlets agree to buy certain products exclusively from a franchisor.⁴ But it also may involve a seller dealing exclusively with a single buyer.

Exclusive dealing also occurs between sellers and consumers, as when a consumer agrees to purchase all its requirements of a particular product from a single supplier. Firms may agree to deal exclusively in contracts

prohibiting one party from dealing with others,⁵ or the exclusive-dealing arrangement can take other forms, as when a seller enacts policies effectively requiring customers to deal exclusively with it.

Exclusive dealing is frequently procompetitive, as when it enables manufacturers and retailers to overcome free-rider issues misaligning the incentives for these vertically-related firms to satisfy the demands of consumers most efficiently. For example, a manufacturer may be unwilling to train its distributors optimally if distributors can take that training and use it to sell products of the manufacturer's rivals. Other benefits can occur as well, as when an exclusivity arrangement assures a customer of a steady stream of a necessary input.

But exclusive dealing also can be anticompetitive in some circumstances. For example, exclusive dealing may allow one manufacturer, in effect, to monopolize efficient distribution services and thereby prevent its rivals from competing effectively. As then-Judge Breyer explained, exclusive dealing can harm consumers by thwarting entry or inhibiting the growth of existing rivals:

Exclusive dealing arrangements may *sometimes* be found unreasonable under the antitrust laws because they may place enough outlets, or sources of supply, in the hands of a single firm (or small group of firms) to make it difficult for new, potentially competing firms to penetrate the market. To put the matter more technically, the arrangements may "foreclose" outlets or supplies to potential entrants, thereby

¹ See, e.g., 1 SECTION OF ANTITRUST LAW, AM. BAR ASS'N, ANTITRUST LAW DEVELOPMENTS 210 (6th ed. 2007) ("Exclusive dealing describes a set of practices that have the effect of inducing a buyer to purchase most or all products or services for a period of time from one supplier."). Firms sometimes engage in bundling and loyalty-discount practices with competitive effects similar to those of exclusive dealing. Chapter 6 discusses those practices.

² See, e.g., Sherman Act Section 2 Joint Hearing: Exclusive Dealing Session Hr'g Tr. 41, Nov. 15, 2006 [hereinafter Nov. 15 Hr'g Tr.] (Marvel) ("It is obvious that exclusive dealing is a very common thing . . ."); *id.* at 121 (Lipsky) ("Exclusive dealing is a very elastic label. It applies to a lot of different things."); Richard M. Steuer, *Exclusive Dealing in Distribution*, 69 CORNELL L. REV. 101, 101 (1983) ("Exclusive dealing is one of the most common practices within the sweep of the antitrust laws . . .").

³ See, e.g., Nov. 15 Hr'g Tr., *supra* note 2, at 41 (Marvel); see also, e.g., Steuer, *supra* note 2, at 102.

⁴ See, e.g., HERBERT HOVENKAMP, THE ANTITRUST ENTERPRISE 202 (2005).

⁵ See also Nov. 15 Hr'g Tr., *supra* note 2, at 64 (Jacobson) ("I think the 'no contract, no problem' scheme is a problem . . ."); *id.* at 117 (Calkins) ("[I]t should be possible for a short-term contract or contract that is cancellable still to be . . . unlawful.").

raising entry barriers. Higher entry barriers make it easier for existing firms to exploit whatever power they have to raise prices above the competitive level because they have less to fear from potential new entrants.⁶

Sometimes exclusive dealing can both provide benefits and at the same time impede the ability of a manufacturer's rivals to compete effectively. In those situations, determining whether the arrangement should be illegal can be difficult because "what makes exclusive dealing potentially harmful is the very same mechanism that makes the arrangement efficient and may lead to lower prices for consumers."⁷

Historically, Supreme Court exclusive-dealing jurisprudence has focused on whether the arrangement "foreclose[s] competition in a substantial share of the line of commerce affected."⁸ Current practice in the courts of appeals, however, assesses the legality of exclusive dealing by examining a broad set of factors.⁹ This chapter reviews exclusive-dealing law, discusses exclusive dealing's potential anticompetitive and procompetitive effects, and sets forth the Department's view on certain legal issues regarding the treatment of exclusive dealing.

II. Background

Courts have condemned exclusive dealing under four provisions of the antitrust laws: (1) section 1 of the Sherman Act, which prohibits contracts "in restraint of trade,"¹⁰ (2) section 2 of the Sherman Act, which makes it illegal to "monopolize,"¹¹ (3) section 3 of the

Clayton Act, which prohibits exclusivity arrangements that may "substantially lessen competition,"¹² and (4) section 5 of the FTC Act, which prohibits "[u]nfair methods of competition."¹³ "The extent to which exclusive dealing jurisprudence under Section 2 differs from exclusive dealing claims in other contexts is not precisely clear."¹⁴ Some courts, however, find that the different statutory provisions create different standards of legality.¹⁵

This chapter discusses exclusive-dealing cases arising under both section 2 of the Sherman Act and other statutory provisions. Courts today consider a wide variety of competitive factors when assessing the legality of an exclusive-dealing arrangement.¹⁶ Among those factors, one panelist asserted that the three most significant are (1) "the nature of the product and relationship" between the parties to the arrangement, (2) the "percentage of the market" foreclosed to rivals as a result of the arrangement, and (3) the "duration" of the arrangement.¹⁷ Professor Hovenkamp states that exclusive dealing requires "a plaintiff to show that the defendant has significant market power, that the exclusivity agreement serves to deny market access to one or more significant rivals, and that market output to consumers is lower (or prices higher) as a result."¹⁸ These considerations, however, are broader than those addressed in older Supreme Court precedent, which, as described below, focused on whether the exclusive dealing foreclosed a substantial amount of trade, a focus that would

⁶ *Interface Group, Inc. v. Mass. Port Auth.*, 816 F.2d 9, 11 (1st Cir. 1987) (Breyer, J.) (emphasis in original) (citations omitted).

⁷ Nov. 15 Hr'g Tr., *supra* note 2, at 53 (Jacobson); *see also, e.g., id.* at 138 (Farrell) (noting the difficulty of "disentangling all of these difficult concepts").

⁸ *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 327 (1961).

⁹ *See, e.g., Nov. 15 Hr'g Tr.*, *supra* note 2, at 72-73 (Steuer, Jacobson, Wright); *id.* at 122-23 (Lipsky).

¹⁰ 15 U.S.C. § 1 (2000).

¹¹ *Id.* § 2.

¹² *Id.* § 14. Among other limitations, section 3 applies only to "goods, wares, merchandise, machinery, supplies, or other commodities." *Id.*

¹³ *Id.* § 45(a)(1). This report does not address section 5, which is beyond the scope of this report.

¹⁴ SECTION OF ANTITRUST LAW, *supra* note 1, at 248.

¹⁵ *See, e.g., United States v. Dentsply Int'l, Inc.*, 399 F.3d 181, 197 (3d Cir. 2005).

¹⁶ *See, e.g., id.* at 187, 196; *United States v. Microsoft Corp.*, 253 F.3d 34, 71-74 (D.C. Cir. 2001) (en banc) (per curiam); *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 236-37 (1st Cir. 1983) (Breyer, J.).

¹⁷ Nov. 15 Hr'g Tr., *supra* note 2, at 72-73 (Steuer); *see also* SECTION OF ANTITRUST LAW, *supra* note 1, at 217-20.

¹⁸ HOVENKAMP, *supra* note 4, at 206.

prohibit many exclusive-dealing arrangements that courts today uphold.

A. Supreme Court

In its first decision condemning exclusive dealing under the antitrust laws, the Supreme Court considered a contract prohibiting one of Standard Fashion's retailers from carrying other manufacturers' garment patterns. After the retailer began carrying another line of patterns, Standard Fashion sought damages from the retailer for breach of contract. The Court affirmed dismissal of the action on the ground that the contract violated the Clayton Act. Noting that Standard Fashion controlled forty percent of the pattern retailers in the country, the Court found that Standard Fashion's exclusive-dealing arrangements "'must in hundreds, perhaps in thousands, of small communities amount to . . . a monopoly.'"¹⁹

In its 1949 *Standard Oil Co. of California v. United States (Standard Stations)* decision, the Court similarly upheld an injunction prohibiting Standard Oil from enforcing contractual provisions requiring gas stations in seven states to purchase only Standard Oil gas.²⁰ The Court noted that exclusive dealing "may well be of economic advantage to buyers as well as to sellers, and thus indirectly of advantage to the consuming public,"²¹ but found these potential procompetitive justifications irrelevant because (1) Congress did not intend the courts to weigh "in each case the ultimate demands of the 'public interest'"²² and (2) courts are "ill-suited" to the task of ascertaining pro- and anticompetitive effects.²³ Because "the affected proportion of retail sales of petroleum products [was] substantial"²⁴—Standard Oil had exclusive-dealing contracts with "16% of the retail gasoline outlets" in the seven-state area²⁵—the Court held that the contract violated

the Clayton Act.²⁶

Shortly thereafter, the Court considered a newspaper's refusal to sell advertising to firms that also bought advertising from a new radio station.²⁷ Some commentators view this practice as an attempt by the newspaper to be its customers' exclusive supplier of local advertising.²⁸ The Court found that section 2 of the Sherman Act prohibited the newspaper's attempt to "regain" its "substantial monopoly" by forcing the radio station out of business,²⁹ holding that the newspaper violated the antitrust laws "when it use[d] its monopoly to destroy threatened competition."³⁰ Some commentators assert that this case is an example of an exclusivity arrangement with clear anticompetitive effects but no redeeming procompetitive effects.³¹

In 1961, the Court upheld a contract whereby Nashville Coal agreed to sell all the coal Tampa Electric required to operate some of its power plants. When Nashville Coal refused to honor the contract, Tampa Electric sued. Nashville Coal defended on the ground that the Clayton Act prohibited the exclusive-dealing contract, which required, over a twenty-year period, delivery of coal worth about \$128 million, about one percent of the relevant market. Although analyzing the issue under the substantiality framework set forth in *Standard Stations*, the Court stated that the legality of the arrangement depended on many

²⁶ *Id.* at 314.

²⁷ *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951).

²⁸ Compare, e.g., Jonathan M. Jacobson, *Exclusive Dealing, "Foreclosure," and Consumer Harm*, 70 ANTITRUST L.J. 311, 321 (2002) (characterizing defendant's conduct as "an exclusive dealing policy"), with John E. Lopatka & Andrew N. Kleit, *The Mystery of Lorain Journal and the Quest for Foreclosure in Antitrust*, 73 TEX. L. REV. 1255, 1287 (1995) ("Perhaps the most productive way to explore the *Lorain Journal* case is through application of a tying paradigm.").

²⁹ *Lorain Journal*, 342 U.S. at 153.

³⁰ *Id.* at 154.

³¹ See, e.g., 3A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 768e3, at 155 (2d ed. 2002) ("A supplier's requirement that a customer not deal with a specific rival seems particularly hard to justify.").

¹⁹ *Standard Fashion Co. v. Magrane-Houston Co.*, 258 U.S. 346, 357 (1922) (quoting circuit court).

²⁰ 337 U.S. 293, 314 (1949).

²¹ *Id.* at 306.

²² *Id.* at 311.

²³ *Id.* at 310.

²⁴ *Id.* at 314.

²⁵ *Id.* at 295.

factors that it had deemed irrelevant in *Standard Stations*:

To determine substantiality in a given case, it is necessary to weigh the probable effect of the contract on the relevant area of effective competition, taking into account the relative strength of the parties, the proportionate volume of commerce involved in relation to the total volume of commerce in the relevant market area, and the probable immediate and future effects which pre-emption of that share of the market might have on effective competition therein.³²

Applying these competitive factors, the Court upheld the arrangement, noting that the contract assured a steady source of supply for Tampa Electric and enabled Nashville Coal to reduce selling expenses.³³

Despite the Court's less hostile treatment of exclusive dealing in *Tampa Electric*, the Court soon thereafter condemned, under section 5 of the FTC Act, Brown Shoe's exclusivity arrangements with approximately one percent of U.S. shoe retailers. Finding that these arrangements required "shoe retailers . . . substantially to limit their trade with Brown's competitors," the Court held that the exclusivity program "obviously conflicts with the central policy of both § 1 of the Sherman Act and § 3 of the Clayton Act against contracts which take away freedom of purchasers to buy in an open market."³⁴

Finally, the Supreme Court mentioned exclusive dealing in its 1984 *Jefferson Parish Hospital District No. 2 v. Hyde* decision, observing that an "exclusive-requirements contract . . . could be unlawful if it foreclosed so much of the market from penetration by . . . competitors as to unreasonably restrain

competition in the affected market."³⁵ Although the case was decided under the rubric of tying, the four concurring Justices noted that the contract at issue "unquestionably does constitute exclusive dealing."³⁶ They would have found no liability under section 1 of the Sherman Act because the arrangement—between four anesthesiologists and one of several hospitals in the area—affected "only a very small fraction of the total number of anesthesiologists whose services are available for hire by other hospitals."³⁷

B. Courts of Appeals

With no Supreme Court case ruling on exclusive dealing since *Brown Shoe*, jurisprudence has developed in the courts of appeals. The courts of appeals have interpreted *Tampa Electric* as abandoning the Court's narrow focus in *Standard Stations* on substantiality, and they thus consider a variety of competitive factors when assessing exclusive dealing. A theme throughout these cases is that the extent to which rivals are foreclosed from the market is only one factor in the analysis; courts also consider procompetitive justifications when assessing the practice's legality.

In 1983, the First Circuit upheld a series of contracts whereby Grinnell agreed to purchase from Pacific Scientific a high portion of Grinnell's expected demand for snubbers, which are safety devices used in nuclear facilities. Barry Wright, a competing snubber manufacturer, sought damages from Pacific (which historically held an eighty-percent share of the snubber market) under section 2 of the Sherman Act. Barry Wright characterized the contracts as exclusive-dealing arrangements that effectively precluded it from selling snubbers to Grinnell, which purchased about fifty percent of all snubbers. Noting that "courts have judged the lawfulness of [exclusive dealing] not under per se rules but under a 'rule of reason,'"³⁸ the court upheld the

³² *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 329 (1961).

³³ *Id.* at 334.

³⁴ *FTC v. Brown Shoe Co.*, 384 U.S. 316, 321 (1966); see also *In re Brown Shoe Co.*, 62 F.T.C. 679, 716 (1963) (noting that "[t]he stores under the franchise plan constitute approximately one percent" of all U.S. "retail shoe outlets").

³⁵ 466 U.S. 2, 30 n.51 (1984).

³⁶ *Id.* at 44 (O'Connor, J., concurring).

³⁷ *Id.* at 46.

³⁸ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724

arrangements, asserting that the relevant inquiry was “whether the ‘size’ of the contract to purchase is reasonable”³⁹ in view of “both the extent of the foreclosure and the buyer’s and seller’s business justifications.”⁴⁰ The court found the arrangements justified in view of, among other things, “their fairly short time period”⁴¹—the longest covered a two-and-a-half-year period—and the existence of “legitimate business justifications”⁴²—Grinnell’s desire for “a stable source of supply” and “a stable, favorable price” and Pacific’s desire to engage in “production planning that was likely to lower costs.”⁴³

The next year, the Seventh Circuit vacated a preliminary injunction under the Clayton Act prohibiting a manufacturer from terminating a dealer that had begun carrying a competing line. Without deciding the issue on the merits, the court noted that exclusive dealing may increase welfare by “lead[ing] dealers to promote each manufacturer’s brand more vigorously than would be the case under nonexclusive dealing” and “prevent[ing] dealers from taking a free ride” on one manufacturer’s promotional efforts.⁴⁴ The decision is known particularly for the court’s statement that “[e]xclusive-dealing contracts terminable in less than a year are presumptively lawful.”⁴⁵

In another important First Circuit decision, that court approved an exclusivity arrangement challenged under sections 1 and 2 of the Sherman Act in 1993. The arrangement here involved a seller’s commitment to sell its output only to a specified buyer: approximately twenty-five percent of New Hampshire’s primary-care physicians agreed to sell their services to Healthsource and no other

health maintenance organization (HMO). The court found no section 1 violation since plaintiff (a competing HMO) failed to offer “proof of substantial foreclosure,” which the court characterized as the “cardinal requirement of a valid claim.”⁴⁶ The court rejected the section 2 claim on the ground that plaintiff failed to establish “a properly defined product market in which [defendant] could approach monopoly size.”⁴⁷ The court noted that exclusivity arrangements may have “benign” purposes, including “assurance of supply or outlets, enhanced ability to plan, reduced transaction costs, [and] creation of dealer loyalty.”⁴⁸

Four years later, the Ninth Circuit upheld, under section 3 of the Clayton Act, a manufacturer’s policy of refusing to sell its equipment (a variety of products used at gasoline stations) to retailers carrying competing equipment on the ground that the arrangement only “foreclosed roughly 38% of the relevant market.”⁴⁹ In reaching its conclusion, the court stated that “exclusive dealing arrangements imposed on distributors rather than end-users are generally less cause for anticompetitive concern”⁵⁰ because rivals can sell directly to end-users. Further, “the short duration and easy terminability” of an exclusivity arrangement “negate[s] substantially [its] potential to foreclose competition.”⁵¹

Two prominent decisions condemning exclusive dealing followed. In 2001, the D.C. Circuit upheld under section 2 of the Sherman Act the condemnation of several exclusivity agreements between Microsoft and original equipment manufacturers, internet access providers, independent software vendors, and Apple on the ground that they “bar[red]” Microsoft’s rivals from “means of distribution”

F.2d 227, 236 (1st Cir. 1983) (Breyer, J.).

³⁹ *Id.* at 237.

⁴⁰ *Id.* at 236–37.

⁴¹ *Id.* at 238.

⁴² *Id.* at 237.

⁴³ *Id.*

⁴⁴ *Roland Mach. Co. v. Dresser Indus., Inc.*, 749 F.2d 380, 395 (7th Cir. 1984) (Posner, J.).

⁴⁵ *Id.*

⁴⁶ *U.S. Healthcare, Inc. v. Healthsource, Inc.*, 986 F.2d 589, 597 (1st Cir. 1993) (Boudin, J.).

⁴⁷ *Id.* at 599.

⁴⁸ *Id.* at 595.

⁴⁹ *Omega Envtl., Inc. v. Gilbarco, Inc.*, 127 F.3d 1157, 1162 (9th Cir. 1997).

⁵⁰ *Id.*

⁵¹ *Id.* at 1163.

that were “cost-efficient.”⁵² The court stated that in a monopoly-maintenance case, two important concerns are whether the exclusive dealing “‘reasonably appear[s] capable of making a significant contribution to . . . maintaining monopoly power’”⁵³ and whether competing firms that wanted to use the distribution channels subject to the exclusivity arrangement “constituted nascent threats” to defendant’s monopoly power.⁵⁴

Similarly, in *Dentsply*, the Third Circuit held in 2005 that Dentsply’s practice of refusing to sell to distributors that carried other manufacturers’ artificial teeth violated section 2 because it unlawfully maintained Dentsply’s monopoly power.⁵⁵ This practice left Dentsply’s rivals with distribution methods entailing “significantly higher transaction costs, extension of credit burdens, and credit risks,”⁵⁶ thereby “keep[ing] sales of competing teeth below the critical level necessary for any rival to pose a real threat to Dentsply’s market share.”⁵⁷ Finding that Dentsply’s policy “exclude[d] its rivals from access to dealers,”⁵⁸ the court held that Dentsply’s proffered efficiency justifications were “pretextual” and “did not excuse its exclusionary practices.”⁵⁹ Notably, the *Dentsply* court distinguished several other courts’ assertions that short-term exclusive-dealing contracts are presumptively legal,⁶⁰ explaining that a policy of not dealing with customers also patronizing a rival can “realistically make the arrangements . . . as effective as those in written contracts.”⁶¹

⁵² *United States v. Microsoft Corp.*, 253 F.3d 34, 64 (D.C. Cir. 2001) (en banc) (per curiam); *see also id.* at 70, 72, 73.

⁵³ *Id.* at 79 (quoting 3 AREEDA & HOVENKAMP, *supra* note 31, ¶ 651c, at 78 (1996) (alteration in original)).

⁵⁴ *Id.*

⁵⁵ *United States v. Dentsply Int’l, Inc.*, 399 F.3d 181, 191–93 (3d Cir. 2005).

⁵⁶ *Id.* at 193.

⁵⁷ *Id.* at 191.

⁵⁸ *Id.* at 185.

⁵⁹ *Id.* at 197.

⁶⁰ *Id.* at 194 n.2.

⁶¹ *Id.* at 193.

Finally, some lower courts reviewing other exclusivity arrangements have implied a safe harbor for arrangements that in the aggregate affect less than thirty to forty percent of existing customers or distribution. For example, the First Circuit stated that “[f]or exclusive dealing, foreclosure levels are unlikely to be of concern where they are less than 30 or 40 percent.”⁶² Similarly, in *Minnesota Mining & Manufacturing Co. v. Appleton Papers Inc.*, the court noted that “[g]enerally speaking, a foreclosure rate of at least 30 percent to 40 percent must be found to support a violation of the antitrust laws.”⁶³

III. Analysis

Panelists described and discussed conditions under which exclusive dealing can be anticompetitive and procompetitive.⁶⁴ As discussed below, assessing in practice whether the net effect of exclusive dealing is anticompetitive or procompetitive can at times be difficult. Notwithstanding that difficulty, the Department believes that the general approach used by lower courts today—focusing on whether the exclusive dealing allows a firm to acquire or maintain monopoly power and also taking into account procompetitive effects in those situations where harm to competition is likely—is the appropriate way to determine the legality of exclusive dealing.

A. Potential Anticompetitive Effects

Some have argued that exclusive dealing can never have anticompetitive effects because it is against buyers’ interests to help a seller acquire or maintain monopoly power. Implicit in this argument is the presumption that, if buyers enter into exclusivity arrangements, it must be because the arrangements create efficiencies. Buyers will demand to be fully compensated by

⁶² *Stop & Shop Supermarket Co. v. Blue Cross & Blue Shield of R.I.*, 373 F.3d 57, 68 (1st Cir. 2004) (Boudin, C.J.).

⁶³ 35 F. Supp. 2d 1138, 1143 (D. Minn. 1999); *see also, e.g.*, Nov. 15 Hr’g Tr., *supra* note 2, at 75–76 (Steuer); *id.* at 96 (Jacobson); 11 HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1821c, at 176 (2d ed. 2005).

⁶⁴ *See, e.g.*, Nov. 15 Hr’g Tr., *supra* note 2, at 18 (Steuer); *id.* at 31–39 (Wright); *id.* at 50 (Marvel); *id.* at 53–54 (Jacobson); *id.* at 127 (Lipsky).

the seller before entering into an arrangement subjecting them to future monopoly power. If the arrangement is anticompetitive, the monopoly profit to the seller will be less than the harm to the victims, and the would-be monopolist will not be able to compensate its potential victims fully. Hence, they would never agree.⁶⁵

But it is now generally accepted that the assumptions necessary to support this argument do not always apply. For example, when buyers are “unable to coordinate their actions to defeat the tactic,” a monopolist “can scare victims into selling cheaply; no single victim can stop the exclusion by itself, so no single victim has any bargaining power.”⁶⁶ Put another way, under certain circumstances, buyers may agree to inefficient exclusive-dealing arrangements because each buyer believes that, no matter what it does, other buyers will agree. Thus, buyers will not necessarily resist exclusive dealing that harms them collectively. And if those entering into exclusive-dealing arrangements are distributors, the manufacturer may be able to obtain their acquiescence by sharing with them some of its expected monopoly profits.⁶⁷ Thus,

⁶⁵ See, e.g., ROBERT H. BORK, *THE ANTITRUST PARADOX* 304–09 (1978).

⁶⁶ Eric B. Rasmusen et al., *Naked Exclusion: Reply*, 90 AM. ECON. REV. 310, 310 (2000); see also, e.g., Nov. 15 Hr’g Tr., *supra* note 2, at 49 (Marvel); *id.* at 114 (Calkins); Joseph Farrell, *Deconstructing Chicago on Exclusive Dealing*, 50 ANTITRUST BULL. 465, 476 (2005); Jonathan M. Jacobson & Scott A. Sher, “No Economic Sense” Makes No Sense for Exclusive Dealing, 73 ANTITRUST L.J. 779, 791 (2006) (“[I]t is now common ground that, in many contexts, exclusive dealing can be deployed in a way that . . . allows the defendant to reap gains from the arrangement that far exceed the associated costs.”); Eric B. Rasmusen et al., *Naked Exclusion*, 81 AM. ECON. REV. 1137, 1140 (1991); Ilya R. Segal & Michael D. Whinston, *Naked Exclusion: Comment*, 90 AM. ECON. REV. 296, 307 (2000) (stating that when many buyers already have agreed to exclusivity arrangements, a monopolist “will not have to pay much” to induce other buyers to agree as well).

⁶⁷ See, e.g., A. Douglas Melamed, *Exclusive Dealing Agreements and Other Exclusionary Conduct – Are There Unifying Principles?*, 73 ANTITRUST L.J. 375, 404 (2006) (“If the manufacturer expects to gain or preserve market power by excluding its rivals, it could induce

exclusive dealing can be anticompetitive in some instances, notwithstanding the seeming anomaly of buyers agreeing to arrangements allowing a seller to acquire or maintain a monopoly.

In particular, exclusive dealing may be harmful when it deprives rivals “of the necessary scale to achieve efficiencies, even though, absent the exclusivity,” more than one firm “would . . . be large enough to achieve efficiency.”⁶⁸ In other words, exclusive dealing can be a way that a firm acquires or maintains monopoly power by impairing the ability of rivals to grow into effective competitors that erode the firm’s position. As one panelist put it, “the exclusive dealing case that you ought to worry about” is where exclusivity deprives rivals of the ability to obtain economies of scale.⁶⁹

the distributors to go along with the exclusionary scheme by sharing with them a portion of the anticipated supracompetitive profits.”).

⁶⁸ Dennis W. Carlton, *A General Analysis of Exclusionary Conduct and Refusal to Deal – Why Aspen and Kodak Are Misguided*, 68 ANTITRUST L.J. 659, 663 (2001); see also Nov. 15 Hr’g Tr., *supra* note 2, at 8 (Steuer) (assessing exclusionary arrangements requires “looking more at foreclosure of competitors than anything else”); *id.* at 54 (Jacobson) (noting that exclusive dealing can harm consumers by “deny[ing] the rivals access to customers or supplies and hav[ing] the effect of driving their costs up and rendering them less effective competitors”); *id.* at 83 (Wright) (characterizing most modern theories of competitive harm from exclusive dealing as dependent upon preventing rivals from obtaining “minimum efficient scale”); MICHAEL D. WHINSTON, *LECTURES ON ANTITRUST ECONOMICS* 133–97 (2006); Eric B. Rasmusen et al., *Naked Exclusion*, 81 AM. ECON. REV. 1137, 1144 (1991).

⁶⁹ Nov. 15 Hr’g Tr., *supra* note 2, at 94 (Jacobson); see also, e.g., RICHARD A. POSNER, *ANTITRUST LAW* 229 (2d ed. 2001) (noting that exclusive dealing may “increase the scale necessary for new entry, and . . . increase the time required for entry and hence the opportunity for monopoly pricing”); Carlton, *supra* note 68, at 665 n.15 (asserting that the “key issue” is that exclusive dealing can “impair[] the competitive effectiveness of the rival with a resulting harm to competition”).

Exclusive dealing can be a way that a firm acquires or maintains monopoly power by impairing the ability of rivals to grow into effective competitors that erode the firm's position.

Panelists noted many issues relevant to the question of when exclusive dealing potentially could be harmful.⁷⁰ In the context of exclusive dealing between a manufacturer and retailers, for example, exclusive dealing is likely to harm consumers only when it affects a significant portion of effective distribution methods. As one panelist explained, “I think everybody would agree that below some percent, no agency should worry about it, and no court should find illegality”⁷¹ Thus, exclusive dealing is more likely to harm consumers when rivals do not have other effective ways to distribute their products. As one panelist put it, if “access to the customers . . . is very easy . . . then exclusive dealing will not present any problems.”⁷² A number of panelists noted that exclusive dealing between a manufacturer and retailers is more likely to pose a threat to consumers when rivals cannot “establish their own distribution networks.”⁷³ Accordingly, the adequacy of other potential alternatives can be a crucial issue in assessing exclusive dealing’s potential to foreclose a competitor and thereby harm consumers.⁷⁴

Panelists also asserted that “the level of distribution really matters”⁷⁵ and that the

competitive effects of exclusive dealing with wholesalers may differ from those with retailers or end users.⁷⁶ At least one observed that the potential for anticompetitive harm may depend on the product involved, claiming that if the product is one for which customers are likely to shop around, then exclusive dealing may be less likely to harm rivals because consumers “are more likely to . . . look[] at other . . . dealers” if a “dealer only has one brand.”⁷⁷

B. Potential Procompetitive Effects

Exclusive dealing can help consumers in many ways.⁷⁸ For instance, several panelists noted that (1) a distributor selling the product of only one manufacturer is likely to promote that product more effectively than it would if it sold multiple manufacturers’ products, and (2) increased interbrand competition benefits consumers. One panelist stated that exclusive

⁷⁶ See *id.* at 8–9 (Steuer); *id.* at 136–37 (Farrell) (discussing potentially different effects of exclusivity arrangements with retailers as opposed to consumers); see also, e.g., Kenneth L. Glazer & Abbott B. Lipsky, Jr., *Unilateral Refusals to Deal Under Section 2 of the Sherman Act*, 63 ANTITRUST L.J. 749, 790 (1995) (“Cooperation between a supplier and downstream intermediaries in promoting the product may stimulate interbrand competition. By contrast, consumers or end-users rarely play any role in activities that promote successful distribution of the product—their only role in the process is that of customer.”); Steuer, *supra* note 2, at 118.

⁷⁷ Nov. 15 Hr’g Tr., *supra* note 2, at 9 (Steuer).

⁷⁸ See, e.g., POSNER, *supra* note 69, at 230 (“Exclusive dealing can promote efficiency by increasing the likelihood that a distributor will use his best efforts to promote the manufacturer’s brand rather than try to substitute a cheap knock-off, and (a related point) it can help a seller of intellectual property to prevent piracy, a serious concern in intellectual-property markets.” (footnote omitted)); Jacobson, *supra* note 28, at 312 (“Exclusive dealing arrangements generally promote more effective distribution by increasing dedication and loyalty; and they can minimize free-riding, improve product quality, and ensure customers and suppliers of a reliable source of supply.”); Benjamin Klein & Kevin M. Murphy, *Vertical Restraints as Contract Enforcement Mechanisms*, 31 J.L. & ECON. 265, 288 (1988) (When used in conjunction with exclusive territories or resale price maintenance, exclusive-dealing arrangements “prevent[] free riding on the manufacturer’s payment scheme for dealer services.”).

⁷⁰ See, e.g., Nov. 15 Hr’g Tr., *supra* note 2, at 8–10 (Steuer); *id.* at 83, 89–90 (Wright); *id.* at 86 (Sullivan); *id.* at 136–37 (Farrell).

⁷¹ *Id.* at 174 (Calkins).

⁷² *Id.* at 183 (Calkins).

⁷³ *Id.* at 10 (Steuer); cf. *id.* at 84 (Wright) (questioning the likelihood of anticompetitive exclusive dealing “if you have free entry at the retail level”).

⁷⁴ See SECTION OF ANTITRUST LAW, *supra* note 1, at 218 & nn.1269–70; see also *United States v. Denstply Int’l, Inc.*, 399 F.3d 181, 193 (3d Cir. 2005) (“The proper inquiry is not whether direct sales enable a competitor to ‘survive’ but rather whether direct selling ‘poses a real threat’ to defendant’s monopoly.” (quoting *United States v. Microsoft*, 253 F.3d 34, 71 (D.C. Cir. 2001) (en banc) (per curiam))).

⁷⁵ Nov. 15 Hr’g Tr., *supra* note 2, at 8 (Steuer).

dealing can “stimulate distributors” because “[i]f the distributor only has one brand of a product, it is going to devote all of its efforts to that brand.”⁷⁹ Another observed that “undivided dealer loyalty . . . increases the dealer’s incentives to supply . . . desired services and to more actively promote the manufacturer’s products.”⁸⁰

Panelists also agreed that exclusive dealing can align distributor and manufacturer incentives and thereby prevent free-rider problems. As Judge Posner has noted,

Exclusive dealing may also enable a manufacturer to prevent dealers from taking a free ride on his efforts (for example, efforts in the form of national advertising) to promote his brand. The dealer who carried competing brands as well might switch customers to a lower-priced substitute on which he got a higher margin, thus defeating the manufacturer’s effort to recover the costs of his promotional expenditures by charging the dealer a higher price.⁸¹

Exclusive dealing can align distributor and manufacturer incentives and thereby prevent free-rider problems.

Put another way, exclusive dealing “encourages the *supplier itself* to give the distributors more support by eliminating what may be called the ‘interbrand free rider effect’; suppliers will strengthen their distributors because other *brands* cannot take a ‘free ride’ on the supplier’s investment by selling through the same distributors.”⁸²

Panelists generally agreed that this sort of free riding is one of the basic theories of exclusive dealing’s procompetitive effects: “the manufacturer invests in a product or a reputation that brings in customers,” thereby enticing customers to patronize a dealer, but “then the dealer says, by the way, I have got a better deal for you,” to patrons drawn by the manufacturer’s investment.⁸³ As one panelist explained, exclusive dealing can “stimulate[] suppliers to put more time and effort and money behind their channels of distribution, because . . . they do not have to worry about divided loyalties where they are wasting their effort.”⁸⁴ In effect, exclusive dealing can help consumers by “encourag[ing] people to make specific investments in the relationship.”⁸⁵ Panelists identified manufacturer advertising,⁸⁶ training of dealer staff,⁸⁷ sharing of trade secrets with retailers,⁸⁸ and promotional investments⁸⁹ as examples of services that ultimately benefit consumers yet might not be provided but for exclusive dealing.

Panelists suggested a host of other potential benefits from exclusive dealing, including allowing manufacturers to better assess and improve dealer quality⁹⁰ and lowering the cost of monitoring certain kinds of contracts.⁹¹ Likewise, exclusive dealing may help assure supply, afford protection against price increases, and allow long-term cost planning. For instance, requirements contracts where a buyer promises to purchase all its needs for an input from a specified seller “allow suppliers to anticipate demand while providing customers

⁷⁹ Nov. 15 Hr’g Tr., *supra* note 2, at 11 (Steuer).

⁸⁰ *Id.* at 150 (Klein); *see also* Roland Mach. Co. v. Dresser Indus., Inc., 749 F.2d 380, 395 (7th Cir. 1984) (Posner, J.) (“If . . . exclusive dealing leads dealers to promote each manufacturer’s brand more vigorously than would be the case under nonexclusive dealing, the quality-adjusted price to the consumer (where quality includes the information and other services that dealers render to their customers) may be lower with exclusive dealing than without, even though a collateral effect of exclusive dealing is to slow the pace at which new brands . . . are introduced.”).

⁸¹ *Roland Mach.*, 749 F.2d at 395.

⁸² *Steuer*, *supra* note 2, at 115 (emphasis in original).

⁸³ Nov. 15 Hr’g Tr., *supra* note 2, at 44–45 (Marvel); *see also id.* at 53–54 (Jacobson) (noting that exclusive dealing can allow a manufacturer to obtain “more effective distribut[ion]” by providing services to its dealers “without concern of free riding by competing suppliers”).

⁸⁴ *Id.* at 11–12 (Steuer).

⁸⁵ *Id.* at 185 (Klein).

⁸⁶ *Id.* at 167 (Calkins).

⁸⁷ *Id.* at 147 (Klein).

⁸⁸ *Id.* at 12 (Steuer).

⁸⁹ *Id.* at 148 (Klein).

⁹⁰ *Id.* at 12 (Steuer).

⁹¹ *Id.* at 38 (Wright).

with protection against shortages of needed inputs.”⁹² Another commentator noted that competition among manufacturers to become the exclusive supplier to a retailer can result in significant savings for the ultimate consumer.⁹³ The limited empirical literature available is consistent with these theories of procompetitive benefits.⁹⁴

In summary, although exclusive dealing can harm consumers in some circumstances, it can also generate efficiencies, and there is no simple way of determining—even where harm is possible—whether a particular exclusive-dealing arrangement should be condemned as anticompetitive.⁹⁵ As one panelist noted, current economic theory regarding exclusivity provides “‘possibility results’ in simple settings,” demonstrating that harm could occur under certain circumstances, not that it will.⁹⁶ Similarly, while all panelists recognized that exclusive dealing can benefit consumers, demonstrating the existence of those benefits, much less estimating their magnitude, is

difficult.⁹⁷

IV. Conclusion

Courts currently consider the possibility of both anticompetitive and procompetitive effects when assessing the legality of exclusive dealing. The first step in that analysis is to determine whether the arrangement has the potential to harm competition and consumers. In situations where competitive harm is implausible—for instance, where other efficient distribution methods are available in sufficient size and number to rivals—courts appropriately uphold the arrangement.

When actual or probable harm to competition is shown, the Department believes that exclusive dealing should be illegal only when (1) it has no procompetitive benefits, or (2) if there are procompetitive benefits, the exclusivity arrangement produces harms substantially disproportionate to those benefits.⁹⁸ Where exclusive dealing has both anticompetitive and procompetitive effects, this standard requires plaintiffs to show that the anticompetitive effects substantially outweigh its procompetitive benefits. For example, a trivial benefit should not save an arrangement that has substantial anticompetitive effects. The Department believes this approach is prudent in view of the uncertainty that can surround exclusive dealing’s competitive effects and the costs of inadvertently imposing antitrust liability on conduct that, while potentially hampering a rival’s ability to compete, often lowers costs and benefits consumers.

Further, the Department believes that, although exclusivity arrangements of short duration are less likely to harm competition than those of long duration, even arrangements that are terminable at will can at times be anticompetitive. The Third Circuit endorsed this view in *Dentsply*, explaining that the economic effect of a policy of terminating

⁹² Richard M. Steuer, *Customer-Instigated Exclusive Dealing*, 68 ANTITRUST L.J. 239, 242 (2000); see also Nov. 15 Hr’g Tr., *supra* note 2, at 16 (Steuer) (noting that requirements contracts ensure “dependable supply”).

⁹³ Nov. 15 Hr’g Tr., *supra* note 2, at 38–39 (Wright); see also Benjamin Klein, *Exclusive Dealing as Competition for Distribution “On the Merits,”* 12 GEO. MASON L. REV. 119, 120 (2003) (“[C]ompetition for distribution is . . . an important part of the normal competitive process that benefits consumers.”).

⁹⁴ See, e.g., James Cooper et al., *Vertical Restrictions and Antitrust Policy: What About the Evidence?*, COMPETITION POL’Y INT’L, Autumn 2005, at 45, 63; cf. Francine Lafontaine & Margaret E. Slade, *Retail Contracting: Theory and Practice*, 45 J. INDUS. ECON. 1, 13–14 (1997); Tim R. Sass, *The Competitive Effects of Exclusive Dealing: Evidence from the U.S. Beer Industry*, 23 INT’L J. INDUS. ORG. 203, 222 (2005).

⁹⁵ See, e.g., Nov. 15 Hr’g Tr., *supra* note 2, at 49 (Marvel) (questioning how frequently, if ever, exclusive dealing harms consumers, although acknowledging that consumer harm “is possible, in principle”). See generally Cooper et al., *supra* note 94, at 55.

⁹⁶ Nov. 15 Hr’g Tr., *supra* note 2, at 50 (Marvel).

⁹⁷ See *id.* at 50 (noting that the procompetitive benefits of exclusive dealing can be “really hard to prove”); cf. *id.* at 143–44 (Farrell).

⁹⁸ See 3 AREEDA & HOVENKAMP, *supra* note 31, ¶ 651a, at 72.

customers that deal with a rival can “realistically make the arrangements . . . as effective as those in written contracts.”⁹⁹ Panelists differed with one another on this point,¹⁰⁰ but the Department believes that the legality of exclusive dealing should not depend solely on its length.

The legality of exclusive dealing should not depend solely on its length.

Finally, in cases where the firm engaging in exclusive dealing already has legally acquired monopoly power, the Department will examine whether the exclusivity contributed significantly to maintaining that power and whether alternative distribution channels allow competitors to “pose a real threat” to its continued existence.¹⁰¹ A significant factor in making this assessment is the portion of customers or dealers with which a monopolist’s rival cannot deal as a result of the exclusivity arrangement. As discussed above, a treatise notes that “single-firm foreclosure percentages of less than 30 percent would seem to be harmless,”¹⁰² and several panelists agreed that courts typically recognize a safe harbor for exclusive dealing affecting less than a thirty-percent market share.¹⁰³ The Department

likewise believes that exclusive-dealing arrangements that foreclose less than thirty percent of existing customers or effective distribution should not be illegal, but emphasizes that exclusive dealing affecting more than thirty percent should be neither automatically nor presumptively illegal.

The Department believes that exclusive-dealing arrangements that foreclose less than thirty percent of existing customers or effective distribution should not be illegal.

⁹⁹ *United States v. Dentsply Int’l, Inc.*, 399 F.3d 181, 193 (3d Cir. 2005).

¹⁰⁰ Compare Nov. 15 Hr’g Tr., *supra* note 2, at 51 (Marvel) (advocating a rule that exclusivity arrangements should be legal if they do not involve a contract), with *id.* at 117 (Calkins) (stating that “a short-term contract or contract that is cancellable” can harm consumers).

¹⁰¹ *United States v. Microsoft Corp.*, 253 F.3d 34, 71, 79 (D.C. Cir. 2001) (en banc) (per curiam); see also *Dentsply*, 399 F.3d at 193.

¹⁰² HOVENKAMP, *supra* note 63, ¶ 1821c, at 176; see also *Stop & Shop Supermarket Co. v. Blue Cross & Blue Shield of R.I.*, 373 F.3d 57, 68 (1st Cir. 2004) (Boudin, C.J.) (stating that “foreclosure levels are unlikely to be of concern where they are less than 30 or 40 percent”); *Minn. Mining & Mfg. Co. v. Appleton Papers Inc.*, 35 F. Supp. 2d 1138, 1143 (D. Minn. 1999) (“Generally speaking, a foreclosure rate of at least 30 percent to 40 percent must be found to support a violation of the antitrust laws.”).

¹⁰³ See, e.g., Nov. 15 Hr’g Tr., *supra* note 2, at 75–76 (Steuer); *id.* at 96 (Jacobson).

CHAPTER 9

REMEDIES

I. Introduction

Without a proper remedy, winning a judgment of a section 2 violation is similar to winning a battle but losing the war. Designing and implementing effective remedies in unilateral conduct cases often is a daunting challenge. The central goals of remedies in government section 2 cases are to terminate the defendant's unlawful conduct, prevent its recurrence, and re-establish the opportunity for competition in the affected market. Section 2 remedies should achieve these goals without unnecessarily chilling legitimate competitive conduct and incentives.

In some instances, these remedial goals can be achieved through a prohibitory injunction banning repetition of specific past acts. In other instances, more may be required, including "fencing-in" provisions or affirmative obligations. In addition to these conduct remedies, structural remedies are sometimes considered. However, both conduct and structural remedies can have high administrative costs that must be considered when determining what remedy, if any, should apply in a given case. Indeed, different remedial approaches generally have different effects on efficiency and innovation as well as different administrative costs, and selecting the optimal approach requires careful thought. In particular, structural remedies, often preferred in merger cases where they can be "'simple, relatively easy to administer, and sure' to preserve competition,"¹ are less favored in section 2 cases where they often would require structural change to an existing unitary firm that had not grown by acquisition. In those

situations, the advantages typically associated with structural relief in merger cases may not exist, and the source of the violation may not have the same nexus with the structure of the defendant. Furthermore, in the section 2 context, structural remedies may undermine productive efficiencies achieved by unitary firms, a lesser risk in merger cases.

Notwithstanding their importance, the study of remedies has been somewhat neglected. As one panelist quipped, "'Everybody likes to catch them, but nobody wants to clean them.'" ² Because selecting and implementing a suitable remedy is such a crucial yet difficult task, panelists stressed that the antitrust enforcement agencies need to give careful consideration to potential remedies early in their investigations.³ As now-FTC

² Sherman Act Section 2 Joint Hearing: Remedies Hr'g Tr. 47, Mar. 28, 2007 [hereinafter Mar. 28 Hr'g Tr.] (Lipsky) (quoting former Assistant Attorney General William Baxter).

³ Sherman Act Section 2 Joint Hearing: Final Session Hr'g Tr. 149–50, May 8, 2007 [hereinafter May 8 Hr'g Tr.] (Sidak) (asserting it was "unfortunate" that "at the very beginning of the [Microsoft] case there wasn't a clear statement as to what the desired remedies were on the part of the federal government"); Sherman Act Section 2 Joint Hearing: Section 2 Policy Issues Hr'g Tr. 13, May 1, 2007 [hereinafter May 1 Hr'g Tr.] (Krattenmaker) ("you begin with remedies" in a section 2 case); *id.* at 32 (Baer) (advocating "thinking about remedy . . . as a front-end issue"); Sherman Act Section 2 Joint Hearing: Remedies Hr'g Tr. 12, Mar. 29, 2007 [hereinafter Mar. 29 Hr'g Tr.] (Shelanski) (stating that a remedy "needs to be clearly articulable at the start of a case"); *id.* at 18 (Hesse) (focusing on the remedy at an early stage "helps you try to figure out what your goal is"); Sherman Act Section 2 Joint Hearing: Welcome and Overview of Hearings Hr'g Tr. 52–53, June 20, 2006 (Hovenkamp) ("The only purpose in bringing [section 2] cases is to make the economy work better, and if you do not have a clear picture of the kind of remedy you want when you go in, then you really have to wonder whether it is worth bringing the action to begin with.").

¹ ANTITRUST DIV., U.S. DEP'T OF JUSTICE, ANTITRUST DIVISION POLICY GUIDE TO MERGER REMEDIES 7–8 (2004), available at <http://www.usdoj.gov/atr/public/guidelines/205108.pdf> (quoting *United States v. E. I. du Pont de Nemours & Co.*, 366 U.S. 316, 331 (1961)).

Chairman William E. Kovacic explained, “Responsible prosecutorial practice dictates that government enforcement agencies begin an abuse of dominance case only after they first have defined their remedial aims clearly and devised a convincing strategy for achieving them if the defendant’s liability is established.”⁴

This chapter addresses a range of section 2 remedial issues. Part II reviews the basic goals of section 2 remedies. Part III identifies the various trade-offs in crafting equitable remedies. Part IV discusses the major types of equitable remedies, ranging from prohibitory provisions to structural remedies. Part V discusses monetary remedies and whether the current mix of available remedies is appropriate.

II. Goals of Section 2 Remedies

Three central goals of section 2 remedies in government cases are terminating defendant’s wrongful conduct, preventing its recurrence, and re-establishing the opportunity for competition in the affected market.⁵ As the Supreme Court stated, “We start from the premise that adequate relief in a monopolization case should put an end to the combination and deprive the defendants of any of the benefits of the illegal conduct, and break up or render impotent the monopoly power found to be in violation of the Act.”⁶

It is important that any remedy re-establish the opportunity for competition in the affected market.⁷ This entails “unfetter[ing] a market from anticompetitive conduct” and creating an opportunity for the market to work, not necessarily creating a competitive market or any specific level of competition.⁸ As the D.C. Circuit held, “[D]epriving an antitrust violator of the fruits of its violation does not entail conferring a correlative benefit upon the particular competitor harmed by the violation.”⁹ Section 2 remedies should not attempt to redress harm to competition by “providing aid to a particular competitor,” but rather should aim to “restor[e] conditions in which the competitive process is revived and any number of competitors may flourish (or not) based upon the merits of their offerings.”¹⁰ For example, in a monopoly-maintenance case, conditions before the unlawful conduct may have involved a lawful monopoly, and re-establishing the opportunity for competition would not necessarily produce new competitors or reduce the monopolist’s market share. In contrast, in a monopoly-acquisition case, the pre-conduct setting may have been competitive, so eliminating the anticompetitive consequences of the violation might include dismantling the monopoly to restore the competitive environment that would have existed without the violation. In both instances, however, the focus is on re-establishing the

⁴ William E. Kovacic, *Designing Antitrust Remedies for Dominant Firm Misconduct*, 31 CONN. L. REV. 1285, 1310 (1999); *see also* LAWRENCE A. SULLIVAN, HANDBOOK OF THE LAW OF ANTITRUST 146 (1977) (“The ideal presentation in a monopoly case would be one in which [the] remedial proposal arose organically out of the theory of the case. . . . The remedy would be . . . a public policy goal integral to the entire proceeding.”); Edward Cavanagh, *Antitrust Remedies Revisited*, 84 OR. L. REV. 147, 201 (2005) (“Remedies should be at the top of the agenda from the outset of litigation. Enforcers should be considering remedies from the moment an investigation is commenced.”).

⁵ *United States v. Microsoft Corp.*, 253 F.3d 34, 103 (D.C. Cir. 2001) (en banc) (per curiam). In private actions and actions brought by the government as a victim, compensation through damage awards is also an important goal.

⁶ *United States v. Grinnell Corp.*, 384 U.S. 563, 577 (1966); *see also* *United States v. United Shoe Mach.*

Corp., 391 U.S. 244, 250 (1968) (“[I]n a [section] 2 case . . . it is the duty of the court to prescribe relief which will terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future.”).

⁷ *See, e.g., United Shoe*, 391 U.S. at 251–52 (approving additional measures to achieve “‘principal objects’” of district court’s remedy, “namely, ‘to extirpate practices that have caused or may hereafter cause monopolization, and to restore workable competition in the market’” (quoting *United States v. United Shoe Mach. Corp.*, 110 F. Supp. 295, 343 (D. Mass. 1953), *aff’d*, 347 U.S. 521 (1954) (per curiam))).

⁸ *Ford Motor Co. v. United States*, 405 U.S. 562, 577 (1972) (discussing merger remedies).

⁹ *Massachusetts v. Microsoft Corp.*, 373 F.3d 1199, 1243 (D.C. Cir. 2004) (en banc).

¹⁰ *Id.* at 1231.

opportunity for the market to work, unfettered by the defendant's illegal practices.

Panelists and commentators frequently identified re-establishing the opportunity for competition as the central remedial goal in section 2 cases.¹¹ They also stated that achieving this goal requires, at a minimum, terminating the unlawful conduct and preventing its recurrence.¹² In some cases, however, additional steps may be necessary. Practices similar to the unlawful conduct that could give rise to the same anticompetitive effects may also need to be prohibited.¹³

¹¹ See Mar. 29 Hr'g Tr., *supra* note 3, at 48 (Page) ("The goals of Section 2 remedies should be to restore [the] competitive conditions that would have existed but for the illegal conduct."); Mar. 28 Hr'g Tr., *supra* note 2, at 107 (Fisher) ("[O]ne ought to want to restore competition. That ought to be a primary objective. One ought to want to undo the anticompetitive effects of the violation."); 2 PHILLIP E. AREEDA ET AL., *ANTITRUST LAW* ¶ 325a, at 246 (2d ed. 2000) ("Ultimately . . . the purpose of the decree is to create a situation in which unrestrained competition can occur."); *id.* ¶ 325c, at 253–55; John E. Lopatka & William Page, *Devising a Microsoft Remedy that Serves Consumers*, 9 GEO. MASON L. REV. 691, 700 (2001) (stating that "the goal of the remedy should be to return the market to a baseline condition that would have prevailed in the market but for the defendant's anticompetitive acts").

¹² See 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶ 653b, at 98 (2d ed. 2002) ("[T]here is no unfairness or disincentive to meritorious competition in simply preventing the conduct at the outset or ordering the monopolist to stop."); Charles A. James, *The Real Microsoft Case and Settlement*, *ANTITRUST*, Fall 2001, at 58, 60–62 (stating that an "antitrust remedy for a Section 2 violation must stop the offending conduct, prevent its recurrence, and restore competition" and explaining the focus of restoration is on "lost competition"); John E. Lopatka & William H. Page, *A (Cautionary) Note on Remedies in the Microsoft Case*, *ANTITRUST*, Summer 1999, at 25, 26 ("The starting point . . . is an order prohibiting the defendant from engaging in the proven illegal conduct. . . . Only if the circumstances of the case demonstrate that such an approach would be ineffective in restoring competition to the condition that would have existed but for the illegal conduct should the court consider broader conduct relief or structural relief.").

¹³ See *Zenith Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 132 (1969) ("In exercising its equitable jurisdiction, '(a) federal court has broad power to restrain acts which are of the same type or class as

Beyond this, affirmative steps sometimes may be needed to re-establish the opportunity for competition.¹⁴ One panelist contended that "focusing the remedy on the specific conduct found to be unlawful[] will not return competition to the status quo; thus drafting or crafting forward-looking remedies is quite important."¹⁵

The reach of remedies is not unlimited, however. Panelists warned that remedies reaching beyond re-establishment of the opportunity for competition and aiming instead to create a particular market structure run the risk of engineering a market outcome that may deprive consumers of the benefit of the normal competitive process.¹⁶ One panelist cautioned that government remedies should "focus on competitive opportunity rather than outcome of market shares."¹⁷ As another

unlawful acts which the court has found to have been committed or whose commission in the future unless enjoined, may fairly be anticipated from the defendant's conduct in the past." (quoting *NLRB v. Express Publ'g Co.*, 312 U.S. 426, 435 (1941))); *Int'l Salt Co. v. United States*, 332 U.S. 392, 400 (1947) ("[I]t is not necessary that all of the untraveled roads . . . be left open and that only the worn one be closed."); *Microsoft*, 373 F.3d at 1233 (approving remedial actions that denied Microsoft "the ability to take the same or similar actions to limit competition in the future"); AREEDA ET AL., *supra* note 11, ¶ 325c, at 253 (stating that decrees may "forbid conduct that is different from the conduct that was actually condemned" and "may even prohibit lawful conduct if such a prohibition 'represents a reasonable method of eliminating the consequences of the illegal conduct'" (quoting *Nat'l Soc'y of Prof'l Eng'rs v. United States*, 435 U.S. 679, 697 (1978))).

¹⁴ See Mar. 29 Hr'g Tr., *supra* note 3, at 70–72 (Lao) (discussing scenarios where it "would be helpful . . . to impose affirmative duties on the dominant firm" and listing forms of affirmative remedies).

¹⁵ *Id.* at 67 (Lao); see also Mar. 28 Hr'g Tr., *supra* note 2, at 108 (Fisher) (arguing that barring practices similar to those found unlawful may be insufficient if defendant had used exclusionary conduct to ward off a competitive threat "at a crucial moment").

¹⁶ See, e.g., Mar. 28 Hr'g Tr., *supra* note 2, at 10 (Heiner) (suggesting that remedies should be designed "to safeguard competitive opportunities but not necessarily to engineer any particular market outcome"). See generally *Microsoft*, 373 F.3d at 1243.

¹⁷ Mar. 28 Hr'g Tr., *supra* note 2, at 11 (Heiner); see also *id.* at 10.

panelist elaborated: “The goals of Section 2 remedies should be to restore competitive conditions that would have existed but for the illegal conduct. They should not be to try to restore or to create some sort of ideal competitive condition or to supervise market outcomes.”¹⁸

The Department agrees. A section 2 remedy in a government case is neither a chance to fix all perceived competitive problems in an industry nor an opportunity to punish the defendants.¹⁹ Thus, the Department will focus its unilateral-conduct remedies on re-establishing the opportunity for competition in the affected market rather than dictating a market outcome or any particular level of competition.²⁰ This means that the remedy should be tailored to the violation charged and to its actual competitive harm.²¹

III. Considerations in Crafting Remedies

Crafting a successful section 2 remedy often

requires balancing a number of important, sometimes competing, considerations. For instance, the sufficiency of the remedy must be balanced against the danger of overbreadth. Similarly, the remedy’s impact on efficiency and innovation must be considered. Moreover, the remedy must be sufficiently specific yet also adaptable. And finally, a remedy’s administrability must be taken into account.

Sufficiency Versus Overbreadth. Re-establishing the opportunity for competition may require going beyond mere prohibition of the offending conduct.²² For example, “‘proactive steps to address conduct of [a] similar nature’” may be necessary.²³ Further, if the conduct has so changed market structure that ending the unlawful practice will not re-establish the opportunity for competition, the defendant may be required to take affirmative

¹⁸ Mar. 29 Hr’g Tr., *supra* note 3, at 48 (Page); *see also* Lopatka & Page, *supra* note 11, at 700 (noting that a remedy should not attempt “to reshape the market to approximate a competitive ideal”).

¹⁹ *See* United States v. E. I. du Pont de Nemours & Co., 366 U.S. 316, 326 (1961) (“Courts are not authorized in civil proceedings to punish antitrust violators, and relief must not be punitive.”); Int’l Salt Co. v. United States, 332 U.S. 392, 401 (1947) (“the end to be served is not punishment of past transgressions”); Hartford-Empire Co. v. United States, 323 U.S. 386, 409 (1945) (a court “may not impose penalties in the guise of preventing future violations” (footnote omitted)). Private plaintiffs, of course, are entitled to seek treble damages.

²⁰ *See generally* Thomas O. Barnett, Assistant Attorney Gen., U.S. Dept. of Justice, Section 2 Remedies: What to Do After Catching the Tiger by the Tail (June 4, 2008), available at <http://www.usdoj.gov/atr/public/speeches/233884.pdf>; Thomas O. Barnett, *Section 2 Remedies: A Necessary Challenge*, in 2007 ANNUAL PROCEEDINGS OF THE FORDHAM COMPETITION LAW INSTITUTE 551, 557 (Barry E. Hawk ed., 2008).

²¹ *See* Microsoft, 373 F.3d at 1243 (stating that the proposed judgment “addresses and remedies precisely” the “fruit of Microsoft’s unlawful conduct” in order to “restore the competitive conditions” potentially created by middleware threats similar to those previously restricted by Microsoft’s conduct (internal quotation marks omitted)).

²² *See* Mar. 29 Hr’g Tr., *supra* note 3, at 14 (Shelanski) (noting that in some cases an unlawfully obtained monopoly position may not be “easily eroded, even if exclusionary or predatory conduct that contributed to that monopoly is stopped”); *id.* at 70 (Lao) (“[I]f the dominant firm has already successfully excluded its competitor and potential competitors, simply stopping the conduct and preventing its recurrence is not going to be enough to restore competition.”); AREEDA & HOVENKAMP, *supra* note 12, ¶ 653f, at 102–04 (“[I]njunctive relief must be tailored with sufficient breadth to ensure that a certain ‘class’ of acts, or acts of a certain type or having a certain effect, not be repeated.”); AREEDA ET AL., *supra* note 11, ¶ 325c, at 253 (“The decree may also contemplate and forbid conduct that is different from the conduct that was actually condemned. Indeed, the court may even prohibit lawful conduct if such a prohibition ‘represents a reasonable method of eliminating the consequences of illegal conduct.’” (quoting Nat’l Soc’y of Prof’l Eng’rs v. United States, 435 U.S. 679, 697 (1978))); Lopatka & Page, *supra* note 12, at 26 (“Conduct relief should, in some instances, proscribe more than the precise conduct found unlawful.”); R. Craig Romaine & Steven C. Salop, *Alternative Remedies for Monopolization in the Microsoft Case*, ANTITRUST, Summer 1999, at 15, 20 (“If the court finds that the present and likely future effects of Microsoft’s illegal conduct are to maintain the monopoly, then those findings could support broader relief to undo those effects and prevent their recurrence.”).

²³ Mar. 28 Hr’g Tr., *supra* note 2, at 44 (Hellstrom) (quoting James, *supra* note 12, at 61).

steps.²⁴

At the same time, remedies must be “commensurate with the offense.”²⁵ Implementing a remedy that extends too broadly runs the risk of distorting markets and, ultimately, impairing competition, often through wholly unintended consequences.²⁶

Impact on Efficiency and Innovation. Imposing a remedy sufficient to re-establish the opportunity for competition sometimes may be in tension with maintaining the efficiency of defendant’s operations or its incentives and ability to innovate. As two commentators explain, although a remedy should “deprive the offender of the benefits of the violation,” it should not take away “the benefits of lawful conduct.”²⁷ The courts and the federal enforcement agencies, they caution, should aim to implement remedies that do not “harm consumers by deterring hard competition, efficient arrangements, or innovation.”²⁸ Although this problem may arise in remedies requiring divestiture, it can also result from certain conduct remedies, particularly those

that impose affirmative-conduct obligations. In addition to potentially blunting defendant’s incentives to innovate, affirmative-conduct obligations, especially ones imposing a duty to provide competitors access to assets, may also lessen the incentives of those competitors to develop their own assets or to innovate around defendant’s assets.²⁹ Nevertheless, preserving a defendant’s efficiency does not take precedence over ensuring that a remedy effectively addresses the illegal conduct.

Specificity Versus Adaptability. A remedial decree ideally will be sufficiently specific for defendant readily to understand its obligations and for the supervising court (or agency) to determine whether its terms are being satisfied. Uncertainty about a decree’s requirements may cause defendant to refrain from engaging in procompetitive conduct that the decree did not intend to prohibit or lead to conduct that violates the spirit of the decree but is not clearly prohibited.³⁰ Specificity, however, may limit the adaptability of relief to changes. A lack of adaptability may reduce the efficacy of a decree, particularly when a market is

²⁴ See Mar. 29 Hr’g Tr., *supra* note 3, at 67 (Lao) (noting shortcomings of “narrowly focusing the remedy on the specific conduct found to be unlawful”); *id.* at 70.

²⁵ Lopatka & Page, *supra* note 11, at 700; see also Mar. 28 Hr’g Tr., *supra* note 2, at 107 (Fisher) (“It is natural to require that the remedy be reasonably consonant with the liability findings.”); Cavanagh, *supra* note 4, at 201 (“The overarching principle of equitable remedies in monopolization cases is that the remedy must be proportional to the wrongdoing.”).

²⁶ See, e.g., *Microsoft*, 373 F.3d at 1223–24 (limiting discretion of the district court in crafting forward-looking remedy that covered conduct not found to have been exclusionary); *id.* at 1232–33 (identifying the “fruits” of Microsoft’s violations and discussing whether the remedy denied Microsoft those fruits); AREEDA & HOVENKAMP, *supra* note 12, ¶ 653e, at 102 (“Wholly apart from fairness, . . . a policy [of far reaching equitable sanctions] would undesirably deter firms from engaging in superficially restrictive conduct that is in fact reasonably necessary to competition on the merits.”); E. Thomas Sullivan, *The Jurisprudence of Antitrust Divestiture: The Path Less Traveled*, 86 MINN. L. REV. 565, 612 (2002) (“[C]ourts should be wary when brandishing the club of divestiture.”).

²⁷ Lopatka & Page, *supra* note 11, at 700 (citation omitted).

²⁸ *Id.*

²⁹ See, e.g., *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407–08 (2004) (observing that compelling firms that have acquired monopoly power “to share the source of their advantage is in some tension with the underlying purpose of antitrust law, since it may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities”); Mar. 29 Hr’g Tr., *supra* note 3, at 93 (Shelanski) (urging caution in mandating interoperability, even in network markets, due to risk of “eliminat[ing] the incentive to try to create the new network standard”); Mar. 28 Hr’g Tr., *supra* note 2, at 52 (Lipsky) (noting that access remedies may potentially cause competitors to “invest their resources in legal maneuvering rather than . . . in innovation that would destroy the monopoly”).

³⁰ Cf. *Int’l Salt Co. v. United States*, 332 U.S. 392, 400 (1947) (“[I]t is desirable, in the interests of the court and of both litigants, that the decree be as specific as possible, not only in the core of its relief, but in its outward limits, so that parties may know their duties and unintended contempts may not occur.”); Lopatka & Page, *supra* note 11, at 704 (“A conduct remedy, however well-crafted, raises a significant possibility of future litigation, because it is likely to require some interpretation.”).

undergoing rapid change.³¹ Accordingly, successful remedies must balance sufficient specificity against the adaptability necessary to address future developments.

The importance of adaptability in crafting specific remedies may be tied to the decree's duration. For most section 2 decrees to succeed, they must be of sufficient duration to encourage entrants to invest in competing products or otherwise re-establish the opportunity for competition in the market.³² In fast-changing markets, however, absent sufficient adaptability, decrees of long duration can soon become obsolete, with unintended effects that potentially can stifle a defendant's ability to compete, thereby harming consumers.³³ Although in recent years both the Department and the FTC have avoided the perpetual decrees they sometimes sought in the past,³⁴ the decree's duration remains an important consideration in any particular case.

Administrability. Administrability is another critical consideration in shaping a remedy. Panelists and commentators have urged close attention to the complexity and cost of administration.³⁵ Ideally,

a remedy should be "self-executing" in the sense that it should not require significant oversight or intervention from the courts or a government enforcement agency. But as a practical matter, few injunctive remedies are truly self-executing, and the effectiveness of most remedial solutions will therefore depend in part on how easily they can be administered or enforced.³⁶

Complex remedies may have high implementation or enforcement costs, ultimately borne by businesses and consumers. According to one panelist, the judicial oversight needed to continuously fine-tune complex remedial decrees may create an enormous drag on affected businesses, lowering their efficiency and diminishing their innovation.³⁷ Similarly, remedies that require courts to prescribe (or to determine the fairness or reasonableness of) pricing or price-related terms of sale may convert courts into de facto regulators, a role for which they are not suited. Indeed, in *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, the Supreme Court warned against remedies that would place courts in the role of "assum[ing] the day-to-day controls characteristic of a regulatory agency."³⁸ At the extreme, a remedy may be so

³¹ See Mar. 29 Hr'g Tr., *supra* note 3, at 72-73 (Lao) (arguing for continuing jurisdiction clauses in decrees to allow courts to modify them to ensure their success); HERBERT HOVENKAMP, THE ANTITRUST ENTERPRISE 299-300 (2005) ("By the time each round of *Microsoft* litigation had produced a 'cure,' the victim was already dead. This makes it vitally important that settlements such as the one in *Microsoft* contain a clause that permits a court to retain its jurisdiction and assess future developments.").

³² See, e.g., Mar. 29 Hr'g Tr., *supra* note 3, at 100 (Page) (noting that forward-looking remedies may require lengthy decrees).

³³ See *United States v. Microsoft Corp.*, 231 F. Supp. 2d 144, 195-96 (D.D.C. 2002) (finding five-year decree reasonable in light of rapid technological change and fear of decree becoming unduly regulatory), *aff'd sub nom. Massachusetts v. Microsoft Corp.*, 373 F.3d 1199 (D.C. Cir. 2004) (en banc).

³⁴ See Mar. 29 Hr'g Tr., *supra* note 3, at 102-03 (Hesse) ("[B]oth of the agencies have gone away from the idea of doing perpetual decrees[;] ten years is generally the standard.").

³⁵ See, e.g., *id.* at 20 (urging consideration of "whether or not the problem is subject to a fix that's

worth the investment of resources in not only the investigation and prosecution of the matter, but also the compliance and enforcement activities that will happen post judgment"); Mar. 28 Hr'g Tr., *supra* note 2, at 62 (Lipsky) ("The administrative costs and complexities [of a remedy] . . . mean[] that you don't mess around with lemon carts even if they are monopolies."); Howard A. Shelanski & J. Gregory Sidak, *Antitrust Divestiture in Network Industries*, 68 U. CHI. L. REV. 1, 31 (2001) ("The importance of taking enforcement costs into account is enormous, though often underemphasized."); *id.* at 32 ("Any complete analysis of enforcement costs needs systematically to compare the litigation, monitoring, and other administrative costs of remedies under consideration.").

³⁶ Shelanski & Sidak, *supra* note 35, at 34; see also Mar. 28 Hr'g Tr., *supra* note 2, at 106 (Fisher) ("[I]njunctive relief . . . can require continuing and perhaps continual judicial supervision.").

³⁷ RICHARD A. EPSTEIN, ANTITRUST CONSENT DECREES IN THEORY AND PRACTICE 107 (2007).

³⁸ *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 415 (2004) (quoting Phillip E. Areeda, *Essential Facilities: An Epithet in Need of Limiting*

difficult or expensive to administer that it is effectively unenforceable and, as a result, will not succeed in stopping defendant's illegal conduct or re-establishing the opportunity for competition.³⁹

IV. Equitable Remedies

Equitable remedies in section 2 cases run along a spectrum. Traditionally, remedies have been categorized as either conduct remedies (often less drastic) or structural remedies (often more drastic). Many antitrust remedies, however, do not fit neatly into one category or the other; many contain both conduct and structural components. Consequently, although this chapter relies on the traditional categories for ease of exposition, many remedies blend attributes from across the spectrum.

Conduct remedies typically seek to terminate the conduct that was found unlawful or similar conduct. They also may impose affirmative obligations to foster the competitive process, including requiring a defendant to sell to, or provide interconnection with, a rival in order to lower entry barriers.⁴⁰

Structural remedies typically re-establish the opportunity for competition by requiring a violator to divest certain assets or even to dissolve. Some licensing requirements may also have structural characteristics.⁴¹

In the merger context, structural remedies generally are preferred over conduct remedies because they are "relatively clean and certain, and generally avoid costly government entanglement in the market."⁴² Since the parties to a merger have either not yet or only recently merged, there generally still exist clear demarcations between entities and units, facilitating a structural solution. Further, there typically is a close nexus between the firm's structure and the antitrust violation (i.e., the merger).

These advantages usually are absent in the section 2 context, especially where the firm in question has not grown through acquisition.⁴³ As a result, many panelists and commentators favor conduct remedies over structural relief in section 2 cases.⁴⁴ To the extent that conduct remedies can be tailored to address specific exclusionary conduct, they may serve to re-establish the opportunity for competition without the disruption often associated with divestitures. As two commentators summarize, "Even if structural and conduct relief would be equally effective, a conduct remedy is nevertheless preferable if any higher administrative costs it entails are outweighed by lower costs of lost efficiencies and stifled innovation."⁴⁵ While both conduct and structural remedies can impose high administrative costs, an advantage of conduct remedies in the section 2 context is that they may more easily be fine-tuned over time in response to changing market circumstances.

Principles, 58 ANTITRUST L.J. 841, 853 (1990)); see also Sherman Act Section 2 Joint Hearing: Predatory Pricing Hr'g Tr. 95, June 22, 2006 (Elzinga) (warning against making antitrust a "price regulatory regime").

³⁹ See Lopatka & Page, *supra* note 11, at 701-03 (noting that conduct relief can be ineffective where a conduct order might be "unenforceable" and discussing the difficulties in drafting a conduct remedy of "sufficient specificity to prohibit the full range of exclusionary practices Microsoft might employ").

⁴⁰ See generally ANTITRUST DIV., *supra* note 1, at 23-24. While an access requirement may, under certain circumstances, be an appropriate remedy, denial of access to an asset should rarely, if ever, serve as the basis for antitrust liability. See generally *supra* Chapter 7 (concluding that antitrust liability for unilateral, unconditional refusals to deal with competitors should not play a meaningful part in section 2 enforcement).

⁴¹ See, e.g., *Massachusetts v. Microsoft Corp.*, 373

F.3d 1199, 1233 (D.C. Cir. 2004) (en banc) (describing a proposal to require Microsoft to offer royalty-free licenses as a "structural remedy").

⁴² See ANTITRUST DIV., *supra* note 1, at 7.

⁴³ Lopatka & Page, *supra* note 12, at 27 ("[I]n cases where the defendant lawfully acquired its monopoly position by internal expansion in an unregulated market, structural relief will rarely be appropriate.").

⁴⁴ See, e.g., Mar. 29 Hr'g Tr., *supra* note 3, at 7 (Shelanski) ("I think while innovation makes structural remedies more difficult, it may in some cases make conduct remedies particularly valuable."); Mar. 28 Hr'g Tr., *supra* note 2, at 141 (Joskow) (asserting that in section 2 cases, "it is more likely desirable to focus on some form of conduct remedy").

⁴⁵ Lopatka & Page, *supra* note 11, at 701.

Therefore, while both conduct and structural remedies may produce unanticipated consequences, it may be easier to adjust conduct remedies as these consequences emerge.

As FTC Chairman William E. Kovacic observes, however, “[C]onduct remedies do not enjoy a sturdy reputation in the antitrust literature.”⁴⁶ He notes one “frequently voiced criticism” of conduct remedies is that they are insufficient to “unravel existing accumulations of market power” and are “feeble alternatives” to structural remedies that can “directly dismantle positions of dominance.”⁴⁷ Others contend that conduct remedies may prove insufficient “if the market is locked into a position that is the result of prior exclusionary behavior.”⁴⁸ Moreover, as one panelist argued, “[I]njunctive relief can simply turn into an effort to prohibit actions already in the past and already obsolete”⁴⁹

Conduct and structural remedies need not be mutually exclusive. In some instances, relief with both conduct and structural aspects may be needed. The trial court consequently is “clothed with ‘large discretion’ to fit the decree to the special needs of the individual case.”⁵⁰

A. Conduct Remedies

1. Prohibitory Provisions

Many conduct remedies focus on prohibiting the defendant from engaging in specific anticompetitive acts in the future. Prohibitory provisions have been used frequently to remedy a variety of unlawful exclusionary conduct, including exclusive

dealing and tying,⁵¹ and they take two general forms. First, where sufficient to achieve proper remedial goals, prohibitory provisions can be designed to prohibit only the specific practices found to be unlawful.⁵² These provisions are sometimes referred to as “cease and desist” or “sin no more” provisions. Second, where appropriate, they may go beyond prohibiting specific prior unlawful acts and prohibit other conduct that may result in recurrence of the violation. These measures are often referred to as “fencing in” provisions.⁵³

One panelist argued that orders prohibiting specific illegal conduct are the optimal remedies: “[I]njunctions should be limited to preventing reoccurrence of proven anticompetitive behavior. The Sherman Act . . . reflects the assumption that if specific impediments to

⁵¹ See, e.g., *United States v. Microsoft Corp.*, 231 F. Supp. 2d 144, 183 (D.D.C. 2002) (prohibiting exclusive-dealing arrangements “that have a significant degree of foreclosure of the market”), *aff’d sub nom. Massachusetts v. Microsoft Corp.*, 373 F.3d 1199 (D.C. Cir. 2004) (en banc); *United States v. Gen. Motors Corp.*, 1965 Trade Cas. (CCH) ¶ 71,624 (E.D. Mich. 1965) (prohibiting contracts that required bus operators or manufacturers to purchase all or a stated percentage of their requirements of buses or bus parts from General Motors); *United States v. W. Elec. Co.*, 1956 Trade Cas. (CCH) ¶ 68,246 (D.N.J. 1956) (prohibiting exclusive distributorship and requirements contracts); *United States v. IBM*, 1956 Trade Cas. (CCH) ¶ 68,245 (S.D.N.Y. 1956) (prohibiting requiring lessees or purchasers of IBM tabulating or electronic data processing machines to purchase IBM tabulating cards); *United States v. Eastman Kodak Co.*, 1954 Trade Cas. (CCH) ¶ 67,920 (W.D.N.Y. 1954) (prohibiting Kodak tying or otherwise connecting sale of its color film to processing of that film); see also *In re Biovail Corp.*, 134 F.T.C. 407 (2002) (prohibiting improper Orange Book listings); *In re Bristol-Myers-Squibb*, 135 F.T.C. 444 (2003) (barring misuse of FDA Orange Book listings based on false or misleading information, or other specified forms of misconduct, in order to initiate or maintain a stay of FDA generic drug approvals).

⁵² See AREEDA & HOVENKAMP, *supra* note 12, ¶ 653b2, at 99 (“Where the prohibited conduct is discrete and well defined, a prohibitory injunction may be sufficient to remedy the problem, particularly where it is clear that the defendant is unlikely to exercise its market power in other ways.”).

⁵³ See, e.g., *Mar. 29 Hr’g Tr.*, *supra* note 3, at 59 (Page).

⁴⁶ Kovacic, *supra* note 4, at 1292.

⁴⁷ *Id.* at 1292–93.

⁴⁸ Lopatka & Page, *supra* note 11, at 701; see also *Mar. 28 Hr’g Tr.*, *supra* note 2, at 117 (Fisher) (asserting that the *Microsoft* decree “didn’t restore competition” after competitive threats had been “destroyed”).

⁴⁹ *Mar. 28 Hr’g Tr.*, *supra* note 2, at 106 (Fisher).

⁵⁰ *Ford Motor Co. v. United States*, 405 U.S. 562, 573 (1972) (quoting *Int’l Salt Co. v. United States*, 332 U.S. 392, 401 (1947)); see also *Md. & Va. Milk Producers Ass’n v. United States*, 362 U.S. 458, 473 (1960) (“The formulation of decrees is largely left to the discretion of the trial court . . .”).

competition are removed, then private contracting within the market will lead to the efficient outcome.”⁵⁴ Another panelist explained that a remedy’s effectiveness “is likely to be tied to the precision with which one can define the cause of anticompetitive harm, and in some cases, this can be done quite clearly, and in those cases, I think behavioral injunctions can be quite effective.”⁵⁵

Although commentators generally agree that provisions prohibiting the actual illegal conduct found to violate section 2 are the proper first step in crafting a remedy,⁵⁶ those provisions are not always sufficient to re-establish the opportunity for competition.⁵⁷ Fencing-in provisions, which prohibit conduct not specifically described in the complaint but capable of effecting a recurrence of the violation, may also be appropriate. They may prohibit conduct not charged as part of the violation, but which would have been unlawful if defendant had engaged in it, or conduct not unlawful by itself, but which needs to be prohibited to re-establish the opportunity for competition.

Fencing-in provisions can take several forms. First, they can prohibit the “same type or class” of acts that created the violation “or whose commission in the future, unless enjoined, may fairly be anticipated from the

defendant’s conduct in the past.”⁵⁸ That can mean prohibiting different but reasonably related acts, or the same past acts directed against different but reasonably related product or geographic markets. Further, “[a]cts entirely proper when viewed alone may be prohibited.”⁵⁹ Thus, if necessary or appropriate, remedial provisions may constrain conduct in markets distinct from, but logically related to, the market at issue in the complaint, and may prohibit the defendant from taking otherwise lawful acts in those markets.

Second, fencing-in provisions can prohibit acts that are not similar to the defendant’s past illegal acts but that could be used to repeat the same basic violation. To reach every new way that a defendant might act anticompetitively, fencing-in provisions often would need to contain broad language that also constrains normal, competitive behavior. As a result, seeking to entirely eliminate the chance of recurrence, if possible at all, may lead to such sweeping prohibitions that the remedy could create more harm than good for consumers. It is important to evaluate carefully the likely impact of each fencing-in provision to avoid unnecessarily constraining normal competitive behavior in order to reach behavior that is possible but unlikely to occur or to cause competitive harm.⁶⁰

The Department believes that, where based on clear and objective criteria and sufficient to stop the violation, prevent its recurrence, and re-establish the opportunity for competition, a prohibitory provision is the proper remedy. If, however, a prohibitory provision is insufficient to achieve these goals, then the Department will not hesitate to seek additional relief.

⁵⁴ *Id.* at 49; *see also id.* at 59 (conceding that “forward-looking or fencing in kinds of provisions may be necessary” but urging that they be applied only when the record establishes that they are needed).

⁵⁵ *Id.* at 12–13 (Shelanski).

⁵⁶ *See, e.g., supra* notes 52, 54–55.

⁵⁷ *See, e.g., Mar. 29 Hr’g Tr., supra* note 3, at 59 (Page) (stating that “forward-looking or fencing in kinds of remedies may be necessary”); *id.* at 67 (Lao) (concluding that in high-technology markets, after a competitor has been forced out of the market, “focusing the remedy on the specific conduct found to be unlawful[] will not return competition to the status quo; thus drafting or crafting forward-looking remedies is quite important”); *cf. Robert W. Crandall & Kenneth G. Elzinga, Injunctive Relief in Sherman Act Monopolization Cases*, 21 RES. LAW AND ECON. 277, 335–37 (2004) (analyzing ten separate conduct remedies imposed on firms charged with monopolization and finding “little evidence that any of them contributed favorably to consumer welfare”).

⁵⁸ *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 132 (1969) (quoting *NLRB v. Express Publ’g Co.*, 312 U.S. 426, 435 (1941)).

⁵⁹ *United States v. U.S. Gypsum Co.*, 340 U.S. 76, 89 (1950).

⁶⁰ *Cf. Richard Craswell, Regulating Deceptive Advertising: The Role of Cost Benefit Analysis*, 64 S. CAL. L. REV. 549, 552 (1991) (“The required level of precautions should therefore be defined as the point at which the value of any further precautions would be outweighed by any costs those precautions would inflict.”).

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2. Affirmative-Obligation Remedies

Designing and implementing an effective remedy can be particularly difficult when the defendant's conduct extensively changed the market, precluding the opportunity for competition. For example, unlawful exclusionary conduct can deprive rivals of economies of scale or network economies. Once a defendant denies these economies to rivals (and secures them for itself), it may be difficult or impossible to re-establish the opportunity for competition simply by barring continuation of the specific exclusionary practices or other, related conduct. In addition, a company may engage in unlawful exclusionary practices when there is competition for a market. In those situations, a remedy that requires a defendant to take affirmative steps may be necessary to re-establish the opportunity for competition.⁶¹

Some panelists recognized a need for affirmative-obligation remedies in appropriate circumstances.⁶² When, for example, scale economies make successful entry by new

competitors unlikely, an affirmative remedy may allow potential competitors to enter with a cost structure similar to a defendant's.⁶³ Even when a defendant already has established its technology as the current market standard, an affirmative remedy may be able to approximate the competitive conditions that would have prevailed but for the exclusionary conduct.⁶⁴ Finally, forward-looking affirmative remedies that go beyond the precise conduct at issue may help ensure that a defendant does not use similar tactics to foreclose competition in the future.⁶⁵

While affirmative-obligation remedies potentially can be effective,⁶⁶ these remedies also run the risk of being overbroad and disproportionate to the unlawful conduct. Careful consideration of the nexus between the remedy and the exclusionary conduct helps reduce this risk.⁶⁷

Access remedies, which may mandate

⁶³ See Mar. 29 Hr'g Tr., *supra* note 3, at 70 (Lao) (where the dominant firm has already successfully excluded rivals, an affirmative remedy that requires the "dominant firm to reduce rivals' costs" may be necessary).

⁶⁴ See, e.g., Mar. 28 Hr'g Tr., *supra* note 2, at 121 (Fisher) (arguing that requiring Microsoft to auction "licenses to Windows," along with "the requisite know-how," would have been an appropriate remedy).

⁶⁵ See Mar. 29 Hr'g Tr., *supra* note 3, at 67-69 (Lao); Willard K. Tom & Gregory F. Wells, *Raising Rivals' Costs: The Problem of Remedies*, 12 GEO. MASON L. REV. 389, 404 (2003) (noting that an antitrust remedy "must take into account the evolution of the market between the time the violation occurred and the time the remedy is being entered, as well as the likely future course of the market").

⁶⁶ See generally *Massachusetts v. Microsoft Corp.*, 373 F.3d 1199 (D.C. Cir. 2004) (en banc). But cf. Mar. 29 Hr'g Tr., *supra* note 3, at 57 (Page) (arguing that if the original rationale for the *Microsoft* remedy "was to preserve the middleware threat to the Microsoft monopoly in the network . . . the [remedy] has not succeeded, because it's attracted very few licensees, despite these enormous efforts").

⁶⁷ See, e.g., *United States v. Microsoft Corp.*, 231 F. Supp. 2d 144, 183 (D.D.C. 2002) (finding it "entirely appropriate" that the remedy "prohibit only those contracts that have a significant degree of foreclosure of the market"), *aff'd sub nom.* *Massachusetts v. Microsoft Corp.*, 373 F.3d 1199 (D.C. Cir. 2004) (en banc).

⁶¹ See Lopatka & Page, *supra* note 11, at 705-07 (observing that "if predatory behavior has irreversible anticompetitive effects, an order that does more than stop the anticompetitive conduct may be justified").

⁶² See, e.g., Mar. 29 Hr'g Tr., *supra* note 3, at 70-71 (Lao) (describing "the importance of implementing creative affirmative obligations"); Tad Lipsky, *Remedies for Monopolization* 4 (Mar. 28, 2007) (hearing submission) ("Mandatory access has benefits and deserves consideration."); see also Philip J. Weiser, Goldwasser, *The Telecom Act, and Reflections on Antitrust Remedies*, 55 ADMIN. L. REV. 1, 15 (2003) (asserting that conduct remedies need not "mire courts in supervisory roles for which they are ill-suited" because courts can rely on (1) an arrangement regulated by a regulatory agency; (2) an existing access arrangement; (3) a prior course of dealing; or (4) a non-discrimination standard).

selling or licensing physical assets or intellectual property, offering services, or providing interconnection to a network, can particularly raise significant administrability concerns. They can be the most complex remedies to design, implement, and supervise. At the design stage, an access remedy typically requires specifying the nature of access, its price, and other terms. In many instances, however, adequately specifying these conditions in advance may prove difficult. As one panelist explained, price-setting in a regulatory context is often “complicated” and raises the “familiar problems of traditional public utility-style regulation.”⁶⁸ Similarly, another panelist noted that “the many complex and unforeseeable consequences of a forced sharing regime are extremely difficult to administer.”⁶⁹

Any access remedy requires a pricing determination. The price cannot be left to defendant’s unilateral determination; otherwise, it could set a price so high as to effectively deny access, which would subvert the remedial goals of the decree. At the same time, some panelists expressed significant concern that courts and antitrust enforcement agencies are not well-equipped to determine appropriate prices.⁷⁰ However, others challenged that proposition, arguing that in some contexts an appropriate price may be established easily. For instance, where the monopolist already has been selling to other buyers in a more competitive setting, the price established in that market may be appropriate for the remedy.⁷¹ Other commentators observe,

however, that using prior-course-of-dealing comparisons to craft a remedy may be difficult in practice, particularly in fast-moving markets where terms may change quickly.⁷²

Access remedies that mandate selling or licensing physical assets or intellectual property, offering services, or providing interconnection to a network can also require extensive continuing oversight.⁷³ In some circumstances, they may require the antitrust enforcement agencies and courts to make decisions traditionally vested in regulatory agencies with features better suited for these determinations, including a large permanent staff, well-established reporting requirements, and specialized expertise in evaluating the relevant industry.⁷⁴

The *Microsoft* decree highlights the complexities that interconnection remedies can create. It requires Microsoft to share certain communications protocols with potential middleware providers so that personal computers can interconnect with Microsoft servers. The purpose is to ensure that rival middleware is able to interconnect with Microsoft-based servers and thereby compete

(Pitofsky) (“I don’t think the remedy [in *Aspen Skiing*] is very difficult. You take whatever the arrangement was in the other resort areas and apply it to Aspen.”); Mar. 28 Hr’g Tr., *supra* note 2, at 53 (Lipsky) (noting that setting prices may be less challenging in a regulated industry, at least where prices already have been set through the regulatory process).

⁷² See, e.g., Weiser, *supra* note 62, at 18–19 (urging caution in using prior course of dealing as the basis for crafting a remedy, especially in “markets that move very quickly”).

⁷³ See *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 414–15 (2004) (“Effective remediation of violations of regulatory sharing requirements will ordinarily require continuing supervision of a highly detailed decree.”); Kovacic, *supra* note 4, at 1293.

⁷⁴ See, e.g., *Trinko*, 540 U.S. at 415 (“An antitrust court is unlikely to be an effective day-to-day enforcer of . . . detailed sharing obligations.”); RICHARD A. POSNER, *ANTITRUST LAW* 242 (2d ed. 2001) (noting that “supervision of an ongoing commercial relationship” is “a function that courts are not equipped to perform effectively”).

⁶⁸ Mar. 28 Hr’g Tr., *supra* note 2, at 50 (Lipsky); see also *id.* at 24 (Crandall) (“[I]n any regulated access there is going to be an argument about the price.”).

⁶⁹ Sherman Act Section 2 Joint Hearing: Refusals to Deal Panel Hr’g Tr. 35, July 18, 2006 (Pate).

⁷⁰ See *id.* at 30 (Pate) (“Government-imposed duties to assist competitors force courts into setting prices, a task for which they are not very well equipped”); *id.* at 110 (Walton) (“[H]ow do we get this pricing?”). See generally *supra* Chapter 4 (discussing remedial difficulties in predatory-pricing cases); Chapter 7 (discussing remedial difficulties in refusal-to-deal cases).

⁷¹ See, e.g., May 8 Hr’g Tr., *supra* note 3, at 107

with Microsoft's middleware.⁷⁵ This interconnection provision, according to one panelist, "has turned out to be the most difficult and the most problematic in its enforcement,"⁷⁶ and, according to another panelist, it has taken up "the lion's share of compliance work for Microsoft and the agencies."⁷⁷ The technological complexity of the protocols has made implementation, he claimed, "quite challenging."⁷⁸ He noted that the Department and the district court have had to rely upon assistance from a forty-person "technical committee" for determining and enforcing Microsoft's compliance with the consent decree.⁷⁹

Access remedies also raise efficiency and innovation concerns. By forcing defendant to share the benefits of its investments and relieving rivals of the incentive to develop comparable assets, access remedies can reduce an industry's competitive vitality.⁸⁰ One panelist, for example, argued that subjecting an industry to regulatory scrutiny over technical aspects of network interconnection drains the industry of its entrepreneurial energy or "mojo."⁸¹ Similarly, one commentator notes that others maintain that access remedies tend to lead to "creeping regulation" by courts and

competition agencies, which have to regulate the defendant's day-to-day efforts to comply with the decree.⁸² However, as another panelist observed, when the market in question is one "where you can't assume that there is a competitive structure that will automatically achieve optimal performance," it is appropriate to assess the possibility that "some kind of access remedy, despite all the costs and burdens . . . might actually be better than doing nothing or might be better than applying some other regulatory remedy."⁸³ Even in that situation, however, panelists cautioned that careful design is required to ensure a decree of sufficient duration for the opportunity for competition to take root but not so long as to interfere unnecessarily with the efficiency and innovation incentives of the companies involved.⁸⁴

The Department believes that, in certain circumstances, affirmative-obligation remedies will play an important role in remedying section 2 violations. In some settings, merely barring a defendant's exclusionary conduct, or other similar conduct, is insufficient to re-establish the opportunity for competition, and affirmative relief is needed. The Department recognizes, however, that any affirmative obligation must carefully balance the benefits it brings to consumers with the costs it may impose on the Department and courts in designing and supervising the remedy, on defendant's and competitors' business

⁷⁵ *United States v. Microsoft Corp.*, 231 F. Supp. 2d 144, 189-90 (D.D.C. 2002), *aff'd sub nom.* *Massachusetts v. Microsoft Corp.*, 373 F.3d 1199 (D.C. Cir. 2004) (en banc).

⁷⁶ Mar. 29 Hr'g Tr., *supra* note 3, at 45 (Page).

⁷⁷ Mar. 28 Hr'g Tr., *supra* note 2, at 16 (Heiner); *see also* Mar. 29 Hr'g Tr., *supra* note 3, at 57 (Page) (stating that 313 Microsoft employees work on this portion of the decree).

⁷⁸ Mar. 28 Hr'g Tr., *supra* note 2, at 16 (Heiner); *see also id.* at 16-17.

⁷⁹ *Id.* at 16-17 (Heiner); *see also* Mar. 29 Hr'g Tr., *supra* note 3, at 47 (Page). *But see id.* at 30 (Hesse) (asserting that "hiring technical experts to help out was an innovative thing to do and . . . has proven to be a pretty successful component of the Microsoft decree").

⁸⁰ *See Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 408 (2004) (recognizing that forced sharing may "lessen the incentive for the monopolist, the rival, or both to invest in . . . economically beneficial facilities").

⁸¹ May 8 Hr'g Tr., *supra* note 3, at 102 (Sidak).

⁸² Francois Leveque, *The Controversial Choice of Remedies to Cope with the Anti-Competitive Behavior of Microsoft* 8 (Berkeley Program in Law & Econ. Working Paper Series, Paper No. 34, 2000), available at <http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1055&context=blewp>.

⁸³ *See* Mar. 28 Hr'g Tr., *supra* note 2, at 53 (Lipsky).

⁸⁴ *See, e.g.*, Mar. 29 Hr'g Tr., *supra* note 3, at 99-100 (Page) (noting that longer decrees may be preferable with access remedies, as in *Microsoft*, to assure competitors that investments made in interconnecting with the monopolist will be worthwhile); *id.* at 102 (Hesse) (arguing that length of decree in a network market will depend on whether there is a quick way to lower entry barriers or otherwise overcome network effects and concluding that longer decrees will be appropriate in most technology markets).

operations and incentives, and on consumers.

The Department believes that, in certain circumstances, affirmative-obligation remedies will play an important role in remedying section 2 violations.

B. Structural Remedies

Structural remedies typically dissolve the defendant, split it into two or more entities, or require divestiture of assets to a new owner. The Supreme Court has recognized that, along the spectrum of antitrust remedies, these are the “most drastic.”⁸⁵ Similarly, in *Microsoft*, the D.C. Circuit cautioned that “structural relief, which is ‘designed to eliminate the monopoly altogether . . . require[s] a clearer indication of a significant causal connection between the conduct and creation or maintenance of the market power.’”⁸⁶ The court indicated that the further the relief under consideration is toward the structural end of the remedial spectrum, the greater the need for “a sufficient causal connection between [the] anticompetitive conduct and [the firm’s] dominant position.”⁸⁷ The court also suggested that structural remedies are best suited to instances involving a firm “that has expanded by acquiring its competitors,”⁸⁸ because, while it is likely to be difficult to divide a unitary company into efficient competitors, a company formed through mergers may still have identifiable structural divisions.⁸⁹

⁸⁵ *United States v. E. I. du Pont de Nemours & Co.*, 366 U.S. 316, 326 (1961).

⁸⁶ *United States v. Microsoft Corp.*, 253 F.3d 34, 106 (D.C. Cir. 2001) (en banc) (per curiam) (quoting AREEDA & HOVENKAMP, *supra* note 12, ¶ 653b, at 91–92) (alteration in original) (emphasis in original); *see also* Mar. 29 Hr’g Tr., *supra* note 3, at 60 (Page) (“[R]emedies should be proportional to the strength of the proof that [defendant’s] illegal actions actually reduced competition. . . . [Y]ou need more evidence to support more Draconian remedies.”).

⁸⁷ *See Microsoft*, 253 F.3d at 106.

⁸⁸ *Id.*

⁸⁹ *Id.* (citing *United States v. United Shoe Mach. Corp.*, 110 F. Supp. 295, 343 (D. Mass. 1953), *aff’d*, 347 U.S. 521 (1954) (per curiam)).

Some commentators favor structural remedies in section 2 cases as a general matter:

Structural relief is the most far-reaching category of remedies, but there are several reasons for the presumption favoring structural remedies in monopolization cases. If the aim is to “terminate the monopoly”, the most straightforward solution is to break it up in some fashion. This is consistent with the economic view that structural relief goes to the root of the problem, even if the problem is merely conduct that unlawfully maintains the monopoly. . . . If there are significant reasons why restraining conduct or licensing remedies are not likely to be effective in . . . terminating the monopoly . . . then the case for some sort of structural remedy is compelling.⁹⁰

Some commentators also note that divestiture, and other structural remedies, offer the possibility of swiftly dissipating a defendant’s monopoly power by introducing new competitors into the market.⁹¹ In addition, some panelists argued that structural remedies can be administratively efficient. As one panelist noted, “[S]tructural remedies generally eliminate, although not entirely, the need for ongoing enforcement in compliance activity, which also can be an extremely time consuming and resource intensive process.”⁹² Another panelist observed that a structural remedy “doesn’t require continued and long judicial supervision and continued wrangling and litigation that can go with that.”⁹³

What structural remedies may gain by reducing long-term administration burdens, however, they may lose by imposing significant up-front implementation costs. Some commentators have observed that breaking up a company can present acute administrability challenges. As one panelist explained:

⁹⁰ Robert E. Litan & William D. Nordhaus, *Effective Structural Relief in U.S. v. Microsoft 2* (May 2000) (unpublished manuscript), *available at* http://aei-brookings.org/admin/authorpdfs/redirect-safely.php?fname=../pdffiles/Structural_Relief.pdf.

⁹¹ Kovacic, *supra* note 4, at 1294.

⁹² Mar. 29 Hr’g Tr., *supra* note 3, at 24 (Hesse).

⁹³ Mar. 28 Hr’g Tr., *supra* note 2, at 110 (Fisher).

[T]he structural remedy is very difficult because firms just aren't divided up this way.

In the case of a horizontal divestiture, it is not necessarily neatly divided in that way.

What are the necessary assets, what are the necessary intellectual property, what are the necessary employees to create a going concern and have these separated entities?⁹⁴

A court crafting a structural remedy that entails dismantling a defendant to terminate an unlawful monopoly may face difficult decisions regarding allocation of personnel and assets that serve the company as a whole. For example, if the firm's operations are carried out in fully integrated teams, the court would need to decide how personnel who serve in the integrated teams will be allocated among the new enterprises.⁹⁵ Because of these challenges, one panelist noted that "courts are traditionally reluctant to grant structural relief" and "crafting [a structural remedy] is not easy and may sometimes be impossible."⁹⁶ Another panelist advised that because of these challenges, divestiture "should be a last resort" for an integrated or "unitary" company.⁹⁷

In addition, major restructuring may have serious consequences for business efficiency and innovation. Just as the problems of dividing a company into parts present challenges for a court, the separate entities created by divestiture may face challenges post-breakup due to lack of personnel, organizations, or information necessary to compete. These challenges may be particularly acute in technologically dynamic markets characterized by rapid innovation. For example, an order splitting up a company might leave one post-divestiture entity without research and development operations, or two entities each with diminished research and

development capability, making it difficult for these entities to maintain the level of innovation necessary to compete in a rapidly changing market.⁹⁸ Concern with undermining the efficiency of post-divestiture operations was one of the issues that led the *Microsoft* court to reject the divestiture remedy initially ordered by the district court.⁹⁹ As one panelist concluded, "[M]ost of the structural remedies are a case of too much at too high a cost."¹⁰⁰ In exceptional cases, however, a simple divestiture of intellectual property might be an adequate structural remedy that would impose a relatively modest cost.

Panelists were also divided on whether structural remedies actually work. One argued that structural remedies are more likely to be successful than conduct remedies: "The lines are clearer, and if you've actually proven a violation where you can support imposition of a structural remedy, I think the likelihood of that structural remedy having an effect is probably higher."¹⁰¹ Other panelists disagreed. One asserted that "the effectiveness of structural remedies in Section 2 cases is not assured and there's certainly quite a bit of debate of effectiveness historically over structural remedies."¹⁰² Another writes more bluntly that attempts to break up monopolists have been "costly exercises in futility."¹⁰³

⁹⁸ See *id.* at 9 (Shelanski).

⁹⁹ *Microsoft*, 253 F.3d at 106 ("[A] 'corporation, designed to operate effectively as a single entity, cannot readily be dismembered of parts of its various operations without a marked loss of efficiency.'" (quoting *United States v. Aluminum Co. of Am.*, 91 F. Supp. 333, 416 (S.D.N.Y. 1950))). These concerns are similar to those that, in the merger context, cause the Department to disfavor divestitures of less than an existing, standalone business entity. See ANTITRUST DIV., *supra* note 1, at 12-13.

¹⁰⁰ Mar. 28 Hr'g Tr., *supra* note 2, at 172 (Epstein).

¹⁰¹ Mar. 29 Hr'g Tr., *supra* note 3, at 25 (Hesse); see also *id.* at 24 (Hesse) (arguing that structural remedies are "generally less easy to evade" because "[i]t's pretty clear what you're supposed to do").

¹⁰² *Id.* at 8 (Shelanski).

¹⁰³ Robert W. Crandall, *Costly Exercises in Futility: Breaking Up Firms to Increase Competition* 1 (Dec. 2003) (unpublished manuscript), available at <http://www.brookings.edu/~media/Files/rc/>

⁹⁴ *Id.* at 136 (Joskow).

⁹⁵ See, e.g., *United States v. Microsoft Corp.*, 253 F.3d 34, 106 (D.C. Cir. 2001) (en banc) (per curiam); Kovacic, *supra* note 4, at 1294-95.

⁹⁶ Mar. 28 Hr'g Tr., *supra* note 2, at 110 (Fisher).

⁹⁷ Mar. 29 Hr'g Tr., *supra* note 3, at 49 (Page).

Evaluating the efficacy of past structural remedies in monopolization cases is difficult because generally there is no way of determining how competition in the relevant market would have fared had the remedy not been imposed. One panelist questioned whether anyone has an adequate “tool kit” for evaluating whether decrees systematically improve or reduce consumer welfare.¹⁰⁴

Indeed, commentators continue to debate whether past divestiture remedies were successful. For example, some commentators point to the breakup of Standard Oil in the early 1900s as an example of a successful structural remedy.¹⁰⁵ That divestiture “ordered the dissolution of the trust by directing the combination to distribute the stock of thirty-seven subsidiaries to its shareholders”¹⁰⁶ and created a number of sizable, enduring, independent competitors, including the companies that became Amoco, Chevron, Exxon, and Mobil.¹⁰⁷ Despite Standard Oil’s predictions, dissolution did not disrupt the industry’s provision of goods and services, or significantly undermine the operations of the divested companies.¹⁰⁸ Some, however, have questioned the overall success of the remedy.¹⁰⁹

[papers/2003/12_competition_crandall/12_competition_crandall.pdf](#).

¹⁰⁴ See May 8 Hr’g Tr., *supra* note 3, at 39 (Sidak).

¹⁰⁵ William S. Comanor & F. M. Scherer, *Rewriting History: The Early Sherman Act Monopolization Cases*, 2 INT’L J. ECON. BUS. 263, 266–71 (1995); Kovacic, *supra* note 4, at 1295–1302. See generally *Standard Oil Co. of N.J. v. United States*, 221 U.S. 1, 77–82 (1911) (describing breakup).

¹⁰⁶ Kovacic, *supra* note 4, at 1295, 1300.

¹⁰⁷ *Id.*; see also 1 SIMON N. WHITNEY, ANTITRUST POLICIES 103–10 (1958) (arguing that over time vigorous competition developed among the divested companies).

¹⁰⁸ Kovacic, *supra* note 4, at 1298 (“The transition proceed[ed] relatively smoothly even though most of the newly independent entities were deprived of the full-scale integration that Standard had argued was vital to their survival.”).

¹⁰⁹ See Sherman Act Section 2 Joint Hearing: Business History Session Hr’g Tr. 15–18, 63–65, Oct. 26, 2006 [hereinafter Oct. 26 Hr’g Tr.] (May); Walter Adams, *Dissolution, Divorcement, Divestiture: The Pyrrhic Victories of Antitrust*, 27 IND. L.J. 1, 2 (1951); POSNER, *supra* note 74, at 107 (“The decree had substituted a

Evaluations of the structural remedy imposed on AT&T in the 1980s are also mixed. The order split the Bell System between its monopoly local exchange business (assigned to the seven Regional Bell Operating Companies (RBOCs)) and its competitive long distance and manufacturing businesses (assigned to AT&T).¹¹⁰ Some panelists believed that these divestitures had important positive benefits. One suggested that “it is arguable” that many innovations in the telecommunications industry “might [never] have occurred without the divestiture decree.”¹¹¹ Another contended that “the structural remedy in the AT&T case unleashed innovation from smaller telecommunications firms on an unprecedented scale, which enhanced consumer welfare.”¹¹²

Other observers, however, viewed the AT&T remedy as less successful and possibly costly from the standpoint of lost efficiencies.¹¹³ Two panelists argued that Bell’s vertical integration had been efficient, as demonstrated by the RBOCs’ subsequent vertical re-integration.¹¹⁴

series of regional monopolies for a national monopoly.”).

¹¹⁰ *United States v. AT&T*, 552 F. Supp. 131, 141–43 (D.D.C. 1982), *aff’d mem. sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

¹¹¹ Mar. 28 Hr’g Tr., *supra* note 2, at 55 (Lipsky); see also Oct. 26 Hr’g Tr., *supra* note 109, at 185 (Smith).

¹¹² Mar. 29. Hr’g Tr., *supra* note 3, at 67 (Lao).

¹¹³ See, e.g., Mar. 28 Hr’g Tr., *supra* note 2, at 34 (Crandall) (“The cost of the vertical divestiture was extremely high. Was it necessary? I think in retrospect I can say probably not.”); Oct. 26 Hr’g Tr., *supra* note 109, at 46 (Galambos) (“There was no consideration of whether deregulation might not serve the public interest better than structural settlements under the Sherman Act. There was, instead, dedication to a policy that was rooted in the past . . .”); *id.* at 77–78 (stating that the breakup of AT&T, in the long term, did not lead to the increased innovation and productivity that the government had sought in the case).

¹¹⁴ See Mar. 28 Hr’g Tr., *supra* note 2, at 33 (Crandall) (“[A]fter 12 years of the AT&T decree and nine years after the 1996 [A]ct, we reverted back to a vertically integrated telecom sector.”); *id.* at 147–48 (Thorne) (“Some of the efficiencies of a larger firm were sacrificed. Many of those efficiencies have been recreated since, reacheived since the divestiture happened.”); see also Oct. 26 Hr’g Tr., *supra* note 109, at 83 (Galambos) (“I do not think we are moving back to

One panelist estimated that the economy “lost about \$5 billion of output just in the transition from the old AT&T to the new AT&T.”¹¹⁵

The Department believes that structural remedies remain an important part of the government’s remedial arsenal. They may be appropriate if a section 2 violation has a clear, significant causal connection to a defendant’s acquisition of monopoly power. Radical restructuring of a defendant, however, is appropriate only after a determination that alternative remedies would not satisfactorily achieve the remedial goals or would do so at an unacceptable cost and a determination that the structural remedy is likely to benefit consumers.

C. The Special Challenge of Remedies in Technologically Dynamic Industries

The rapid changes and innovation typical of new-economy industries raise the question whether current antitrust enforcement mechanisms, which often involve lengthy investigation, followed by complex, time-consuming trials, are suitable for implementing effective remedies that adequately protect competition. Developing an equitable remedy in these markets has been likened to “trying to shoe a galloping horse.”¹¹⁶ One panelist observed that “the system seems broken in terms of speed, cost, and effectiveness of remedies.”¹¹⁷ Professor Hovenkamp explained the problem in the context of the *Microsoft* litigation: “[T]he legal wheels turn far too slowly. By the time each round of *Microsoft* litigation had produced a ‘cure,’ the victim was already dead.”¹¹⁸ Similar criticisms were

the Bell System, but we are getting reconsolidation. It seems to me . . . you are seeing the effect of economies of scale and some economies of scope, so you are getting reconsolidation.”).

¹¹⁵ Mar. 28 Hr’g Tr., *supra* note 2, at 28 (Crandall).

¹¹⁶ *New York v. Microsoft Corp.*, 224 F. Supp. 2d 76, 184 (D.D.C. 2002), *aff’d sub nom.* *Massachusetts v. Microsoft Corp.*, 373 F.3d 1199 (D.C. Cir. 2004) (en banc).

¹¹⁷ Mar. 29 Hr’g Tr., *supra* note 3, at 36 (Cunningham).

¹¹⁸ HOVENKAMP, *supra* note 31, at 299; *see also* *United States v. Microsoft Corp.*, 253 F.3d 34, 49 (D.C. Cir.

directed to the long-running litigation against IBM. A panelist concluded that the IBM case highlights the “need for speed” and demonstrates “how the industry and the technology tend to change in a manner that by the time you are done, everything you thought when you started the case is irrelevant.”¹¹⁹

The time required for litigation may present particularly acute concerns in new-economy industries because in many instances, if anticompetitive conduct has eliminated potential competitors, the opportunity for robust competition may be difficult to recreate. As one panelist explained, in fast-moving, high-technology markets, “it’s extremely difficult to resuscitate a competitor, after the competitor has been crushed. The convergence of factors that produced a competitive challenge before it was anticompetitively excluded[] may never reappear, not in the same fashion, anyway.”¹²⁰

To be sure, antitrust litigation ideally would be more rapid, reaching resolution and a remedy before the markets change significantly. In some cases, this issue can be addressed by consent decrees entered into before litigation; in others, it may suggest seeking preliminary injunctive relief. More generally, the effort to develop clear, objective standards for liability discussed in chapters 1-8 can help address this concern. The clearer and more objective the standard for liability, the more efficient and effective the antitrust enforcement. Violations are more likely to be deterred, litigation is likely to be faster and less expensive, and parties are more likely to reach prompt and effective settlements.

Once an appropriate judgment has been issued, steps can be taken to ensure the efficacy of relief in dynamic industries. One possibility is to fashion remedies that go beyond the precise conduct at issue. For example, some panelists suggested that, before the *Microsoft*

2001) (en banc) (per curiam) (noting that in the computer industry, “[b]y the time a court can assess liability, firms, products, and the marketplace are likely to have changed dramatically”).

¹¹⁹ Mar. 28 Hr’g Tr., *supra* note 2, at 56 (Lipsky).

¹²⁰ Mar. 29 Hr’g Tr., *supra* note 3, at 67 (Lao).

litigation ended, “the browser wars were over.”¹²¹ For that reason, the remedies at least partially focused on protecting competition that might arise through future middleware technologies.

Of course, even when an industry’s dynamic nature makes effective injunctive relief problematic, antitrust enforcement continues to play an important role. Thus, the *Microsoft* court recognized that, while the passage of time in fast-changing settings

threatens enormous practical difficulties for courts considering the appropriate measure of relief [e]ven in those cases where forward-looking remedies appear limited, the Government will continue to have an interest in defining the contours of the antitrust laws so that law-abiding firms will have a clear sense of what is permissible and what is not.”¹²²

The same potential for dynamic change between complaint and judgment that complicates crafting a remedy in the first place raises further complexity after a remedy is in place. Panelists warned that when technology is changing rapidly, a fixed remedy running years into the future may have damaging, unintended consequences.¹²³ Panelists’ general admonitions that decrees should provide adequate flexibility¹²⁴ and should run no longer than necessary for re-establishing the opportunity for competition are therefore particularly applicable to cases in

technologically dynamic settings.¹²⁵

V. Monetary Remedies

The antitrust-remedial system in the United States is not limited to conduct and structural remedies. There are also a variety of monetary remedies available that can both deter future anticompetitive conduct and help restore injured parties to the position they would have been in without the unlawful conduct. Private plaintiffs in antitrust cases can seek monetary damages, which by law are trebled automatically.¹²⁶ Similarly, the federal government may seek treble damages in instances in which anticompetitive conduct harmed the United States itself,¹²⁷ and the states may recover damages they suffered themselves as well as on behalf of injured citizens in their *parens patriae* capacity.¹²⁸ In addition, certain monetary equitable remedies, such as disgorgement and restitution, may be available.¹²⁹ The antitrust enforcement agencies, however, do not have the authority to impose civil fines.

A. Private Monetary Remedies – Treble Damages

The U.S. antitrust laws permit private plaintiffs to recover three times the damages they prove they have suffered. Although treble damages can increase deterrence and overall enforcement, a number of observers argue that,

¹²¹ *Id.* at 50 (Page); see also Mar. 28 Hr’g Tr., *supra* note 2, at 117–18 (Fisher).

¹²² *Microsoft*, 253 F.3d at 49.

¹²³ See Mar. 29 Hr’g Tr., *supra* note 3, at 7 (Shelanski) (stating that “innovative markets are cause for agencies and courts to be more cautious about remedies”); Crandall & Elzinga, *supra* note 57, at 287–88 (arguing that the 1956 *Western Electric* settlement provisions confining AT&T and its manufacturing and research arms to markets involving common carrier communications services and equipment “cut off a major potential source of innovation” in the computer and other electronics markets).

¹²⁴ See Mar. 29 Hr’g Tr., *supra* note 3, at 72–73 (Lao) (explaining that continued judicial supervision over decrees is “helpful in a dynamic high technology market because it allows the court to assess the success of the remedy, and to assess future development”).

¹²⁵ See *supra* notes 32–34 and accompanying text. But cf. Tom & Wells, *supra* note 65, at 407 (noting that, where rapid change “takes place against a background of powerful network effects,” decree should be longer to account for fact that challenges to a dominant position rarely arise).

¹²⁶ 15 U.S.C. § 15(a) (2000).

¹²⁷ *Id.* § 15a.

¹²⁸ *Id.* §§ 15(a), 15c; see also *Georgia v. Evans*, 316 U.S. 159, 162–63 (1942) (holding that states are “persons” capable of bringing treble damage actions when they are “immediate victim[s] of a violation of the Sherman Law”).

¹²⁹ See, e.g., FTC Policy Statement on Monetary Equitable Remedies in Competition Cases, 68 Fed. Reg. 45,820 (Aug. 4, 2003). Although the FTC has sought disgorgement, see *FTC v. Mylan Labs., Inc.*, 62 F. Supp. 2d 25, 36–37 (D.D.C. 1999), *modified*, 99 F. Supp. 2d 1, 4–5 (D.D.C. 1999), the Department has not done so.

in the section 2 context, treble damages also can chill procompetitive conduct and that the rationale for trebling is weaker here than in other contexts. As explained below, these concerns have led to questions about the appropriateness of treble damages in private section 2 cases.

A successful plaintiff in a section 2 case is entitled to recover “threefold the damages by him sustained.”¹³⁰ Plaintiffs also may recover attorneys’ fees and, in limited circumstances, pre-judgment interest.¹³¹ These private monetary remedies provide incentives for private enforcement and advance at least three important goals: deterrence, punishment of wrongdoers, and compensation of victims.¹³² Trebling damages generally increases deterrence by compensating for the possibility that anticompetitive conduct will not be detected and prosecuted.¹³³ Likewise, the possibility of winning multiple damages enhances plaintiffs’ incentives to seek out and detect anticompetitive conduct and to bear the time, expense, and uncertainty of bringing suit.¹³⁴

The Department believes that private actions and resulting monetary remedies play an important role in overall antitrust enforcement. The government has finite resources to

prosecute antitrust violations; private enforcement supplements these efforts. Indeed, private plaintiffs, rather than the government, undertake a significant portion of antitrust enforcement, including section 2 enforcement.¹³⁵ Moreover, by deterring violations, private damages can reduce the need for government enforcement in the first instance.

Panelists expressed a variety of opinions regarding the suitability of treble damages in section 2 cases. A number voiced policy concerns. One argued that enhanced incentives for bringing suit lead to baseless litigation.¹³⁶ Other commentators suggest that the prospect of treble damages has led courts to apply section 2 more narrowly than they might otherwise.¹³⁷ Along these lines, one panelist stressed that the prospect of treble damages should not distort the agencies’ analysis of potential section 2 liability.¹³⁸

Some commentators and panelists argued that the key goals of trebling—deterrence, punishment of violators, and compensation of victims—apply less forcefully in the section 2 context. With regard to deterrence, to ensure that the expected penalty for violating the antitrust laws exceeds the benefit to the perpetrator, the penalty must be set as a multiple of the actual harm to compensate for the possibility that the violation will not be detected.¹³⁹ However, one panel moderator suggested that because section 2 violations are rarely covert and instead are typically open and known to customers, competitors, and the public, the justification for trebling damages is weaker in most section 2 contexts than with

¹³⁰ 15 U.S.C. § 15(a). There are a limited number of exemptions from this general rule. See, e.g., Export Trading Company Act § 306, 15 U.S.C. § 4016(b)(1) (limiting to single damages claims against export trading companies for conduct undertaken pursuant to certificates of review issued by the Department of Commerce).

¹³¹ 15 U.S.C. § 15(a).

¹³² See, e.g., Edward Cavanagh, *Detrebling Antitrust Damages: An Idea Whose Time Has Come?*, 61 TUL. L. REV. 777, 783 (1987); see also ANTITRUST MODERNIZATION COMM’N, REPORT AND RECOMMENDATIONS 246 (2007), available at http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf.

¹³³ See, e.g., Cavanagh, *supra* note 133, at 803; Frank H. Easterbrook, *Detrebling Antitrust Damages*, 28 J.L. & ECON. 445, 454–55 (1985).

¹³⁴ See May 1 Hr’g Tr., *supra* note 3, at 94 (Jacobson) (noting that “treble damages are there for the principal reason of inducing private enforcement of the antitrust laws”); Cavanagh, *supra* note 133, at 786; Easterbrook, *supra* note 133, at 451–52, 455.

¹³⁵ See, e.g., Douglas H. Ginsburg & Leah Brannon, *Determinants of Private Antitrust Enforcement in the United States*, COMPETITION POL’Y INT’L, Autumn 2005, at 29, 32 & fig. 1.

¹³⁶ See Mar. 28 Hr’g Tr., *supra* note 2, at 108–09 (Fisher).

¹³⁷ See William E. Kovacic, Gen. Counsel, Fed. Trade Comm’n, Private Participation in the Enforcement of Public Competition Laws § III & nn.13–14 (May 15, 2003), available at <http://www.ftc.gov/speeches/other/030514biicl.shtml>.

¹³⁸ May 8 Hr’g Tr., *supra* note 3, at 25 (Creighton).

¹³⁹ See, e.g., Easterbrook, *supra* note 133, at 454–55.

regard to other antitrust violations.¹⁴⁰

Further, private section 2 cases sometimes follow on government investigations into the same conduct. In those cases, a plaintiff bears substantially reduced risk and expense, and treble damages may not be necessary to create incentives to sue.

In addition to deterrence, treble damages have a punitive element. In most civil actions, a defendant is required to pay for damage actually caused, and that amount is not multiplied. Antitrust, in contrast, adds the punitive element of trebling. However, in section 2 cases, determining whether the conduct is anticompetitive or procompetitive often requires a probing analysis.¹⁴¹ For example, in predatory-pricing cases, consumers benefit from deep discounts in the short run; similarly, tying and exclusive-dealing arrangements, which sometimes have anticompetitive impact, can have procompetitive effects as well. Resolving whether these types of business conduct are unlawfully exclusionary in particular contexts usually requires a difficult and fact-intensive inquiry. Punishment through treble damages, some observers conclude, may be inappropriate because it could chill similar conduct that may be procompetitive.¹⁴²

¹⁴⁰ May 1 Hr'g Tr., *supra* note 3, at 91–92 (Carlton) (“[I]t would suggest a different multiple between covert and overt; whether it is one to three is a different question.”). See ANTITRUST MODERNIZATION COMM’N, Separate Statement of Commissioner Carlton, *supra* note 132, at 399 (“I favor a reduction in the multiple to single damages when the actions are overt.”); Richard A. Epstein, Structural Remedies in Section 2 Cases 1 (Mar. 27, 2007) (hearing submission).

¹⁴¹ See Cavanagh, *supra* note 133, at 794. See generally Dennis W. Carlton, *Market Definition: Use and Abuse*, COMPETITION POL’Y INT’L, Spring 2007, at 3, 8 (noting that, in section 2 contexts, “any increase in market power typically has to be weighed against any benefits of the alleged bad act” and “the alleged bad act may have some efficiency justification, but price must typically rise in order to create the incentives to generate the efficiency”).

¹⁴² See, e.g., Cavanagh, *supra* note 4, at 171 (noting that where conduct is not concealed “[c]ritics assert that the consequence of mandatory trebling in these types of cases is to chill the conduct that is procompetitive”); HOVENKAMP, *supra* note 31, at 67. But see Robert H.

Treble damages also may be unnecessary to compensate victims of anticompetitive conduct adequately. As one treatise observes, compensation is generally aided by “liberal proof of damages, other procedural and substantial rules favorable to plaintiffs, and awards of substantial attorney’s fees.”¹⁴³ Accordingly, it notes, “excessive awards only encourage increasingly marginal suits.”¹⁴⁴

These qualms regarding treble damages are by no means universally shared. A number of panelists countered that the length and cost of a typical section 2 case, the general lack of pre-judgment interest, and the promotion of deterrence and private enforcement provide support for trebling damages.¹⁴⁵ For example, a panelist observed that damages may not compensate fully for foregone sales and may not be awarded to all who bear the burden of higher prices.¹⁴⁶ Similarly, one commentator concludes, “[T]he reality is that plaintiffs are unlikely to undertake the arduous task of prosecuting a civil antitrust claim if their recovery is limited to actual damages. Without trebling, therefore, antitrust violators may not be sued and may well be able to reap the benefits of their illegal conduct.”¹⁴⁷

B. Civil Fines

The federal enforcement agencies lack civil-fine authority.¹⁴⁸ Several panelists, however,

Lande, *Are Antitrust “Treble” Damages Really Single Damages?*, 54 OHIO ST. L.J. 115, 172–73 (1993).

¹⁴³ AREEDA & HOVENKAMP, *supra* note 12, ¶ 656c, at 111.

¹⁴⁴ *Id.*

¹⁴⁵ See May 1 Hr’g Tr., *supra* note 3, at 91–92 (Elhauge) (stressing the need to compensate for the cost of bringing successful litigation); *id.* at 92–93 (Willig) (stressing the role of treble damages in enhancing deterrence); *id.* at 93 (McDavid) (stressing the contribution of treble damages as a substitute for pre-judgment interest); *id.* at 94–95 (Jacobson) (concluding that “you do not have private enforcement of antitrust without treble damages”).

¹⁴⁶ See *id.* at 91–92 (Elhauge).

¹⁴⁷ Cavanagh, *supra* note 4, at 172.

¹⁴⁸ Under the Sherman Act, the Department may seek criminal fines of up to \$100 million for violations of either section 1 or section 2. See 15 U.S.C. § 2 (2000). The Department also can proceed under the

suggested that civil fines would be a potentially useful federal-enforcement remedy. Civil fines would be particularly useful, they contended, when a section 2 violation is otherwise difficult or costly to remedy.¹⁴⁹

A remedial scheme under which government agencies have authority to seek civil fines as part of a comprehensive array of remedies may have certain attractive aspects. Coupled with a prohibitory provision, fines may prevent recurrence without resort to more costly and disruptive remedies. Under the current U.S. antitrust remedial scheme, however, private litigation has the potential to impose similar, if not greater, payment obligations than a system of civil fines.¹⁵⁰ In comparison, jurisdictions with civil fine authority tend not to have as robust a system of private monetary remedies as the United States.¹⁵¹ Thus, adding civil fines to existing

private remedies could run the risk of making total available monetary remedies unduly punitive.¹⁵²

Further, the availability of civil fines in the section 2 context could lead to chilling of procompetitive business conduct. At present, defendants in section 2 cases generally face an injunction from government enforcement and treble-damage liability from private enforcement. The possibility of additional substantial fines from governmental enforcement may discourage firms from engaging in conduct that would not violate the antitrust laws, especially without clear, objective standards for defining violations.¹⁵³

Some have raised the issue whether it might be appropriate to reduce the private section 2 remedy to single damages but, at the same time, enable the antitrust enforcement agencies to seek civil fines.¹⁵⁴ The Department believes that further consideration of the appropriate monetary-penalty system for section 2 violations may be useful. Such consideration would need to examine the complicated interplay among various factors, including

“alternative fines” statute, 18 U.S.C. § 3571(d), to seek even greater criminal fines. *See* Antitrust Div., Sherman Act Violations Yielding a Corporate Fine of \$10 Million or More (2008), *available at* <http://www.usdoj.gov/atr/public/criminal/225540.pdf> (reporting fines of as much as \$500 million). The Department has not criminally prosecuted section 2 violations in several decades and seeks criminal fines only for “hard-core” violations of section 1, such as price-fixing and bid-rigging. The government must prove a criminal violation beyond a reasonable doubt, while it must prove a civil violation only by a preponderance of the evidence.

¹⁴⁹ *See, e.g.*, Mar. 28 Hr’g Tr., *supra* note 2, at 84 (Lipsky) (stating that a fine might be a desirable remedy in a predatory-pricing case); *id.* at 140 (Joskow) (same).

¹⁵⁰ *See, e.g.*, Mar. 28 Hr’g Tr., *supra* note 2, at 108 (Fisher); Franklin M. Fisher, *Remedy Issues in Section 2 Cases 2* (Mar. 28, 2007) (hearing submission). For example, the European Union fined Microsoft €497 million (approximately \$610 million at the time) in connection with Microsoft’s alleged anticompetitive conduct relating to its Windows software. In comparison, Microsoft entered into several settlements – with IBM, AOL, and Sun, among others – which, in combination, vastly exceeded that amount. *See* May 8 Hr’g Tr., *supra* note 3, at 151 (Rule) (Microsoft’s settlement payments may exceed \$10 billion); Mar. 29 Hr’g Tr., *supra* note 3, at 104 (Page) (citing reports that Microsoft consents totaled close to \$9 billion).

¹⁵¹ In countries belonging to the Organisation for Economic Co-Operation and Development, monetary sanctions are frequently imposed for abuse of

dominance. Private damages, however, generally are unavailable. Private damages are an “idea that has not quite taken off yet outside of a small number of jurisdictions.” DIRECTORATE FOR FIN. AND ENTER. AFFAIRS COMPETITION COMM., ORG. FOR ECON. COOPERATION AND DEV., *REMEDIES AND SANCTIONS IN ABUSE OF DOMINANCE CASES 45* (2007), *available at* <http://www.oecd.org/dataoecd/20/17/38623413.pdf>.

¹⁵² *See* Mar. 28 Hr’g Tr., *supra* note 2, at 108 (Fisher) (loss of treble-damages suit likely to result in payment greater than disgorgement of monopoly profits).

¹⁵³ Additionally, to the extent such fines were applicable for antitrust violations generally, they might tend to blur the clear demarcation between civil and criminal antitrust enforcement. The Department has spent decades establishing a clear demarcation between civil and criminal antitrust violations. This effort has been crucial to the successful efforts to increase criminal antitrust penalties appropriately and dramatically.

¹⁵⁴ *See, e.g.*, ANTITRUST MODERNIZATION COMM’N, *supra* note 132, at 287 (“If the Commission had recommended reducing or eliminating treble damages recoveries, or significantly limiting their availability, it might have been appropriate to consider whether civil fine authority should take their place. The Commission has not recommended any change to treble damage recovery, however.”).

adequate deterrence of anticompetitive behavior, chilling procompetitive behavior, the role of private enforcement, the pros and cons of governmental civil-fine authority, and the full compensation of section 2 victims.

the range and level of monetary remedies available in section 2 cases would be useful to determine whether adjustment may be appropriate.

VI. Conclusion

Early and careful consideration of remedies in section 2 cases is vitally important. Designing and implementing appropriate remedies may be at least as challenging as reaching the initial determination of liability, if not more so. Remedies should terminate the defendant's unlawful conduct, prevent its recurrence, and re-establish the opportunity for competition in the market. Engineering a specific market outcome that may favor a given rival or achieve a particular market structure should never be the goal.

Section 2 remedies must carefully balance a number of potentially conflicting considerations. A remedy should be sufficiently specific to allow a defendant to comply with its terms and the court to supervise that compliance, but should also be flexible enough to handle changed circumstances. Duration should be considered carefully. Considerations of efficacy must be evaluated alongside concerns with administrability and the desire to maintain efficiency and innovation.

Because prohibitory remedies are generally the least costly to implement and supervise and also the least disruptive in this context, the Department generally prefers them in section 2 cases when they are sufficient to re-establish the opportunity for competition. In other instances, however, more extensive affirmative-obligation remedies may be needed. Finally, when warranted by the circumstances, the Department may seek divestiture or other structural relief. In each case, the Department will seek to ensure that its chosen remedy preserves and protects competition and does more good than harm.

The availability of monetary remedies for section 2 violations encourages private enforcement efforts and thus supplements injunctive relief by providing deterrence. The Department believes further consideration of

CHAPTER 10

AN INTERNATIONAL PERSPECTIVE

I. Introduction

Over one hundred nations now have antitrust laws, most of which include provisions condemning monopolization or, more commonly, abuse of dominance.¹ Many regard this blossoming of competition regimes as good news, because it shows recognition that markets generally are the best means for economies to allocate their scarce resources. However, the proliferation of antitrust regimes throughout the world—each with its own substantive laws, enforcement priorities, and policy objectives—has raised concerns about procedural and substantive conflicts among jurisdictions and the impact of those conflicts on firms doing business internationally. As one panelist observed,

[T]he growing proliferation of antitrust enforcement around the world, together with the globalization of business[,] creates increasing risk of conflict in the application of antitrust rules to single-firm conduct. These conflicts impose costs on firms and harm consumers and are becoming potential barriers to international trade.²

In opening remarks at the hearings, Assistant Attorney General Thomas O. Barnett observed that single-firm business conduct is “at the forefront of people’s minds as we talk to officials on every continent.”³ Then-FTC

¹ See EINER ELHAUGE & DAMIEN GERADIN, *GLOBAL COMPETITION LAW AND ECONOMICS* 53, 235 (2007).

² Sherman Act Section 2 Joint Hearing: Business Testimony Hr’g Tr. 127–28, Feb. 13, 2007 [hereinafter Feb. 13 Hr’g Tr.] (Heather); *see also* Sherman Act Section 2 Joint Hearing: Business Testimony Hr’g Tr. 26, Jan. 30, 2007 [hereinafter Jan. 30 Hr’g Tr.] (Heiner) (“Increasingly we see foreign agencies stepping up their antitrust enforcement And while that’s of course a useful thing, we may find that some of these agencies have differing interests, differing views as to how the antitrust laws should be applied.”).

³ Sherman Act Section 2 Joint Hearing: Welcome

Chairman Deborah Platt Majoras emphasized that it is “the most heavily discussed and debated area of competition policy in the international arena.”⁴

The proliferation of antitrust regimes throughout the world—each with its own substantive laws, enforcement priorities, and policy objectives—has raised concerns about procedural and substantive conflicts among jurisdictions and the impact of those conflicts on firms doing business internationally, particularly with regard to single-firm conduct.

This chapter addresses policy issues arising from the proliferation of diverse antitrust regimes around the world with respect to monopolization and abusive conduct by dominant firms. Part II considers various policy concerns that have arisen as a result of the diversity in approaches to single-firm conduct. Part III describes efforts to promote international convergence and cooperation, including the adoption of recommended practices for the assessment of substantial market power and dominance at the 2008 meeting of the International Competition Network (ICN) in Kyoto, Japan. Part IV describes a number of initiatives the Department will explore to address the policy concerns identified at the hearings.

II. Concerns Raised by the Diversity in Approaches to Single-Firm Conduct

Virtually all antitrust laws contain provisions that address unilateral conduct by firms holding substantial market power. Although

and Overview Hr’g Tr. 24, June 20, 2006 [hereinafter June 20 Hr’g Tr.] (Barnett).

⁴ *Id.* at 10 (Majoras).

the terminology differs, the general requirements in most cases are similar: (1) the firm must have sufficient market power, and (2) the firm must have engaged in conduct that is “abusive,” “anticompetitive,” or “exclusionary.”⁵ Like the United States, most jurisdictions do not regard monopoly in and of itself to be unlawful; rather, there must also be some anticompetitive conduct.⁶ Significant differences exist between the United States and other jurisdictions, however, as to how much market power is required,⁷ what types of conduct are considered anticompetitive, the analytical frameworks used to determine if there is a violation, and enforcement policies.⁸ Jurisdictions also have different institutional frameworks for enforcing their antitrust laws.

The diversity of substantive laws and enforcement objectives pursued by competition regimes in different jurisdictions raises important policy concerns regarding single-firm conduct. Individual jurisdictions, of course, should strive to make their own laws and enforcement policies clear and transparent.

Beyond this, there is a recognized need both to reduce conflicts in the way laws governing single-firm conduct are applied globally and to ensure that one jurisdiction’s remedies do not have undue, adverse spillover repercussions elsewhere.

The basic problem is that antitrust laws are national (or regional) but markets are increasingly global. As one panelist observed,

We live and work in an era characterized by increasingly globalized markets and increasing concentration levels [in] many sectors. Ensuring the “right” approach to assessing allegations of abuse [of] dominance in this context is critical. . . . [I]t also poses a challenge to competition agencies attempting to apply domestic antitrust laws to business markets that are global and business practices which are globalizing.⁹

The basic problem is that antitrust laws are national (or regional) but markets are increasingly global.

While there has been notable success in achieving international convergence in cartel and merger-enforcement policies,¹⁰ the same is less true of single-firm conduct policies. Panelists voiced a number of interrelated concerns, which are discussed below.

⁵ ELHAUGE & GERADIN, *supra* note 1, at 235.

⁶ UNILATERAL CONDUCT WORKING GROUP, INT’L COMPETITION NETWORK, DOMINANCE/SUBSTANTIAL MARKET POWER ANALYSIS PURSUANT TO UNILATERAL CONDUCT LAWS 1 (2007), available at http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/Unilateral_WG_1.pdf [hereinafter 2007 ICN REPORT] (“All jurisdictions agree that unilateral conduct laws address specific conduct and its anticompetitive effects, rather than the mere possession of dominance/substantial market power or its creation through competition on the merits.”).

⁷ See Feb. 13 Hr’g Tr., *supra* note 2, at 57–58 (Stern) (noting that foreign competition authorities generally have set the presumption of dominance at thirty-three to fifty percent, below “essentially the U.S. safe harbor”). See generally James F. Rill, Prepared Remarks of James F. Rill 7–11 (Sept. 12, 2006) (hearing submission) (discussing different national standards for defining dominance and the variance in the market-share thresholds that suggest dominance and noting the differences in the evidentiary weight accorded to market-share data in different jurisdictions).

⁸ See Brian A. Facey & Dany H. Assaf, *Monopolization and Abuse of Dominance in Canada, the United States, and the European Union: A Survey*, 70 ANTITRUST L.J. 513, 523–29 (2002).

⁹ George N. Addy, Speaking Notes 1–2 (Sept. 12, 2006) (hearing submission); see also Sherman Act Section 2 Joint Hearing: International Issues Hr’g Tr. 119, Sept. 12, 2006 [hereinafter Sept. 12 Hr’g Tr.] (Lugard) (stating that “the need for convergence in this specific area [unilateral conduct] is most pressing, because different and inaccurate standards for exclusionary conduct involving firms with significant market power . . . are most likely to defeat procompetitive conduct . . . that ultimately benefits consumers”).

¹⁰ See Sherman Act Section 2 Joint Hearing: Conduct as Related to Competition Hr’g Tr. 138, May 8, 2007 [hereinafter May 8 Hr’g Tr.] (Rill); R. Hewitt Pate, Assistant Attorney Gen., U.S. Dep’t of Justice, Antitrust in a Transatlantic Context—From the Cicada’s Perspective (June 7, 2004), available at <http://www.usdoj.gov/atr/public/speeches/203973.pdf>.

A. Concerns About Uncertainty, Chilling Procompetitive Conduct, and Forum Shopping

As discussed in chapter 1, single-firm conduct presents especially challenging analytical issues because it is often difficult to distinguish between aggressive competition that should be encouraged and competitively harmful conduct that should be condemned. Thus, even within any given jurisdiction, it may be difficult for firms to determine what conduct is forbidden, and to fashion their conduct accordingly. At the same time, in light of the potentially significant remedies, when a firm “gets it wrong,” the consequences may be severe.

This uncertainty is multiplied when a firm does business throughout the world and must take into account the laws and enforcement policies of numerous jurisdictions. As one panelist observed, “[T]he different approaches of the different antitrust agencies across the world provide a daunting task to the ability of multinational firms, firms practicing and doing business, operating in more than one jurisdiction, to plan business strategies with any confidence that they will avoid antitrust challenge.”¹¹ He further observed that “[t]here has not been nearly the progress towards certainty, transparency, much less convergence, in the area of single-firm conduct as in, for example . . . the case of horizontal mergers.”¹² In his view, there is a “crying need . . . for transparency, at a minimum certainty, and at least some mechanisms for the ability of agencies to achieve, in time, convergence in

single-firm . . . conduct across borders.”¹³ Another panelist similarly emphasized the high costs of attempting to comply with rules that are often unclear and vary significantly from jurisdiction to jurisdiction.¹⁴

A number of panelists emphasized that the problem of uncertainty is far more serious in many other jurisdictions than it is in the United States.¹⁵ It is critical that enforcement agencies from all jurisdictions ensure that their own laws and enforcement policies with regard to single-firm conduct are as clear and transparent as possible.¹⁶

¹³ *Id.* at 127–28 (Rill).

¹⁴ See Feb. 13 Hr’g Tr., *supra* note 2, at 209–10 (Sewell) (“Intel expends an enormous amount of resources, legal resources, trying to figure out where these lines are and trying to make sure that we . . . can defend everything that we do if challenged.”); *id.* at 215 (“[T]he disharmony and the lack of convergence represent[] a substantial and significant cost for us, and that cost could be alleviated or at least substantially reduced if we had greater consistency among the various laws.”).

¹⁵ See, e.g., Sherman Act Section 2 Joint Hearing: Section 2 Policy Issues Hr’g Tr. 24–25, May 1, 2007 [hereinafter May 1 Hr’g Tr.] (Calkins) (contrasting United States with “the very, very different standards in other parts of the world, where agencies care about firms that have market shares that are somewhere below 50 percent”); Feb. 13 Hr’g Tr., *supra* note 2, at 52–53 (Stern) (counseling in United States is relatively easy compared to some other jurisdictions with lower dominance thresholds and the concept of collective dominance); *id.* at 57–60; *id.* at 83 (Sheller) (“[W]e don’t seem to have too much difficulty identifying the market monopoly power threshold, in the U.S. anyways. That becomes more of a challenge when we counsel clients outside the U.S.”); Jan. 30 Hr’g Tr., *supra* note 2, at 38 (Heiner) (“[F]or everything I’ve said about predictability, U.S. law is more predictable than European law and the law of other countries with their emerging antitrust regimes.”).

¹⁶ See, e.g., Feb. 13 Hr’g Tr., *supra* note 2, at 47 (Stern) (“Now increasingly, as the economy globalizes, it’s not sufficient that the U.S. rules are clear. The rules adopted by other jurisdictions will of course affect U.S. commerce.”); Sept. 12 Hr’g Tr., *supra* note 9, at 120 (Lugard) (“[T]here is an urgent need for the two key jurisdictions, the EC and U.S., to align their approach towards unilateral firm behavior. But I believe that there is an even clearer and more urgent need to first develop a coherent and clear framework [for] analysis in both of the home jurisdictions.”).

¹¹ Sept. 12 Hr’g Tr., *supra* note 9, at 126–27 (Rill); see also Jan. 30 Hr’g Tr., *supra* note 2, at 25–27 (Heiner) (describing difficulties in making product-design decisions, taking into account views of different enforcers applying different legal standards); *id.* at 95 (Hartogs) (noting, in particular, uncertainties in connection with bundled and loyalty discounts, where “you lack clarity here, you lack clarity in Europe”); Sept. 12 Hr’g Tr., *supra* note 9, at 10 (Lowe) (“The application of Article 82 was . . . widely criticized as being fragmented without guiding principles and for applying in some instances general form-based criteria whose meaning was not always clear . . .”).

¹² Sept. 12 Hr’g Tr., *supra* note 9, at 128 (Rill).

It is critical that enforcement agencies from all jurisdictions ensure that their own laws and enforcement policies with regard to single-firm conduct are as clear and transparent as possible.

Panelists expressed concern about how multiple layers of enforcement may chill procompetitive conduct. As one panelist from Canada observed, “The risk of chill is real and the economic costs associated with the inappropriate or inadvertent chilling of legitimately competitive conduct is, in my view, significant although I acknowledge it’s very, very difficult to measure.”¹⁷ He continued:

The unwanted chill not only affects parties who may be the target of some proceedings, but extends far beyond those individual firms to other observers of market behaviour, including other market participants or participants in different markets. They not only see the outcome of the proceeding at issue but they also observe the costs, uncertainty and disruption associated with lengthy and protracted litigation dealing with those issues.¹⁸

At the same time, concern about differing international antitrust standards chilling procompetitive behavior must be balanced by potential gains for consumers that would come from the interaction among different enforcers with different standards. One of the business panelists expressed the view that “in a world that is changing rapidly and globalizing, it’s very . . . appropriate to step back and take . . . a fresh look at the policy objectives that underlie antitrust law and policy and enforcement,” and “it is likewise appropriate that that be a global debate.”¹⁹ Thus, in his view, while “the issue of harmonization across . . . borders . . . [is] very

important,”²⁰ “intellectual competition” among competition agencies is healthy rather than cause for serious concern.²¹

Nevertheless, an oft-repeated particular concern is that legal advisors to firms doing business globally may base their advice on the “lowest common denominator,” that is, the rules of the most restrictive jurisdiction. Several panelists suggested that this may be so. One panelist explained, “We find ourselves trying to determine what is the most restrictive set of rules under which we should do our analysis and guide our conduct.”²² Another panelist concurred: “It’s very much a global business. . . . And so we do find ourselves kind of looking to what’s the most restrictive set of rules. And that’s what we have to adhere to.”²³ Yet another observed, “[T]here’s a definite threat of a chill, the least common denominator approach in business counseling that can discourage procompetitive business activity and adversely affect consumer welfare.”²⁴

²⁰ *Id.* at 193.

²¹ *Id.* at 194.

²² *Id.* at 93 (Hartogs).

²³ *Id.* at 94–95 (Heiner); *see also* Feb. 13 Hr’g Tr., *supra* note 2, at 85–86 (Sheller) (describing mix of decentralized and centralized advice at Kodak depending on the localized or global nature of the business); *id.* at 86–90 (Stern) (noting that at GE “[t]here are a number of businesses we’re in that are truly global businesses where you really need to counsel on a global basis rather than individualize”); *id.* at 90–91 (Sheller) (noting that “assuming that we can give the green light from a U.S. antitrust perspective, then the next step would . . . be to look at whether there are nuances under European law that might create a problem”); *id.* at 129 (Heather) (noting that “the impact of competition decisions by any given enforcement agency . . . [is] forcing firms to conform their behavior to the most restrictive enforcement policies”); *id.* at 213 (Sewell) (describing how Intel approaches antitrust compliance taking into account different laws of multiple jurisdictions); Sept. 12 Hr’g Tr., *supra* note 9, at 148–49 (Lugard) (stating that decentralization, while possible in many cases, is likely to be costly and sub-optimal).

²⁴ Sept. 12 Hr’g Tr., *supra* note 9, at 127 (Rill). *But cf.* *id.* at 149 (Addy) (“[T]he notion that there’s a huge impediment to business there, I’m not convinced yet,” except for intellectual property.).

¹⁷ Addy, *supra* note 9, at 5; *see also* Sept. 12 Hr’g Tr., *supra* note 9, at 111 (Bloom) (“[T]he U.S. is right to be duly nervous about false positives. I think in Europe we’re a bit too ready to intervene too often.”).

¹⁸ Addy, *supra* note 9, at 6.

¹⁹ Jan. 30 Hr’g Tr., *supra* note 2, at 179 (McCoy).

One concern is that legal advisors to firms doing business globally may base their advice on the “lowest common denominator,” that is, the rules of the most restrictive jurisdiction.

The problem may be most acute in high-technology areas involving product design and intellectual property.²⁵ Product-design decisions, for example, may be based not on optimal functionality, but rather on antitrust advice keyed to the requirements of the most restrictive antitrust regimes. This can impede innovation, lead to substantially higher research and development costs, and risk chilling procompetitive, pro-consumer conduct.²⁶

Panelists also expressed concern about forum shopping. One panelist observed, “[T]here’s a real tendency . . . for competitors who are hurt by efficiency and procompetitive conduct to engage in forum shopping”²⁷ — “trying to game the system, to do forum shopping, to take a number of whacks at the piñata, to try

and play on divergence to find an agency somewhere that will accept their complaint.”²⁸ Another panelist echoed this concern, observing that “[i]ncreasingly we see foreign agencies stepping up their antitrust enforcement [S]ome of these agencies have differing interests, differing views as to how the antitrust laws ought to be applied. . . . With the stepped up enforcement, we have the prospect of forum shopping. And that clearly is going on.”²⁹ Another noted that “the proliferation of competition regimes around the world has also driven an increase not only in knowledge of the law but also an increased understanding of possible strategic use of those laws. Parties threaten to initiate antitrust complaint mechanisms to extract commercial concessions.”³⁰

“[T]here’s a real tendency . . . for competitors who are hurt by efficiency and procompetitive conduct to engage in forum shopping.”

Another panelist observed that the problem is not so much one of forum shopping for the jurisdiction with the lowest enforcement standard but rather the potential for multiple reviews by different agencies: “Multiple reviews ensure that we are going to have a bias in the system in favor of false positives because the second review can cure a false negative but there is nothing that can cure a false positive.”³¹

B. Concern About Conflicting Remedies and Spillover Effects

Other panelists expressed concern about the prospect of inconsistent remedies being imposed upon firms doing business globally.³²

²⁵ See, e.g., Feb. 13 Hr’g Tr., *supra* note 2, at 126 (Heather) (“It is important to remember that new products and new business practices are developed well ahead of their actual introduction and ahead of any scrutiny by antitrust regulators. Firms do want to obey the rules of the road, but discerning and applying those rules is becoming increasingly difficult.”); Jan. 30 Hr’g Tr., *supra* note 2, at 30–31 (Heiner) (“[I]t’s often quite difficult to undo a design decision.”); Sept. 12 Hr’g Tr., *supra* note 9, at 139 (Lugard) (“There is a real chill factor in particular in high technology markets.”); *id.* at 150–51 (Bloom) (“[I]f you are talking about discounts, then it would be possible to have a different discount structure in different jurisdictions. . . . But for IP or the criteria of products, it may well not be possible to differentiate between jurisdictions.”); *id.* at 160 (Addy) (noting problem of enforcement agencies second-guessing business decisions made years earlier).

²⁶ See, e.g., May 1 Hr’g Tr., *supra* note 15, at 152 (Elhaug) (discussing why there is more reason to be worried about false positives in global markets); Feb. 13 Hr’g Tr., *supra* note 2, at 90 (Stern) (“[T]he concern that I was trying to express about the need to address this globally is that U.S. legal clarity at least in a number of areas, could be overridden by a lack of clarity or by overly restrictive rules outside the U.S. and the harm could come to U.S. consumers as well as those in other areas.”); Jan. 30 Hr’g Tr., *supra* note 2, at 35–36 (Heiner).

²⁷ Sept. 12 Hr’g Tr., *supra* note 9, at 127 (Rill).

²⁸ *Id.* at 145.

²⁹ Jan. 30 Hr’g Tr., *supra* note 2, at 26–27 (Heiner).

³⁰ Addy, *supra* note 9, at 5.

³¹ May 8 Hr’g Tr., *supra* note 10, at 143 (Melamed).

³² See, e.g., *id.* at 144 (Muris) (contrasting mergers, where “you can have multiple reviews and it is basically okay because you can sell off parts,” with “the dominance area, [where] the most aggressive remedy tends to dominate”); Feb. 13 Hr’g Tr., *supra* note 2, at 130 (Heather) (noting “the growing potential for conflict and the costs and burdens associated with it”

Even when remedies are not actually in conflict, there can be spillover effects to consider. Although some remedies, such as most fines, may have less direct impact outside the jurisdiction in which they are imposed, other remedies, such as mandatory sharing or licensing of intellectual property, may have global repercussions.³³

Although some remedies, such as most fines, may have relatively little impact outside the jurisdiction in which they are imposed, other remedies, such as mandatory sharing or licensing of intellectual property, may have global repercussions.

One panelist cautioned, “I think we need to pay close attention to the whole issue of compulsory access to intellectual property, because that is the area in which decision-making by one competition authority can have the greatest spillover effects on other economies.”³⁴ Another observed,

When you think about intellectual property, if you have as enforcement and remedy a disclosure of intellectual property, you can’t contain that [disclosure] within a geographical jurisdiction of France or the

and observing that “Microsoft has been subject to three different sets of remedies in three different jurisdictions for what is essentially similar conduct”); Jan. 30 Hr’g Tr., *supra* note 2, at 35 (Heiner) (stating that European Union (EU) relief “will prevail” over U.S. relief in Microsoft because EU relief is “more restrictive”); Sept. 12 Hr’g Tr., *supra* note 9, at 166 (Bloom) (noting that there may be situations where “one jurisdiction requires something of a company which then conflicts with a remedy that’s required in another jurisdiction”).

³³ See, e.g., Feb. 13 Hr’g Tr., *supra* note 2, at 38 (Sheller) (observing that “obstacles to [Kodak’s] ability to monetize our intellectual property investments exists in the form of cases . . . where the [European] Commission required compulsory licensing by intellectual property owners”); Jan. 30 Hr’g Tr., *supra* note 2, at 35 (Heiner) (compulsory licensing creates “a greater uncertainty as to whether the IP can be properly monetized”); Sept. 12 Hr’g Tr., *supra* note 9, at 136–37 (Addy) (noting that intellectual property represents a “big, big problem”).

³⁴ May 1 Hr’g Tr., *supra* note 15, at 18 (Kolasky).

EU. Once . . . the proverbial cat’s out of the bag, it spreads quickly across the rest of the known world.³⁵

III. The Way Forward: Efforts to Encourage Convergence and Cooperation in the Area of Single-Firm Conduct

Multi-jurisdictional enforcement of antitrust laws poses considerable challenges. Today’s challenges are an outgrowth of several factors. First, many firms increasingly do business globally. Second, the world has largely adopted the long-held U.S. position basing jurisdiction on effects rather than on the situs of the conduct, which means that conduct with effects in multiple jurisdictions can be challenged in multiple jurisdictions. Third, there has been a proliferation of antitrust regimes throughout the world, which, as they become more established and more fully staffed, are better able to challenge conduct they find objectionable.

These forces will endure, and the Department recognizes that there are no easy solutions for the challenges they present. Yet, steps can be taken to manage these challenges effectively. In recent years, there have been a variety of policy proposals to encourage more consistency in antitrust laws and enforcement across jurisdictions.

Probably the most radical solution, recommended by a limited number of commentators, is an international competition regime with authority to enforce uniform competition rules.³⁶ Some have suggested that an international organization, such as the World Trade Organization, could assume this role.³⁷ However, others view any kind of

³⁵ Feb. 13 Hr’g Tr., *supra* note 2, at 194 (Heather).

³⁶ See, e.g., Andrew T. Guzman, *Antitrust and International Regulatory Federalism*, 76 N.Y.U. L. REV. 1142, 1142–43 (2001).

³⁷ See generally Frederic Jenny, *Globalization, Competition and Trade Policy: Convergence, Divergence and Cooperation*, in INTERNATIONAL AND COMPARATIVE COMPETITION LAW AND POLICIES 31, 56–67 (Yang-Ching Chao et al. eds., 2001) (discussing the pros and cons of establishing a multilateral framework for competition consistent with WTO principles of transparency and

international regime as unrealistic and undesirable and instead urge "soft harmonization" policies, seeking voluntary convergence in substantive laws and cooperation between enforcement agencies to reduce the costs and burdens of enforcement both to businesses and competition agencies.³⁸

In accordance with the recommendations contained in the 2000 International Competition Policy Advocacy Commission Report, the Department has supported the latter policy.³⁹ The Department's primary initiatives are focused on (1) bilateral cooperation with competition agencies abroad, (2) active participation in multilateral fora, and (3)

non-discrimination).

³⁸ See, e.g., Kerrin M. Vautier, *International Approaches to Competition Laws: Government Cooperation for Business Competition*, in INTERNATIONAL AND COMPARATIVE COMPETITION LAWS AND POLICIES 187, 188 (Yang-Ching Chao et al. eds., 2001) (concluding that "there is little, if any, prospect of a single workable approach to transnational competition issues, let alone prospect of multilateral competition rules and supranational enforcement"); Diane P. Wood, *Cooperation and Convergence in International Antitrust: Why the Light Is Still Yellow*, in COMPETITION LAWS IN CONFLICT 177, 179 (Richard A. Epstein & Michael S. Greve eds., 2004) (suggesting a "need to exercise caution before we take the leap into a formal international antitrust regime" and asserting that "there's a better way forward, which involves education, consensus building in a voluntary environment, and targeted cooperation with like-minded countries"); *id.* at 186.

³⁹ See INT'L COMPETITION POLICY ADVISORY COMM'N, FINAL REPORT 26 (2000), available at <http://www.usdoj.gov/atr/icpac/finalreport.htm> (concluding that "efforts at developing a harmonized and comprehensive multilateral antitrust code administered by a new supranational competition authority or the WTO [are] both unrealistic and unwise" and recommending instead efforts to promote soft convergence); *id.* at 35 (recommending that the Department work toward increased transparency and accountability of government actions; expanded and deeper cooperation between U.S. and foreign competition enforcement agencies; and greater soft harmonization and convergence of systems); see also Vautier, *supra* note 38, at 199 (noting that "the U.S. . . . resists a multilateral approach to competition law" and instead "favors bilateral cooperation agreements, these being an integral feature of U.S. strategy for internationalizing antitrust").

provision of technical assistance to new competition regimes.

A. Bilateral Cooperation

The federal antitrust enforcement agencies and foreign competition agencies have developed an extensive network of cooperative relationships, some of which are based on bilateral cooperation agreements. The United States currently has formal bilateral cooperation agreements with eight jurisdictions: Germany (1976); Australia (1982); the European Communities (1991); Canada (1995); Brazil, Israel, and Japan (1999); and Mexico (2000).⁴⁰ Although these agreements are not identical, they generally require the signatories to notify one another about antitrust enforcement activities that affect the other's interests, to cooperate and coordinate with one another in investigations, and to consult with one another about matters that arise under the agreements. All the agreements contain traditional comity provisions, and most, including those with the EU, contain positive-comity provisions as well.⁴¹ The federal antitrust enforcement agencies also cooperate extensively with other competition agencies under the Organisation for Economic Co-Operation and Development (OECD) recommendation on antitrust cooperation⁴² and

⁴⁰ See generally 2 SECTION OF ANTITRUST LAW, AM. BAR ASS'N, ANTITRUST LAW DEVELOPMENTS 1261-63 (6th ed. 2007) (discussing bilateral cooperation agreements); U.S. Dep't of Justice, Antitrust Cooperation Agreements, http://www.usdoj.gov/atr/public/international/int_arrangements.htm (compiling these agreements).

⁴¹ Traditional (or negative) comity requires an enforcement agency in country A, when enforcing its law, also to take into account important interests of country B. Positive comity allows one country's enforcement agency to request another country's agency to initiate an enforcement action within its jurisdiction when the conduct at issue harms the requesting country and would be illegal in the requested jurisdiction.

⁴² ORGANISATION FOR ECON. CO-OPERATION & DEV., REVISED RECOMMENDATION OF THE COUNCIL CONCERNING CO-OPERATION BETWEEN MEMBER COUNTRIES ON ANTICOMPETITIVE PRACTICES AFFECTING INTERNATIONAL TRADE (1995), available at

with still other agencies through informal arrangements.

Pursuant to these agreements, and even without an agreement, antitrust agencies cooperate both on individual cases and on general competition policy issues. This cooperation may include sharing appropriate information to facilitate investigations. In some enforcement areas, such as mergers, the parties also routinely waive restrictions on the sharing of their confidential information to facilitate cross-agency cooperation.⁴³ Waivers have been valuable to the Department and also can benefit the parties by reducing document production burdens and helping to reduce inconsistent outcomes and incompatible remedies. Such waivers, however, are not as common in cases involving single-firm conduct.⁴⁴

Additionally, the Department works with its counterparts abroad to promote policy convergence on broader competition issues. For example, Department officials attended the European Commission's hearings on the Directorate General for Competition (DG-Comp) Discussion Paper on the Application of Article 82 of the Treaty to Exclusionary Abuses,⁴⁵ in addition to engaging in informal discussions with the EC about the Discussion Paper. Similarly, the Director-General of DG-Comp, Philip Lowe, testified at the hearing on international issues, along with Hideo Nakajima, then-Deputy Secretary General of the Japan Fair Trade Commission, Eduardo Pérez Motta, Chairman of Mexico's Federal Commission on Competition, and Sheridan Scott, Commissioner of Competition from Canada's Competition Bureau.⁴⁶ Additionally,

<http://www.oecd.org/dataoecd/60/42/21570317.pdf>. The OECD's Competition Committee has long served as an important consultative body for countries with competition regimes as well as a source of technical assistance to jurisdictions enacting new antitrust laws.

⁴³ See INT'L COMPETITION NETWORK, WAIVERS OF CONFIDENTIALITY IN MERGER INVESTIGATIONS (n.d.), available at <http://www.internationalcompetitionnetwork.org/media/archive0611/NPWaiversFinal.pdf>.

⁴⁴ See *infra* Part IV.

⁴⁵ See June 20 Hr'g Tr., *supra* note 3, at 10–11 (Majoras).

⁴⁶ See Sept. 12 Hr'g Tr., *supra* note 9, at 8–23 (Lowe);

the U.S., Mexican, and Canadian agencies have formed informal working groups to discuss issues involving intellectual property and single-firm conduct. Although such initiatives cannot guarantee that competition agencies in different jurisdictions will reach consistent decisions in individual cases,⁴⁷ they have been important in fostering increased understanding of the issues and in facilitating constructive dialogue among regimes with somewhat different approaches.

The Department and the FTC also have devoted substantial resources to working with China on its Antimonopoly Law, which became effective on August 1, 2008. Officials of both agencies frequently have shared their experience with officials in China involved in developing the law, with the objective of creating a legal framework consistent with sound competition principles, and have conducted training workshops. The Department expects to continue consulting with the Chinese authorities and to provide additional technical assistance as China implements its new law.

B. Participation in International Organizations

The Department and the FTC also actively participate in international organizations that have facilitated dialogue and sponsored programs on competition issues. Two international organizations—the ICN⁴⁸ and the

id. at 24–38 (Nakajima); *id.* at 39–49 (Pérez Motta); *id.* at 50–66 (Scott).

⁴⁷ See Feb. 13 Hr'g Tr., *supra* note 2, at 139 (Heather) (“While existing bilateral agreements and the existing application of comity principles have certainly been useful, they have limitations, as illustrated by the inconsistent remedies imposed by the U.S., E.U., and enforcement authorities in the Microsoft matter.”).

⁴⁸ The ICN was launched in 2001 by the Department, the FTC, and fourteen other antitrust enforcement agencies. Its membership now includes virtually all competition enforcement agencies around the world. Open only to competition agencies, the ICN exists as a virtual network of enforcers; it has no permanent staff and operates through working groups comprising government enforcement officials as well as advisors from academia, the legal community, and business groups. The ICN seeks to promote greater substantive and procedural convergence among

OECD⁴⁹ – have played an especially pivotal role in fostering cross-border understanding and cooperation among competition regimes throughout the world in the area of single-firm conduct. The Department and the FTC have actively supported, and taken lead roles in, both of these organizations.⁵⁰

The Department and the FTC have actively supported, and taken a leading role in, multilateral organizations, such as the ICN and the OECD.

In 2006, the ICN established a Unilateral Conduct Working Group (UCWG) to promote convergence and sound enforcement of laws governing single-firm conduct. In its first two years, the working group has tackled difficult issues and made significant progress. The group's work on a set of recommended practices for the assessment of substantial market power and dominance under unilateral-conduct laws particularly stands out. These

antitrust authorities around the world toward sound competition policies and to provide support for new antitrust agencies both in enforcing their laws and in building strong competition cultures. The ICN has had considerable success in fostering multi-jurisdictional cooperation and convergence on both substance and procedure.

⁴⁹ The OECD has promoted convergence both in substantive analysis and competition policy by issuing reports, sponsoring roundtable discussions, and providing a forum where enforcers can meet and discuss competition issues. It has also published non-binding recommendations, including one that provided a basis for the bilateral cooperation agreements. See *supra* Part III(A).

⁵⁰ The Department co-chairs the ICN's Merger Working Group and co-chairs a sub-group of the Cartel Working Group; the FTC co-chairs the ICN's working group on unilateral conduct and chairs the Merger Working Group's subgroup on notification and procedures. Over the years, Assistant Attorneys General have often been elected by OECD members to chair the OECD Competition Committee's Working Party No. 3 on Enforcement and Cooperation; Assistant Attorney General Thomas O. Barnett currently chairs the Working Party. Senior officials of both agencies participate actively in these organizations and in their activities devoted to single-firm conduct issues. See, e.g., June 20 Hr'g Tr., *supra* note 3, at 11 (Majoras).

recommended practices, which were adopted by all ICN members at the ICN's annual conference in Kyoto, Japan, in April 2008, represent significant convergence on important points regarding the assessment of substantial market power and dominance and also will serve as a helpful guide to new competition agencies as they formulate their policies in this area. Specifically, the recommended practices are:

1. Agencies should use a sound analytical framework firmly grounded in economic principles in determining whether dominance/substantial market power exists.
2. A firm should not be found to possess dominance or substantial market power without a comprehensive consideration of factors affecting competitive conditions in the market under investigation.
3. Market shares of the firm under investigation and its existing competitors, including their development during the past years, should be used as an indication or starting point for the dominance/substantial market power analysis.
4. Agencies should give careful consideration to the calculation of market shares.
5. It can be beneficial to use market-share based thresholds as a safe harbor.
6. It can be beneficial to use market-share based thresholds as an indicator of dominance/substantial market power.
7. The assessment of durability of market power, with a focus on barriers to entry or expansion, should be an integral part of the analysis of dominance/substantial market power.
8. As appropriate in the specific circumstances of a particular case, agencies should use further criteria to analyze dominance/substantial market power.
9. The analytical framework used to assess market power is the same in small and/or isolated economies, but market factors may result in more limited

competition.

10. Agencies should seek to make their dominance/substantial market power assessments transparent, subject to the appropriate protection of confidential information.⁵¹

In addition to the recommended practices on dominance or substantial market power, the UCWG issued recommended practices on the application of unilateral-conduct rules to state-created monopolies⁵² and has released a series of reports on member agencies' laws, policies, and enforcement practices in various areas of single-firm conduct.⁵³ These reports, which are based on questionnaire responses submitted by members and non-governmental advisors, address the following topics: (1) the objectives of unilateral-conduct laws,⁵⁴ (2) the assessment

of dominance and substantial market power, (3) state-created monopolies, (4) predatory pricing, and (5) exclusive dealing.⁵⁵

The UCWG plans to study members' approaches to tying, bundling, and single-product loyalty rebates during the upcoming year, and it will host a unilateral-conduct workshop in Washington, DC, on March 23–24, 2009.

The OECD Competition Committee also has focused on issues relating to single-firm conduct. It has sponsored a series of roundtables on abuse of dominance. Its efforts have culminated in reports on predatory foreclosure, competition on the merits, barriers to entry, remedies and sanctions, unilateral refusals to deal, and bundled and loyalty discounts.⁵⁶ These reports have played an

⁵¹ 2007 ICN REPORT, *supra* note 6, at 2–7.

⁵² UNILATERAL CONDUCT WORKING GROUP, INT'L COMPETITION NETWORK, STATE-CREATED MONOPOLIES ANALYSIS PURSUANT TO UNILATERAL CONDUCT LAWS: RECOMMENDED PRACTICES (n.d.), *available at* http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/Unilateral_WG_2.pdf.

⁵³ UNILATERAL CONDUCT WORKING GROUP, INT'L COMPETITION NETWORK, REPORT ON THE OBJECTIVES OF UNILATERAL CONDUCT LAWS, ASSESSMENT OF DOMINANCE/SUBSTANTIAL MARKET POWER, AND STATE-CREATED MONOPOLIES (2007), *available at* http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/Objectives%20of%20Unilateral%20Conduct%20May%202007.pdf [hereinafter ICN REPORT ON MARKET POWER AND STATE-CREATED MONOPOLIES]; UNILATERAL CONDUCT WORKING GROUP, INT'L COMPETITION NETWORK, REPORT ON PREDATORY PRICING (2008), *available at* http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/FINALPredatoryPricingPDF.pdf [hereinafter ICN REPORT ON PREDATORY PRICING]; UNILATERAL CONDUCT WORKING GROUP, INT'L COMPETITION NETWORK, REPORT ON SINGLE BRANDING/EXCLUSIVE DEALING (2008), *available at* http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/Unilateral_WG_4.pdf [hereinafter ICN REPORT ON SINGLE BRANDING/EXCLUSIVE DEALING].

⁵⁴ An ICN report noted that the majority of respondents identified consumer welfare, efficiency, and ensuring an effective competitive process as objectives of unilateral-conduct rules. *See* ICN REPORT ON MARKET POWER AND STATE-CREATED MONOPOLIES,

supra note 53, at 38. However, unlike the United States, where these are the only goals, certain respondents identified additional goals, including, for example, promoting fairness and equality within markets and ensuring a level playing field for small and medium-sized enterprises. *See id.* at 17–18. Interestingly, there appeared to be no support for the proposition that promoting industrial-policy goals is an appropriate objective. *See id.* at 31.

⁵⁵ The information on substantial market power and dominance assessment and state-created monopolies in an ICN report formed the basis for the 2008 recommended practices. The report on predatory pricing confirmed that, when analyzing possible predatory-pricing conduct, virtually all agencies require that prices be below cost for there to be a violation. The report also showed that agencies take into account some or all of the following factors: (1) recoupment of losses, (2) competitive effects such as foreclosure or consumer harm, (3) predatory intent, and (4) justifications or defenses that offer pro-competitive rationales for the conduct. *See* ICN REPORT ON PREDATORY PRICING, *supra* note 53, at 3. The exclusive-dealing report identified four factors that agencies generally consider in evaluating exclusive dealing under single-firm conduct rules: (1) the existence of an exclusive-dealing arrangement, (2) the existence of substantial market power or dominance, (3) competitive effects, and (4) procompetitive justifications or defenses. *See* ICN REPORT ON SINGLE BRANDING/EXCLUSIVE DEALING, *supra* note 53, at 3.

⁵⁶ *See* Organisation for Economic Co-Operation & Dev., Best Practice Roundtables on Competition Policy, http://www.oecd.org/document/38/0,3343,en_2649_37463_2474918_1_1_1_37463,00.html (last visited Aug.

important role in furthering cross-border understanding of policy issues in these areas.

C. Provision of Technical Assistance

The Department and the FTC provide technical assistance to countries establishing new competition regimes, largely through funding by the U.S. Agency for International Development. The programs, which began in the early 1990s in Central and Eastern Europe, are active in many areas of the world, including Southeast Asia, Russia, India, Egypt, South Africa, and Central America. Since 1991, the Department and the FTC have conducted approximately four hundred technical-assistance missions, some short-term and others longer-term, in scores of countries. In numerous countries, the agencies have also maintained resident advisors to assist in developing antitrust laws.⁵⁷

In its recent report, the Antitrust Modernization Commission (AMC) reported that technical-assistance programs have been effective and recommended that they receive direct funding in the future.⁵⁸ Congress considered this recommendation, and, in fiscal year 2008, the FTC was granted supplemental funds to be distributed to a number of activities, including technical assistance for both competition and consumer protection.⁵⁹

6, 2008).

⁵⁷ See generally FED. TRADE COMM'N & U.S. DEP'T OF JUSTICE, U.S. FEDERAL TRADE COMMISSION'S AND DEPARTMENT OF JUSTICE'S EXPERIENCE WITH TECHNICAL ASSISTANCE FOR THE EFFECTIVE APPLICATION OF COMPETITION LAWS (2008), available at <http://ftc.gov/oia/wkshp/docs/exp.pdf>; Federal Trade Commission, International Technical Assistance, <http://ftc.gov/oia/assistance.shtm>.

⁵⁸ ANTITRUST MODERNIZATION COMM'N, REPORT AND RECOMMENDATIONS 219 (2007), available at http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf.

⁵⁹ See generally 153 CONG. REC. H15741, H16054 (daily ed. Dec. 17, 2007) (explanatory statement regarding the Consolidated Appropriations Act, 2008, Pub. L. No. 110-161, 121 Stat. 1884) ("The Appropriations Committees recognize and support the FTC's international programs. The FTC should continue competition policy and consumer protection efforts, including training and technical assistance, in

IV. Additional Steps: What Should Be Done?

Over the past decade, the U.S. antitrust enforcement agencies and other organizations have devoted significant resources to improving communication, cooperation, and coordination with other competition agencies throughout the world and in working towards greater convergence in standards and procedures based on sound economic principles. These efforts have been successful in part. As the AMC Report observed, both the Department and the FTC "enjoy [a] strong cooperative relationship[] with a large and increasing number of foreign enforcement agencies, enabling close cooperation on cases, coordination on international antitrust policy, and provision of technical assistance to new agencies throughout the world."⁶⁰

On the other hand, there has been less convergence on single-firm conduct issues than in other areas.⁶¹ This may be attributable to several factors.

First, for all the reasons discussed above, it has proven particularly difficult to develop substantive consensus on the appropriate standards for evaluating single-firm conduct. As one panelist observed, "The complexity inherent in the analysis of single-firm conduct simultaneously endorses the need for caution and challenges the steady approach to convergence that has been in large measure achieved, for example, in the area of horizontal mergers."⁶²

Second, opportunities for cooperation in the area of single-firm conduct historically have

developing countries.").

⁶⁰ ANTITRUST MODERNIZATION COMM'N, *supra* note 58, at 216 (alteration in original) (quoting Randolph W. Tritell, Assistant Dir. for Int'l Antitrust, Fed. Trade Comm'n, International Antitrust Issues (Feb. 15, 2006), available at govinfo.library.unt.edu/amc/commission_hearings/pdf/Statement_Tritell.pdf).

⁶¹ See Feb. 13 Hr'g Tr., *supra* note 2, at 137 (Heather) ("[S]uccess has been realized largely in the cartel and merger enforcement areas. Greater priority must be given to the area of unilateral conduct.").

⁶² Rill, *supra* note 7, at 1.

been far fewer than, for example, in the area of horizontal mergers. Despite the attention devoted to single-firm conduct issues internationally, only a handful of single-firm conduct cases have had cross-border ramifications; in contrast, staffs now routinely work cooperatively on horizontal mergers and cartel investigations.

Finally, in merger investigations, the incentives of both the parties and the reviewing agencies are often aligned, and firms routinely provide waivers that enable the agencies in different jurisdictions to cooperate effectively, thereby speeding the review process and enabling the transaction to move forward. This, however, may not always be the case in investigations involving single-firm conduct, where the firm under investigation does not have the same incentive to cooperate with competition agencies and, therefore, may not be willing to provide waivers that could facilitate better cross-border cooperation.

These factors have posed obstacles to cooperation and convergence with regard to single-firm conduct. Hearing testimony stressed the need to continue striving for progress. Panelists supported efforts to encourage voluntary convergence on substantive standards.⁶³ At the same time, however, several panelists cautioned that convergence was not a transcendent goal in and of itself,⁶⁴ and that convergence must be forged around appropriate legal and economic principles.⁶⁵

⁶³ See, e.g., May 8 Hr'g Tr., *supra* note 10, at 137–38 (Rill) (“I think we should not be too pessimistic and certainly not too humble about the opportunities for convergence and the role the U.S. should play.”); Sept. 12 Hr'g Tr., *supra* note 9, at 144 (Bloom) (“I think there should be as much convergence as will achieve maximum consumer welfare.”).

⁶⁴ See Sept. 12 Hr'g Tr., *supra* note 9, at 136–37 (Addy) (expressing the view that there should be room for countries to reasonably disagree on what they consider the primary factors in challenging single-firm conduct; that firms can operate in conformity with local laws without any major impediment to doing business; and that the most critical need is for individual jurisdictions to make their rules clear and understandable).

⁶⁵ See May 8 Hr'g Tr., *supra* note 10, at 139 (Rule)

Other panelists urged a focus on comity and ways of reducing overlapping enforcement by different agencies.⁶⁶

This part of the chapter discusses a number of proposals for future steps to address the policy concerns identified above.

Participation in Multilateral Organizations. Organizations such as the ICN and the OECD have made major strides in promoting convergence, and the Department will continue to participate actively in both organizations. In particular, the Department will work toward greater convergence on issues of single-firm conduct in the UCWG. Several panelists stressed the importance of this undertaking,⁶⁷ and the Department agrees. The UCWG affords an important forum for dialogue and presents an opportunity for the various jurisdictions to learn from one another, benchmark their approaches, and generally foster convergence.

Organizations such as the ICN and the OECD have made major strides in promoting convergence, and the Department will continue to participate actively in both organizations.

Evaluation and Expansion of Technical-Assistance Programs. Commentators have found that the technical-assistance programs that the Department and the FTC have sponsored to help nascent competition regimes “will foster greater cooperation and

(“The only thing I would say is if given the choice between convergence and advocating what you believe is the right principle, I would frankly urge you always to adopt the second.”); May 1 Hr'g Tr., *supra* note 15, at 151 (Calkins); Feb. 13 Hr'g Tr., *supra* note 2, at 182 (Wark); *id.* at 183–84 (Sewell); *id.* at 184 (Heather).

⁶⁶ See May 8 Hr'g Tr., *supra* note 10, at 144–45 (Pitofsky) (“My view . . . is that convergence is a long way off. . . . But I think there is something that is in the cards, and that is comity.”). *But cf. id.* at 142 (Melamed) (“I think there will be increasing convergence.”).

⁶⁷ See, e.g., Sept. 12 Hr'g Tr., *supra* note 9, at 142 (Rill) (“[T]hrough the ICN and the OECD . . . the agencies can, are and should do more work in the area of bringing about cross-border transparency, and . . . ultimately convergence.”).

convergence on sound antitrust law principles.”⁶⁸ A panelist representing the U.S. Chamber of Commerce recommended review of the adequacy of these programs and “implement[ing] any changes that may be necessary to make them more effective.”⁶⁹ The Department is continually in the process of such an evaluation. As one part of that effort, the Department and the FTC conducted a Technical Assistance Workshop in February 2008, at which they obtained the perspectives of other aid providers, academics, and private practitioners on possible improvements to the assistance programs and ways to maximize their effectiveness. The Department plans to continue providing training on single-firm conduct as part of its technical-assistance efforts.

Enhanced Bilateral Cooperation. Bilateral cooperation among competition agencies has multiplied over the years, and the Department and the FTC have established strong working relationships with many competition agencies throughout the world. In this regard, the Department continues to explore additional measures to improve cooperation and coordination with regard to single-firm conduct.

One avenue the Department intends to explore is whether more can be done to facilitate the sharing of confidential business information between the Department and counterpart foreign competition agencies. The International Antitrust Enforcement Assistance Act (IAEAA) authorizes the United States to enter into antitrust mutual assistance agreements with other countries that allow the exchange of confidential business information.⁷⁰ Although such agreements enable closer working relationships among agencies in

different jurisdictions on cases of common interest, the United States to date has entered into only one antitrust mutual assistance agreement, with Australia.⁷¹ Accordingly, in most jurisdictions, in-depth cooperation and coordination is feasible only with the parties’ consent to the sharing of confidential information. When such consent is given, extensive cooperation and coordination may be beneficial to both the parties and the enforcement agencies involved.⁷²

While confidentiality waivers are entirely within the discretion of parties, this is one area in which businesses concerned with the challenges posed by multi-jurisdictional review may be able to help themselves. As discussed previously, in merger contexts, waivers are relatively routine; in the area of single-firm conduct, they are not. As one panelist observed, progress in cooperation in specific cases and investigations “can be expanded and assisted by cooperation from parties through waivers of confidentiality and similar undertakings.”⁷³ This may be an important way in which firms concerned about the costs of multiple investigations and the prospect of inconsistent remedies could assist the Department in making the process more efficient and effective.

Increased Focus on Comity. A number of panelists also recommended that principles of comity play a greater role in preventing potential conflicts among jurisdictions and creating a more predictable environment. As one commentator defines it,

Comity is a concept of reciprocal deference [that] holds that one nation should defer to the law and rules (or dispute disposition) of

⁶⁸ ANTITRUST MODERNIZATION COMM’N, *supra* note 58, at 219.

⁶⁹ Feb. 13 Hr’g Tr., *supra* note 2, at 140–41 (Heather) (recommending that the technical-assistance review be approached “holistically and in cooperation with other developed countries to ensure that available resources are allocated efficiently and effectively and to ensure that other important initiatives such as the protection of intellectual property are pursued”).

⁷⁰ See 15 U.S.C. §§ 6201–12 (2000).

⁷¹ ANTITRUST MODERNIZATION COMM’N, *supra* note 58, at 218.

⁷² See Vautier, *supra* note 38, at 202 (“[C]harges in the 1994 Microsoft investigation . . . were noteworthy in that they were initiated through close coordination between two enforcement bodies who also joined to settle the case in negotiation with Microsoft. An important feature of this case was that Microsoft consented to both the U.S. and EU authorities exchanging confidential information.”).

⁷³ Rill, *supra* note 7, at 14.

another because, and where, the other has a greater interest; a greater claim of right. It is a concept founded on process, not outcome. It is irrelevant that the outcome may not be the preferred one of the deferring country. Indeed, that is the point.⁷⁴

One panelist observed, "I think we need to restore a greater role for the notion of international comity, the idea that one jurisdiction will defer to another jurisdiction which has more substantial and significant contacts with the conduct at issue."⁷⁵ Similarly, the panelist from the U.S. Chamber of Commerce testified, "The Chamber believes that the U.S. should explore the concept of enhanced comity, including such elements as an agreement amongst jurisdictions to defer to one another in relation to remedies."⁷⁶ Another panelist echoed these views, stating that "[g]iven globalization, I think it is increasingly important to find some way to allocate responsibility among multiple agencies" and further suggesting that "a kind of common sense approach would . . . [give] a greater deference to the rules of the defendant's home country."⁷⁷ Others have made similar recommendations.⁷⁸

On the other hand, one panelist took issue with the proposal that jurisdictions defer to the defendant's home country:

[F]or AMD and Intel . . . our revenues are probably seventy-five percent coming from outside the U.S. . . . We have productive capacity all over the world. . . . The innovation process is one that is built on human resources located around the world, in no particular jurisdiction. And the marketplaces are global.

So, to look at where a company is chartered or where the CEO sits is not a relevant variable to determine competition policy.⁷⁹

Indeed, he questioned the basic concept of deference:

[B]e careful when you talk about who ought to take the lead. I don't think it's ever going to, in the practical world, occur, because in a globalized world, what a dominant company does in any particular jurisdiction affects all other jurisdictions . . .

To think that any jurisdiction is going to advocate or forebear the protection of its own consumers in favor of another jurisdiction, that would be a remarkable thing. And I just don't think it's healthy.⁸⁰

The Department is continuing to explore whether more can be done to employ comity principles in the area of single-firm conduct. Comity is a doctrine that has long been recognized and applied by the courts⁸¹ and the antitrust enforcement agencies,⁸² but with difficulty in some cases. It is incorporated in all

⁷⁴ Eleanor M. Fox, Walter J. Derenberg Professor of Trade Regulation, N.Y. Univ. Sch. of Law, Testimony Before the Antitrust Modernization Commission Hearing on International Issues 6 (Feb. 15, 2006), available at http://govinfo.library.unt.edu/amc/commission_hearings/pdf/statement_Fox_final.pdf.

⁷⁵ May 1 Hr'g Tr., *supra* note 15, at 18 (Kolasky).

⁷⁶ Feb. 13 Hr'g Tr., *supra* note 2, at 139 (Heather); see also May 8 Hr'g Tr., *supra* note 10, at 145 (Pitofsky) (advocating a program of enhanced comity and noting that "Canada does it on a regular basis").

⁷⁷ Jan. 30 Hr'g Tr., *supra* note 2, at 38 (Heiner).

⁷⁸ See, e.g., ANTITRUST MODERNIZATION COMM'N, *supra* note 58, at 221 (recommending that "the United States . . . pursue bilateral and multilateral antitrust cooperation agreements that incorporate comity principles with more of its trading partners and make greater use of the comity provisions in existing cooperation agreements").

⁷⁹ Jan. 30 Hr'g Tr., *supra* note 2, at 193-94 (McCoy); see also Phred Dvorak, *Why Multiple Headquarters Multiply*, WALL ST. J., Nov. 19, 2007, at B1 (suggesting that the concept of "home country" may be outdated for multinational firms).

⁸⁰ Jan. 30 Hr'g Tr., *supra* note 2, at 194-95 (McCoy); accord *id.* at 195 (Haglund).

⁸¹ See, e.g., *Hilton v. Guyot*, 159 U.S. 113, 163-64 (1895); *Laker Airways Ltd. v. Sabena, Belgian World Airlines*, 731 F.2d 909, 937-38 (D.C. Cir. 1984); see also *F. Hoffmann-LaRoche Ltd. v. Empagran S.A.*, 542 U.S. 155, 164-68 (2004) (using principles of prescriptive comity in construing the Foreign Trade Antitrust Improvements Act). See generally SECTION OF ANTITRUST LAW, *supra* note 40, at 1179-85.

⁸² See U.S. DEPT OF JUSTICE & FED. TRADE COMM'N, ANTITRUST ENFORCEMENT GUIDELINES FOR INTERNATIONAL OPERATIONS § 3.2 (1995), available at <http://www.usdoj.gov/atr/public/guidelines/internat.htm>.

the formal cooperation agreements to which the United States is a party.

Although some have urged greater focus on comity to address concerns such as forum shopping and multiple-agency reviews, others are more skeptical. For example, one commentator has noted, “Comity is an ambiguous concept. Invoking the word does not reveal its practical meaning. Whether one nation has a greater claim of right than another is usually not obvious in cases in which duties of deference are likely to be asserted.”⁸³

Some of the difficulties are operational. Some enhanced comity proposals are predicated largely on encouraging competition agencies to defer to the enforcement decisions of the jurisdiction with the greatest interest in the matter. But how is that to be determined? Should it depend on “the defendant’s home country,” as one panelist proposed?⁸⁴ Should it, instead, depend on the size or significance of sales, or capital investments, or the number of customers in the particular jurisdiction? How is greatest interest in the matter determined in cases involving intellectual property? And what about the severity of anticompetitive effects and the size of the jurisdiction—should smaller jurisdictions always defer to larger ones?

Even more fundamentally, it is questionable how realistic it is to expect one competition agency to defer to another when, as sometimes happens, conduct has substantial effects in multiple jurisdictions. Such deference may require restraining basic impulses of national sovereignty: “Virtually every jurisdiction insists upon recognition of its sovereignty. While comity principles may lead a jurisdiction to refrain from asserting powers in a particular case, those principles are clearly viewed as subordinate.”⁸⁵

No competition agency should launch an investigation when conduct clearly lacks significant effects within that agency’s jurisdiction. However, when such effects are present in multiple jurisdictions, it may be unrealistic to expect deference from a jurisdiction where important consumer interests are at stake. One jurisdiction—Canada—has indicated that it will abstain from bringing its own case when it has concluded that its interests are protected by another jurisdiction’s actions,⁸⁶ and other jurisdictions may do the same in specific cases. These jurisdictions, however, explicitly reserve the right to act themselves if they believe that their consumers have not been protected adequately.

It is also important to guard against comity being used to promote national champions. As has been observed, “Comity is a horizontal, nation-to-nation concept, seeking—by reciprocal deference—to maximize the joint interests of the affected nations or to split their differences through repeated interactions. It may play into the hand of nationalism and the nurturing of national champions.”⁸⁷

The Department will continue to explore how to strengthen cooperative bilateral relationships in the area of single-firm conduct. In appropriate cases, the Department may invoke comity principles in attempting to persuade an agency abroad to defer to the United States, and likewise will consider such principles in deciding whether it should defer consistent with its responsibility to protect U.S. consumers. However, at this point, the Department does not underestimate the challenges of doing so and is focusing its international convergence efforts on increased dialogue and cooperation.

Greater Cooperation and Coordination on Remedies. As discussed above, one of the basic

⁸³ Fox, *supra* note 74, at 6.

⁸⁴ Jan. 30 Hr’g Tr., *supra* note 2, at 38 (Heiner).

⁸⁵ William Blumenthal, *The Challenge of Sovereignty and the Mechanisms of Convergence*, 72 ANTITRUST L. J. 267, 272 (2004); see also Antitrust Modernization Commission: Public Hearing Hr’g Tr. 15, Feb. 15, 2006, available at govinfo.library.unt.edu/amc/commission_hearings/

pdf/060215_International_Transcript_reform.pdf [hereinafter AMC Hr’g Tr.] (Tritell) (“How should jurisdictions, including the United States, reconcile enhanced comity principles with domestic statutory obligations to protect their consumers?”).

⁸⁶ See AMC Hr’g Tr., *supra* note 85, at 14.

⁸⁷ Fox, *supra* note 74, at 6.

concerns raised by the current environment of overlapping enforcement is that one jurisdiction's remedy may have serious spillover effects on consumers in other jurisdictions. The severity of this concern depends on the nature of the remedy. For example, remedies requiring the sharing of intellectual property with competitors may well have major spillover effects in other parts of the world. Similarly, remedies addressing product design may have substantial spillover effects as firms, responding to the requirements of one regime, may be forced to design sub-optimal products from the perspective of consumers in other jurisdictions. On the other hand, some remedies, such as those involving distribution or marketing practices, may involve conduct that can be more easily tailored to particular jurisdictions and thus are less likely to have significant spillover effects. In short, a remedy imposed by one jurisdiction may have effects elsewhere, but the extent of any effect will vary depending on the remedy at issue. The Department believes that more should be done to address spillover concerns through regularized and early consultations among involved agencies and parties, and, in suitable cases where confidentiality obligations and simultaneous timing permit, the joint fashioning of appropriate remedies.

The Department believes that more should be done to address the spillover effects that remedies imposed by one jurisdiction may have on consumers in other jurisdictions.

V. Conclusion

There is considerable diversity among jurisdictions in the laws governing single-firm conduct, the types of regimes for enforcing those laws, and the remedies that are imposed for violations. That is understandable. Different countries have different economic histories, legal systems, and policy objectives, and are at different stages of development.

While this divergence has raised legitimate concerns, it is important not to overstate the

issue. Not all single-firm conduct cases have cross-border ramifications and not all such cases have divergent results. The problem, however, is that even a small number of high-profile cross-border cases with divergent results are likely substantially to impact (and potentially inefficiently chill) how global companies conduct their business, and even how they design the products they bring to market.

There has been increasing convergence around some basic principles: that the primary purpose of laws governing single-firm conduct is to serve consumers and competition in general rather than to protect individual competitors; that economics should play a key role in the analysis; and that competitive effects, rather than formalistic line-drawing, should be the focus of liability. Yet there remain important differences in certain areas between the enforcement policies of even mature antitrust jurisdictions such as the United States and the EU. And the emergence of competition regimes in major trading partners such as Brazil, China, and India adds to the sense of urgency that antitrust agencies need to improve the way they work together in this area.

There are no quick fixes to the concerns identified in the hearings, and impediments to full convergence are likely to remain for some time. What each jurisdiction can do is strive to make its own enforcement policy and laws on single-firm conduct as clear and transparent as possible, so that businesses can determine what the law is and how they can best comply with their obligations. Additionally, the Department will continue to seek opportunities to improve cooperation and coordination with other competition regimes in individual cases, and will actively support multilateral organizations such as the ICN and the OECD in their efforts to foster convergence in the area of single-firm conduct based on sound economic principles.

As one authority has observed, "Convergence is an organic process that grows out of learning from each other's experience, allowing all of us to retain the best elements. In a globalising world

it is important to take an open-minded approach and constantly consider whether one's own rules and practices can be improved."⁸⁸ The Department agrees and will continue to strive to do so at home and abroad.

⁸⁸ Alexander Schaub, Dir. Gen., DG Competition, European Comm'n, Continued Focus on Reform: Recent Developments in EC Competition Policy (Oct. 25, 2001), *available at* http://ec.europa.eu/comm/competition/speeches/text/sp2001_031_en.pdf (quoted in Thomas O. Barnett, *Section 2 Remedies: A Necessary Challenge*, in 2007 ANNUAL PROCEEDINGS OF THE FORDHAM COMPETITION LAW INSTITUTE 549, 549 (Barry E. Hawk ed., 2008)).

APPENDIX

HEARINGS AND PARTICIPANTS

Welcome and Overview of Hearings

June 20, 2006

Moderator: William Blumenthal, General Counsel, Federal Trade Commission

Thomas O. Barnett

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Professor of Business Economics, University of Chicago Graduate School of Business

Herbert Hovenkamp

Ben V. & Dorothy Willie Distinguished Professor of Law, University of Iowa College of Law

Deborah Platt Majoras

Chairman, Federal Trade Commission

Predatory Pricing

June 22, 2006

Moderators: Robert A. Potter, Chief, Legal Policy Section, Antitrust Division, U.S. Department of Justice

Patricia Schultheiss, Attorney, Bureau of Competition, Federal Trade Commission

Selling

Patrick Bolton

Barbara and David Zalaznick Professor of Business, Columbia University Business School

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Refusals to Deal

July 18, 2006

Moderators: Alden F. Abbott, Associate Director, Bureau of Competition, Federal Trade Commission

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Trade Commission

International Issues

September 12, 2006

Moderators: Gerald F. Masoudi, Deputy
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U.S. Department of Justice
Randolph W. Tritell, Assistant Director for
International Antitrust, Federal Trade
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International Enforcement Perspectives

Philip Lowe

Director General for Competition, European
Commission

Hideo Nakajima

Deputy Secretary General, General
Secretariat, Japan Fair Trade Commission

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President, Mexican Federal Competition
Commission

Sheridan E. Scott

Commissioner of Competition, Canadian
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Empirical Perspectives

September 26, 2006

Moderators: Kenneth Heyer, Acting Deputy
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Business History and Business Strategy

October 26, 2006

Moderators: Edward D. Eliasberg, Attorney,
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Competition, Federal Trade Commission

Business History

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Tying**November 1, 2006**

Moderators: June K. Lee, Economist, Antitrust
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Exclusive Dealing**November 15, 2006**

Moderators: Daniel P. O'Brien, Chief, Economic
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University School of Law

Loyalty Discounts

November 29, 2006

Moderators: Patrick J. DeGraba, Economist,
Federal Trade Commission

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General, Antitrust Division, U.S. Department of
Justice

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Misleading and Deceptive Conduct

December 6, 2006

Moderators: Richard B. Dagen, Special Counsel
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Business Testimony

January 30, 2007

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Academic Testimony

January 31, 2007

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Business Testimony

February 13, 2007

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Monopoly Power**March 7, 2007**

Moderators: Dennis W. Carlton, Deputy Assistant Attorney General, Antitrust Division, U.S. Department of Justice

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Director of Economic Policy Studies and Senior Fellow, Hudson Institute

Lawrence J. White

Arthur E. Imperatore Professor of Economics, Leonard N. Stern School of Business, New York University; former Deputy Assistant Attorney General, Antitrust Division, U.S. Department of Justice

Monopoly Power**March 8, 2007**

Moderators: Thomas J. Klotz, Attorney, Office of the General Counsel, Federal Trade Commission

Gregory J. Werden, Senior Economic Counsel, Antitrust Division, U.S. Department of Justice

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John C. Head III Dean and Professor of Economics and Management, Sloan School of Management, Massachusetts Institute of Technology

Alan H. Silberman

Partner, Sonnenschein Nath & Rosenthal LLP

Michael A. Williams

Director, ERS Group

Remedies**March 28, 2007*****The Objectives and Goals of Remedies in Section 2 Cases***

Moderators: Daniel P. Ducore, Assistant Director, Compliance Division, Bureau of Competition, Federal Trade Commission
Gail Kursh, Deputy Chief, Legal Policy Section, Antitrust Division, U.S. Department of Justice

Robert W. Crandall

Senior Fellow in Economic Studies, The Brookings Institution

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Vice President and Deputy General Counsel for Antitrust, Microsoft Corporation

Per Hellström

Chief of Unit C-3, Directorate General for Competition, European Commission

Abbott (Tad) B. Lipsky

Partner, Latham & Watkins LLP; former Deputy Assistant Attorney General, Antitrust Division, U.S. Department of Justice

Structural Versus Conduct Remedies

Moderators: Daniel P. Ducore, Assistant Director, Compliance Division, Bureau of Competition, Federal Trade Commission
Edward D. Eliasberg, Attorney, Antitrust Division, U.S. Department of Justice

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James Parker Hall Distinguished Service Professor of Law, Faculty Director for Curriculum and Director, Law and Economics Program, University of Chicago Law School

Franklin M. Fisher

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Remedies

March 29, 2007

Moderators: Edward D. Eliasberg, Attorney, Antitrust Division, U.S. Department of Justice
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Policy Issues

May 1, 2007

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Hearing transcripts, information about the panelists, submissions, and public comments are available on the Department's website:

http://www.usdoj.gov/atr/public/hearings/single_firm/sfchearing.htm

TABLE OF AUTHORITIES

Cases

- A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, 881 F.2d 1396 (7th Cir. 1989)
- AD/SAT v. Associated Press*, 181 F.3d 216 (2d Cir. 1999)
- Advo, Inc. v. Philadelphia Newspapers, Inc.*, 51 F.3d 1191 (3d Cir. 1995)
- American Council of Certified Podiatric Physicians & Surgeons v. American Board of Podiatric Surgery, Inc.*, 185 F.3d 606 (6th Cir. 1999)
- American Tobacco Co. v. United States*, 328 U.S. 781 (1946)
- Appalachian Coals, Inc. v. United States*, 288 U.S. 344 (1933)
- Arthur S. Langenderfer, Inc. v. S.E. Johnson Co.*, 729 F.2d 1050 (6th Cir. 1984)
- Aspen Highlands Skiing Corp. v. Aspen Skiing Co.*, 738 F.2d 1509 (10th Cir. 1984), *aff'd*, 472 U.S. 585 (1985)
- Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985)
- Associated General Contractors v. California State Council of Carpenters*, 459 U.S. 519 (1983)
- Associated Press v. United States*, 326 U.S. 1 (1945)
- Bacchus Industries, Inc. v. Arvin Industries, Inc.*, 939 F.2d 887 (10th Cir. 1991)
- Bailey v. Allgas, Inc.*, 284 F.3d 1237 (11th Cir. 2002)
- Ball Memorial Hospital, Inc. v. Mutual Hospital Insurance, Inc.*, 784 F.2d 1325 (7th Cir. 1986)
- Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227 (1st Cir. 1983)
- Bell Atlantic Corp. v. Twombly*, 127 S. Ct. 1955 (2007)
- In re Biovail Corp.*, 134 F.T.C. 407 (2002)
- Blue Cross & Blue Shield United of Wisconsin v. Marshfield Clinic*, 65 F.3d 1406 (7th Cir. 1995)
- Borough of Lansdale v. Philadelphia Electric Co.*, 692 F.2d 307 (3d Cir. 1982)
- In re Bristol-Myers Squibb Co.*, 135 F.T.C. 444 (2003)
- Broadcast Music, Inc. v. CBS*, 441 U.S. 1 (1979)
- Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297 (3d Cir. 2007)
- Broadway Delivery Corp. v. UPS*, 651 F.2d 122 (2d Cir. 1981)
- Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993)
- In re Brown Shoe Co.*, 62 F.T.C. 679 (1963)
- Brown Shoe Co. v. United States*, 370 U.S. 294 (1962)
- Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477 (1977)
- Business Electronics v. Sharp Electronics Corp.*, 485 U.S. 717 (1988)
- Cargill, Inc. v. Monfort of Colorado, Inc.*, 479 U.S. 104 (1986)
- Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2008)
- Colorado Interstate Gas Co. v. Natural Gas Pipeline Co. of America*, 885 F.2d 683 (10th Cir. 1989)
- Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039 (8th Cir. 2000)
- Confederated Tribes of Siletz Indians v. Weyerhaeuser Co.*, 411 F.3d 1030 (9th Cir. 2005), *vacated and remanded sub nom. Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 127 S. Ct. 1069 (2007)
- Continental T. V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36 (1977)
- Conwood Co. v. U.S. Tobacco Co.*, 290 F.3d 768 (6th Cir. 2002)
- Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752 (1984)
- Covad Communications Co. v. Bell Atlantic Corp.*, 398 F.3d 666 (D.C. Cir. 2005)
- Data General Corp. v. Grumman Systems Support Corp.*, 36 F.3d 1147 (1st Cir. 1994)
- Deauville Corp. v. Federated Department Stores, Inc.*, 756 F.2d 1183 (5th Cir. 1985)
- Digital Equipment Corp. v. Uniq Digital Technologies, Inc.*, 73 F.3d 756 (7th Cir. 1996)
- Domed Stadium Hotel, Inc. v. Holiday Inns, Inc.*, 732 F.2d 480 (5th Cir. 1984)
- Eastman Kodak Co. v. Image Technical Services, Inc.*, 504 U.S. 451 (1992)
- Eastman Kodak Co. v. Southern Photo Materials Co.*, 273 U.S. 359 (1927)
- Exxon Corp. v. Berwick Bay Real Estate Partners*, 748 F.2d 937 (5th Cir. 1984) (*per curiam*)
- F. Hoffmann-La Roche Ltd. v. Empagran S. A.*, 542 U.S. 155 (2004)
- Fishman v. Estate of Wirtz*, 807 F.2d 520 (7th Cir. 1986)
- Ford Motor Co. v. United States*, 405 U.S. 562 (1972)
- Fortner Enterprises, Inc. v. U.S. Steel Corp.*, 394 U.S. 495 (1969)
- FTC v. Brown Shoe Co.*, 384 U.S. 316 (1966)
- FTC v. Indiana Federation of Dentists*, 476 U.S. 447 (1986)
- FTC v. Mylan Laboratories, Inc.*, 62 F. Supp. 2d 25 (D.D.C.), *modified*, 99 F. Supp. 2d 1 (D.D.C. 1999)
- General Industries Corp. v. Hartz Mountain Corp.*, 810

- F.2d 795 (8th Cir. 1987)
- Georgia v. Evans*, 316 U.S. 159 (1942)
- Goldwasser v. Ameritech Corp.*, 222 F.3d 390 (7th Cir. 2000)
- Harrison Aire, Inc. v. Aerostar International, Inc.*, 423 F.3d 374 (3d Cir. 2005)
- Hartford-Empire Co. v. United States*, 323 U.S. 386 (1945)
- Hayden Publishing Co. v. Cox Broadcasting Corp.*, 730 F.2d 64 (2d Cir. 1984)
- Hecht v. Pro-Football, Inc.*, 570 F.2d 982 (D.C. Cir. 1977)
- Hilton v. Guyot*, 159 U.S. 113 (1895)
- IBM v. United States*, 298 U.S. 131 (1936)
- Illinois Tool Works Inc. v. Independent Ink, Inc.*, 547 U.S. 28 (2006)
- Image Technical Services, Inc. v. Eastman Kodak Co.*, 125 F.3d 1195 (9th Cir. 1997)
- In re Independent Service Organizations Antitrust Litigation*, 203 F.3d 1322 (Fed. Cir. 2000)
- Information Resources, Inc. v. Dun & Bradstreet Corp.*, 359 F. Supp. 2d 307 (S.D.N.Y. 2004)
- Interface Group, Inc. v. Massachusetts Port Authority*, 816 F.2d 9 (1st Cir. 1987)
- International Salt Co. v. United States*, 332 U.S. 392 (1947)
- Invacare Corp. v. Respironics, Inc.*, No. 1:04 CV 1580, 2006 WL 3022968 (N.D. Ohio Oct. 23, 2006)
- Jack Walters & Sons Corp. v. Morton Building, Inc.*, 737 F.2d 698 (7th Cir. 1984)
- J.B.D.L. Corp. v. Wyeth-Ayerst Laboratories*, Nos. 1:01-CV-704, 1:03-CV-781, 2005 WL 1396940 (S.D. Ohio June 13, 2005), *aff'd*, 485 F.3d 880 (6th Cir. 2007)
- Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2 (1984)
- Jerrold Electronics Corp. v. United States*, 365 U.S. 567 (1961) (mem.) (per curiam)
- Kelco Disposal, Inc. v. Browning-Ferris Industries of Vermont, Inc.*, 845 F.2d 404 (2d Cir. 1988), *aff'd*, 492 U.S. 257 (1989)
- Klamath-Lake Pharmaceutical Association v. Klamath Medical Service Bureau*, 701 F.2d 1276 (9th Cir. 1983)
- Laker Airways Ltd. v. Sabena, Belgian World Airlines*, 731 F.2d 909 (D.C. Cir. 1984)
- Leegin Creative Leather Products, Inc. v. PSKS, Inc.*, 127 S. Ct. 2705 (2007)
- LePage's Inc. v. 3M*, 324 F.3d 141 (3d Cir. 2003) (en banc)
- Lorain Journal Co. v. United States*, 342 U.S. 143 (1951)
- Mandeville Island Farms, Inc. v. American Crystal Sugar Co.*, 334 U.S. 219 (1948)
- Maryland & Virginia Milk Producers Association v. United States*, 362 U.S. 458 (1960)
- Masimo Corp. v. Tyco Health Care Group, L.P.*, No. CV 02-4770 MRP, 2006 WL 1236666 (C.D. Cal. Mar. 22, 2006)
- Massachusetts v. Microsoft Corp.*, 373 F.3d 1199 (D.C. Cir. 2004) (en banc)
- Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, 475 U.S. 574 (1986)
- McGahee v. Northern Propane Gas Co.*, 858 F.2d 1487 (11th Cir. 1988)
- MCI Communications Corp. v. AT&T*, 708 F.2d 1081 (7th Cir. 1983)
- MetroNet Services Corp. v. Qwest Corp.*, 383 F.3d 1124 (9th Cir. 2004)
- Minnesota Mining & Manufacturing Co. v. Appleton Papers Inc.*, 35 F. Supp. 2d 1138 (D. Minn. 1999)
- Morris Communications Corp. v. PGA Tour, Inc.*, 364 F.3d 1288 (11th Cir. 2004)
- Movie 1 & 2 v. United Artists Communications, Inc.*, 909 F.2d 1245 (9th Cir. 1990)
- Multistate Legal Studies, Inc. v. Harcourt Brace Jovanovich Legal & Professional Publications, Inc.*, 63 F.3d 1540 (10th Cir. 1995)
- National Society of Professional Engineers v. United States*, 435 U.S. 679 (1978)
- NCAA v. Board of Regents of the University of Oklahoma*, 468 U.S. 85 (1984)
- Neumann v. Reinforced Earth Co.*, 786 F.2d 424 (D.C. Cir. 1986)
- New York v. Microsoft Corp.*, 224 F. Supp. 2d 76 (D.D.C. 2002), *aff'd sub nom. Massachusetts v. Microsoft Corp.*, 373 F.3d 1199 (D.C. Cir. 2004) (en banc)
- NLRB v. Express Publishing Co.*, 312 U.S. 426 (1941)
- Northeastern Telephone Co. v. AT&T*, 651 F.2d 76 (2d Cir. 1981)
- Northern Pacific Railway Co. v. United States*, 356 U.S. 1 (1958)
- NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128 (1998)
- Olympia Equipment Leasing Co. v. Western Union Telegraph Co.*, 797 F.2d 370 (7th Cir. 1986)
- Omega Environmental, Inc. v. Gilbarco, Inc.*, 127 F.3d 1157 (9th Cir. 1997)
- Ortho Diagnostic Systems, Inc. v. Abbott Laboratories, Inc.*, 920 F. Supp. 455 (S.D.N.Y. 1996)
- Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973)
- Pacific Engineering & Production Co. of Nevada v. Kerr-McGee Corp.*, 551 F.2d 790 (10th Cir. 1977)
- PepsiCo, Inc. v. Coca-Cola Co.*, 315 F.3d 101 (2d Cir. 2002) (per curiam)
- Rebel Oil Co. v. Atlantic Richfield Co.*, 51 F.3d 1421 (9th Cir. 1995)
- Re/Max International, Inc. v. Realty One, Inc.*, 173 F.3d 995 (6th Cir. 1999)
- Response of Carolina, Inc. v. Leasco Response, Inc.*, 537 F.2d 1307 (5th Cir. 1976)
- Roland Machinery Co. v. Dresser Industries, Inc.*, 749 F.2d 380 (7th Cir. 1984)

- Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210 (D.C. Cir. 1986)
- Schor v. Abbott Laboratories*, 457 F.3d 608 (7th Cir. 2006)
- SmithKline Corp. v. Eli Lilly & Co.*, 427 F. Supp. 1089 (E.D. Pa. 1976), *aff'd*, 575 F.2d 1056 (3d Cir. 1978)
- Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447 (1993)
- Spirit Airlines, Inc. v. Northwest Airlines, Inc.*, 431 F.3d 917 (6th Cir. 2005)
- Spirit Airlines, Inc. v. Northwest Airlines, Inc.*, No. 00-71535, 2003 WL 24197742 (E.D. Mich. Mar. 31, 2003), *rev'd*, 431 F.3d 917 (6th Cir. 2005)
- Standard Fashion Co. v. Magrane-Houston Co.*, 258 U.S. 346 (1922)
- Standard Oil Co. of California v. United States (Standard Stations)*, 337 U.S. 293 (1949)
- Standard Oil Co. of New Jersey v. United States*, 221 U.S. 1 (1911)
- State of Illinois ex rel. Burriss v. Panhandle Eastern Pipe Line Co.*, 935 F.2d 1469 (7th Cir. 1991)
- State Oil Co. v. Kahn*, 522 U.S. 3 (1997)
- Stearns Airport Equipment Co. v. FMC Corp.*, 170 F.3d 518 (5th Cir. 1999)
- Stop & Shop Supermarket Co. v. Blue Cross & Blue Shield of Rhode Island*, 373 F.3d 57 (1st Cir. 2004)
- Sunshine Books, Ltd. v. Temple Univ.*, 697 F.2d 90 (3rd Cir. 1982)
- Swift & Co. v. United States*, 196 U.S. 375 (1905)
- Tampa Electric Co. v. Nashville Coal Co.*, 365 U.S. 320 (1961)
- Times-Picayune Publishing Co. v. United States*, 345 U.S. 594 (1953)
- Tops Markets, Inc. v. Quality Markets, Inc.*, 142 F.3d 90 (2d Cir. 1998)
- Town of Concord v. Boston Edison Co.*, 915 F.2d 17 (1st Cir. 1990)
- Transamerica Computer Co. v. IBM*, 698 F.2d 1377 (9th Cir. 1983)
- United Shoe Machinery Corp. v. United States*, 258 U.S. 451 (1922)
- United States v. Aluminum Co. of America*, 148 F.2d 416 (2d Cir. 1945)
- United States v. Aluminum Co. of America*, 91 F. Supp. 333 (S.D.N.Y. 1950)
- United States v. American Tobacco Co.* 221 U.S. 106 (1911)
- United States v. AMR Corp.*, 335 F.3d 1109 (10th Cir. 2003)
- United States v. AMR Corp.*, 140 F. Supp. 2d 1141 (D. Kan. 2001), *aff'd*, 335 F.3d 1109 (10th Cir. 2003)
- United States v. AT&T*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd mem. sub nom. Maryland v. United States*, 460 U.S. 1001 (1983)
- United States v. AT&T*, 524 F. Supp. 1336 (D.D.C. 1981)
- United States v. Colgate & Co.*, 250 U.S. 300 (1919)
- United States v. Dentsply International, Inc.*, 399 F.3d 181 (3d Cir. 2005)
- United States v. Eastman Kodak Co.*, 1954 Trade Cas. (CCH) ¶ 67,920 (W.D.N.Y. 1954)
- United States v. E. I. du Pont de Nemours & Co.*, 366 U.S. 316 (1961)
- United States v. E. I. du Pont de Nemours & Co.*, 351 U.S. 377 (1956)
- United States v. General Motors Corp.*, 1965 Trade Cas. (CCH) ¶ 71,624 (E.D. Mich. 1965)
- United States v. Grinnell Corp.*, 384 U.S. 563 (1966)
- United States v. IBM*, 1956 Trade Cas. (CCH) ¶ 68,245 (S.D.N.Y. 1956)
- United States v. Jerrold Electronics Corp.*, 187 F. Supp. 554 (E.D. Pa. 1960)
- United States v. Loew's Inc.*, 371 U.S. 38 (1962)
- United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (en banc) (per curiam)
- United States v. Microsoft Corp.*, 147 F.3d 935 (D.C. Cir. 1998)
- United States v. Microsoft Corp.*, 231 F. Supp. 2d 144 (D.D.C. 2002), *aff'd sub nom. Massachusetts v. Microsoft Corp.*, 373 F.3d 1199 (D.C. Cir. 2004) (en banc)
- United States v. Paramount Pictures, Inc.*, 334 U.S. 131 (1948)
- United States v. Syufy Enterprises*, 903 F.2d 659 (9th Cir. 1990)
- United States v. Terminal Railroad Association of St. Louis*, 224 U.S. 383 (1912)
- United States v. United Shoe Machinery Corp.*, 391 U.S. 244 (1968)
- United States v. United Shoe Machinery Corp.*, 110 F. Supp. 295 (D. Mass. 1953), *aff'd*, 347 U.S. 521 (1954) (per curiam)
- United States v. United Shoe Machinery Co.*, 264 F. 138 (E.D. Mo. 1920), *aff'd*, 258 U.S. 451 (1922)
- United States v. United Shoe Machinery Co. of New Jersey*, 247 U.S. 32 (1918)
- United States v. U.S. Gypsum Co.*, 340 U.S. 76 (1950)
- United States v. Waste Management, Inc.*, 743 F.2d 976 (2d Cir. 1984)
- United States v. Western Electric Co.*, 1956 Trade Cas. (CCH) ¶ 68,246 (D.N.J. 1956)
- U.S. Anchor Mfg., Inc. v. Rule Industries, Inc.*, 7 F.3d 986 (11th Cir. 1993)
- U.S. Healthcare, Inc. v. Healthsource, Inc.*, 986 F.2d 589 (1st Cir. 1993)
- U.S. Philips Corp. v. Windmere Corp.*, 861 F.2d 695 (Fed. Cir. 1988)
- U.S. Steel Corp. v. Fortner Enterprises, Inc.*, 429 U.S. 610 (1977)
- Utah Pie Co. v. Continental Baking Co.*, 386 U.S. 685 (1967)
- Verizon Communications Inc. v. Law Offices of Curtis V. Trinko*, 540 U.S. 398 (2004)

Virgin Atlantic Airways Ltd. v. British Airways PLC, 257 F.3d 256 (2d Cir. 2001)

Virgin Atlantic Airways Ltd. v. British Airways PLC, 69 F. Supp. 2d 571 (S.D.N.Y. 1999), *aff'd*, 257 F.3d 256 (2d Cir. 2001)

Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp., 382 U.S. 172 (1965)

Wallace v. IBM, 467 F.3d 1104 (7th Cir. 2006)

Weiss v. York Hospital, 745 F.2d 786 (3d Cir. 1984)

Western Parcel Express v. United Parcel Service of America, Inc., 190 F.3d 974 (9th Cir. 1999)

Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co., 127 S. Ct. 1069 (2007)

William Inglis & Sons Baking Co. v. ITT Continental Baking Co., 668 F.2d 1014 (9th Cir. 1981)

Williamsburg Wax Museum, Inc. v. Historic Figures, Inc., 810 F.2d 243 (D.C. Cir. 1987)

Yoder Bros., Inc. v. California-Florida Plant Corp., 537 F.2d 1347 (5th Cir. 1976)

Zenith Radio Corp. v. Hazeltine Research, Inc., 395 U.S. 100 (1969)

Statutes

Sherman Act § 1, 15 U.S.C. § 1 (2000)

Sherman Act § 2, 15 U.S.C. § 2 (2000)

Robinson-Patman Act § 1, 15 U.S.C. § 13 (2000)

Clayton Act § 3, 15 U.S.C. § 14 (2000)

Clayton Act § 4, 15 U.S.C. § 15 (2000)

Clayton Act § 4A, 15 U.S.C. § 15a (2000)

Clayton Act § 4C, 15 U.S.C. § 15c (2000)

FTC Act § 5, 15 U.S.C. § 45 (2000)

Export Trading Company Act § 306, 15 U.S.C. § 4016 (2000)

International Antitrust Enforcement Assistance Act of 1994 §§ 2-13, 15 U.S.C. §§ 6201-12 (2000)

18 U.S.C. § 3571 (2000)

Consolidated Appropriations Act, 2008, Pub. L. No. 110-161, 121 Stat. 1884

Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified as amended in scattered sections of 47 U.S.C.)

Briefs

Brief for the United States as Amicus Curiae Supporting Petitioner, *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 127 S. Ct. 1069 (2007) (No. 05-381), *available at* <http://www.usdoj.gov/atr/cases/f217900/217988.pdf>

Brief for the United States as Amicus Curiae, 3M v. LePage's Inc., 542 U.S. 953 (2004) (No. 02-1865), *available at* <http://www.usdoj.gov/atr/cases/f203900/203900.pdf>

Brief for the United States & the Federal Trade Commission as Amici Curiae Supporting Petitioner, *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004) (No. 02-682),

available at <http://www.usdoj.gov/atr/cases/f201000/201048.pdf>

Brief of Amici Curiae American Antitrust Institute, Consumer Federation of America and Consumers Union Supporting McKenzie-Williamette and Affirmance, *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2008) (Nos. 05-36153, 05-36202)

Brief of Amici Curiae Genentech, Inc., Honeywell International Inc., Kimberly-Clark Corp., Kraft Foods, Inc., The Coca-Cola Company, and United Technologies Corp. in Support of Appellant/Cross-Appellee *PeaceHealth*, *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2008) (Nos. 05-035627, 05-35640)

Brief of Amici Curiae Law Professors in Support of Defendant-Appellant and Cross-Appellee *PeaceHealth* Supporting Reversal of the Verdict Concerning Bundled Discounts, *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2008) (Nos. 05-35627, 05-35640, 05-36153, 05-36202)

Brief of Pacific Bell Telephone Company (D/B/A AT&T California) and Visa U.S.A. Inc. as Amici Curiae Supporting Reversal, *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2008) (Nos. 05-35627, 05-35640, 05-36153, 05-36202)

Brief for Appellant United States of America, *United States v. AMR Corp.*, 335 F.3d 1109 (10th Cir. 2003) (No. 01-3202), *available at* <http://www.usdoj.gov/atr/cases/f9800/9814.pdf>

Governmental Materials

153 CONG. REC. H15741 (daily ed. Dec. 17, 2007)

ANTITRUST MODERNIZATION COMM'N, REPORT AND RECOMMENDATIONS (2007), *available at* http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf

CANADIAN COMPETITION BUREAU, ENFORCEMENT GUIDELINES: PREDATORY PRICING (2008), *available at* [http://www.competitionbureau.gc.ca/epic/site/cb-bc.nsf/vwapj/Predatory_Pricing_Guidelines-e.pdf/\\$file/Predatory_Pricing_Guidelines-e.pdf](http://www.competitionbureau.gc.ca/epic/site/cb-bc.nsf/vwapj/Predatory_Pricing_Guidelines-e.pdf/$file/Predatory_Pricing_Guidelines-e.pdf)

Competitive Impact Statement, *United States v. Microsoft Corp.*, 56 F.3d 1448 (D.C. Cir. 1995) (Nos. 95-5037, 95-5039), *available at* <http://www.usdoj.gov/atr/cases/f0000/0045.pdf>

DIRECTORATE FOR FIN. AND ENTER. AFFAIRS COMPETITION COMM., ORG. FOR ECON. CO-OPERATION AND DEV., REMEDIES AND SANCTIONS IN ABUSE OF DOMINANCE CASES (2007), *available at* <http://www.oecd.org/dataoecd/20/17/38623413.pdf>

DIRECTORATE-GEN. FOR COMPETITION, EUROPEAN COMM'N, DISCUSSION PAPER ON THE APPLICATION OF ARTICLE 82 OF THE TREATY TO EXCLUSIONARY ABUSES (2005), *available at* ec.europa.eu/comm/competition/antitrust/art82/discpaper2005.pdf

- FED. TRADE COMM'N & U.S. DEP'T OF JUSTICE, U.S. FEDERAL TRADE COMMISSION'S AND DEPARTMENT OF JUSTICE'S EXPERIENCE WITH TECHNICAL ASSISTANCE FOR THE EFFECTIVE APPLICATION OF COMPETITION LAWS (2008), *available at* <http://ftc.gov/oia/wkshp/docs/exp.pdf>
- FTC Policy Statement on Monetary Equitable Remedies in Competition Cases, 68 Fed. Reg. 45,820 (Aug. 4, 2003)
- H.R. Rep. No. 63-627 (1914)
- INT'L COMPETITION NETWORK, WAIVERS OF CONFIDENTIALITY IN MERGER INVESTIGATIONS (n.d.), *available at* <http://www.internationalcompetitionnetwork.org/media/archive0611/NPWaiversFinal.pdf>
- INT'L COMPETITION POLICY ADVISORY COMM., FINAL REPORT (2000), *available at* <http://www.usdoj.gov/atr/icpac/finalreport.htm>
- Organisation for Economic Co-operation and Dev., Best Practice Roundtables on Competition Policy, http://www.oecd.org/document/38/0,3343,en_2649_34715_2474918_1_1_1_37463,00.html (last visited Aug. 28, 2008)
- ORGANISATION FOR ECON. CO-OPERATION & DEV., REVISED RECOMMENDATION OF THE COUNCIL CONCERNING CO-OPERATION BETWEEN MEMBER COUNTRIES ON ANTICOMPETITIVE PRACTICES AFFECTING INTERNATIONAL TRADE (1995), *available at* <http://www.oecd.org/dataoecd/60/42/21570317.pdf>
- UNILATERAL CONDUCT WORKING GROUP, INT'L COMPETITION NETWORK, DOMINANCE/SUBSTANTIAL MARKET POWER ANALYSIS PURSUANT TO UNILATERAL CONDUCT LAWS: RECOMMENDED PRACTICES (2007), *available at* http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/Unilateral_WG_1.pdf
- UNILATERAL CONDUCT WORKING GROUP, INT'L COMPETITION NETWORK, REPORT ON PREDATORY PRICING (2008), *available at* http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/FINALPredatoryPricing.PDF.pdf
- UNILATERAL CONDUCT WORKING GROUP, INT'L COMPETITION NETWORK, REPORT ON SINGLE BRANDING/EXCLUSIVE DEALING (2008), *available at* http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/Unilateral_WG_4.pdf
- UNILATERAL CONDUCT WORKING GROUP, INT'L COMPETITION NETWORK, REPORT ON THE OBJECTIVES OF UNILATERAL CONDUCT LAWS, ASSESSMENT OF DOMINANCE/SUBSTANTIAL MARKET POWER, AND STATE CREATED MONOPOLIES (May 2007), *available at* http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/Objectives%20of%20Unilateral%20Conduct%20May%202007.pdf
- UNILATERAL CONDUCT WORKING GROUP, INT'L COMPETITION NETWORK, STATE-CREATED MONOPOLIES ANALYSIS PURSUANT TO UNILATERAL CONDUCT LAWS: RECOMMENDED PRACTICES (n.d.), *available at* http://www.internationalcompetitionnetwork.org/media/library/unilateral_conduct/Unilateral_WG_2.pdf
- U.S. Dep't of Justice, Antitrust Cooperation Agreements, http://www.usdoj.gov/atr/public/international/int_arrangements.htm (last visited Aug. 27, 2008)
- U.S. DEP'T OF JUSTICE, ANTITRUST DIVISION POLICY GUIDE TO MERGER REMEDIES (2004), *available at* <http://www.usdoj.gov/atr/public/guidelines/205108.pdf>
- U.S. Dep't of Justice, Sherman Act Violations Yielding a Corporate Fine of \$10 Million or More (2008), *available at* <http://www.usdoj.gov/atr/public/criminal/225540.pdf>
- U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST ENFORCEMENT GUIDELINES FOR INTERNATIONAL OPERATIONS (1995), *available at* <http://www.usdoj.gov/atr/public/guidelines/internat.htm>
- U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION (2007), *available at* <http://www.usdoj.gov/atr/public/hearings/ip/222655.pdf>
- U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES (rev. ed. 1997), *available at* <http://www.usdoj.gov/atr/public/guidelines/hmg.pdf>

Articles and Books

- Alden F. Abbott & Michael A. Salinger, *Learning from the Past: The Lessons of Vietnam, IBM, and Tying*, COMPETITION POL'Y INT'L, Spring 2006, at 3
- Walter Adams, *Dissolution, Divorcement, Divestiture: The Pyrrhic Victories of Antitrust*, 27 IND. L.J. 1 (1951)
- Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841 (1990)
- Phillip Areeda, *Monopolization, Mergers, and Markets: A Century Past and the Future*, 75 CAL. L. REV. 959 (1987)
- PHILLIP E. AREEDA ET AL., ANTITRUST LAW (2d ed. 2000, 2d ed. 2004 & 3d ed. 2007)
- PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW (1996, 2d ed. 2002, 2d ed. 2004 & Supp. 2007)
- PHILLIP AREEDA & DONALD F. TURNER, ANTITRUST LAW (1978)
- Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697 (1975)

- Thomas C. Arthur, *The Costly Quest for Perfect Competition: Kodak and Nonstructural Market Power*, 69 N.Y.U. L. REV. 1 (1994)
- Donald I. Baker, *Compulsory Access to Network Joint Ventures Under the Sherman Act: Rules or Roulette?*, 1993 UTAH L. REV. 999
- Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 ANTITRUST L.J. 129 (2007)
- Jonathan B. Baker, *Predatory Pricing After Brooke Group: An Economic Perspective*, 62 ANTITRUST L.J. 585 (1994)
- Jonathan B. Baker, *Promoting Innovation Competition Through the Aspen/Kodak Rule*, 7 GEO. MASON L. REV. 495 (1999)
- Jonathan B. Baker & Timothy F. Bresnahan, *Empirical Methods of Identifying and Measuring Market Power*, 61 ANTITRUST L.J. 3 (1992)
- Thomas O. Barnett, *Section 2 Remedies: A Necessary Challenge*, in 2007 ANNUAL PROCEEDINGS OF THE FORDHAM COMPETITION LAW INSTITUTE (Barry E. Hawk ed., 2008)
- WILLIAM J. BAUMOL, *THE FREE-MARKET INNOVATION MACHINE* (2002)
- William J. Baumol, *Predation and the Logic of the Average Variable Cost Test*, 39 J.L. & ECON. 49 (1996)
- William J. Baumol, *Principles Relevant to Predatory Pricing*, in SWEDISH COMPETITION AUTHORITY, *THE PROS AND CONS OF LOW PRICES* 15 (2003)
- C. Frederick Beckner III & Steven C. Salop, *Decision Theory and Antitrust Rules*, 67 ANTITRUST L.J. 41 (1999)
- George J. Benston, *Accounting Numbers and Economic Values*, 27 ANTITRUST BULL. 161 (1982)
- William Blumenthal, *The Challenge of Sovereignty and the Mechanisms of Convergence*, 72 ANTITRUST L.J. 267 (2004)
- Patrick Bolton et al., *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239 (2000)
- ROBERT H. BORK, *THE ANTITRUST PARADOX* (1978)
- Michael Boudin, *Antitrust Doctrine and the Sway of Metaphor*, 75 GEO. L.J. 395 (1986)
- Ward S. Bowman, *Restraint of Trade by the Supreme Court: The Utah Pie Case*, 77 YALE L.J. 70 (1967)
- Malcolm R. Burns, *New Evidence of Price Cutting*, 10 MANAGERIAL & DECISION ECON. 327 (1989)
- Malcolm R. Burns, *Predatory Pricing and the Acquisition Cost of Competitors*, 94 J. POL. ECON. 266 (1986)
- Dennis W. Carlton, *Does Antitrust Need to Be Modernized?*, J. ECON. PERSP., Summer 2007, at 155
- Dennis W. Carlton, *A General Analysis of Exclusionary Conduct and Refusal to Deal – Why Aspen and Kodak Are Misguided*, 68 ANTITRUST L.J. 659 (2001)
- Dennis W. Carlton, *Market Definition: Use and Abuse*, COMPETITION POL'Y INT'L, Spring 2007, at 3
- Dennis W. Carlton, *The Relevance for Antitrust Policy of Theoretical and Empirical Advances in Industrial Organization*, 12 GEO. MASON L. REV. 47 (2003)
- Dennis W. Carlton & Ken Heyer, *Appropriate Antitrust Policy Towards Single-Firm Conduct* (Econ. Analysis Group, Discussion Paper No. EAG 08–2, 2008), available at <http://www.usdoj.gov/atr/public/eag/231610.pdf>
- DENNIS W. CARLTON & JEFFREY M. PERLOFF, *MODERN INDUSTRIAL ORGANIZATION* (4th ed. 2005)
- Dennis W. Carlton & Michael Waldman, *How Economics Can Improve Antitrust Doctrine Towards Tie-In Sales: Comment on Jean Tirole's "The Analysis of Tying Cases: A Primer,"* COMPETITION POL'Y INT'L, Spring 2005, at 27
- Dennis W. Carlton & Michael Waldman, *The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries*, 33 RAND J. ECON. 194 (2002)
- Dennis W. Carlton & Michael Waldman, *Tying, Upgrades, and Switching Costs in Durable-Goods Markets* (Nat'l Bureau of Econ. Research, Working Paper No. 11407, 2005), available at <http://www.nber.org/papers/w11407>
- Peter C. Carstensen, *False Positives in Identifying Liability for Exclusionary Conduct: Conceptual Error, Business Reality, and Aspen*, 2008 WIS. L. REV. 295
- Ronald A. Cass & Keith N. Hylton, *Preserving Competition: Economic Analysis, Legal Standards and Microsoft*, 8 GEO. MASON L. REV. 1 (1999)
- Edward Cavanagh, *Antitrust Remedies Revisited*, 84 OR. L. REV. 147 (2005)
- Edward D. Cavanagh, *Detrebling Antitrust Damages: An Idea Whose Time Has Come?*, 61 TUL. L. REV. 777 (1987)
- Jay Pil Choi & Christodoulos Stefanadis, *Tying, Investment, and the Dynamic Leverage Theory*, 32 RAND J. ECON. 52 (2001)
- William S. Comanor & F. M. Scherer, *Rewriting History: The Early Sherman Act Monopolization Cases*, 2 INT'L J. ECON. BUS. 263 (1995)
- James C. Cooper et al., *Does Price Discrimination Intensify Competition? Implications for Antitrust*, 72 ANTITRUST L.J. 327 (2005)
- James Cooper et al., *Vertical Restrictions and Antitrust Policy: What About the Evidence?*, COMPETITION POL'Y INT'L, Autumn 2005, at 45
- Robert W. Crandall, *Costly Exercises in Futility: Breaking Up Firms to Increase Competition* (Dec. 2003) (unpublished manuscript), available at http://www.brookings.edu/~media/Files/rc/papers/2003/12_competition_crandall/12_competition_crandall.pdf
- Robert W. Crandall & Kenneth G. Elzinga, *Injunctive Relief in Sherman Act Monopolization Cases*, 21 RES. LAW & ECON. 277 (2004)
- Daniel A. Crane, *Mixed Bundling, Profit Sacrifice, and Consumer Welfare*, 55 EMORY L.J. 423 (2006)
- Daniel A. Crane, *Multiproduct Discounting: A Myth of Nonprice Predation*, 72 U. CHI. L. REV. 27 (2005)

- Daniel A. Crane, *The Paradox of Predatory Pricing*, 91 CORNELL L. REV. 1 (2005)
- Richard Craswell, *Regulating Deceptive Advertising: The Role of Cost Benefit Analysis*, 64 S. CAL. L. REV. 549 (1991)
- Susan A. Creighton et al., *Cheap Exclusion*, 72 ANTITRUST L.J. 975 (2005)
- The Current State of Economics Underlying Section 2: Comments of Michael Katz and Michael Salinger*, ANTITRUST SOURCE, Dec. 2006, at 1, <http://www.abanet.org/antitrust/at-source/06/12/Dec06-BrownBag.pdf>
- Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 51 NW. U. L. REV. 281 (1956)
- Phred Dvorak, *Why Multiple Headquarters Multiply*, WALL ST. J., Nov. 19, 2007, at B1
- Frank H. Easterbrook, *Detrebling Antitrust Damages*, 28 J.L. & ECON. 445 (1985)
- Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1 (1984)
- Frank H. Easterbrook, *On Identifying Exclusionary Conduct*, 61 NOTRE DAME L. REV. 972 (1986)
- Frank H. Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263 (1981)
- Frank H. Easterbrook, *Vertical Arrangements and the Rule of Reason*, 53 ANTITRUST L.J. 135 (1984)
- Frank H. Easterbrook, *When Is It Worthwhile to Use Courts to Search for Exclusionary Conduct?*, 2003 COLUM. BUS. L. REV. 345
- Aaron S. Edlin, *Stopping Above-Cost Predatory Pricing*, 111 YALE L.J. 941 (2002)
- Aaron S. Edlin & Joseph Farrell, *The American Airlines Case: A Chance to Clarify Predation Policy* (2001), in *THE ANTITRUST REVOLUTION* 502 (John E. Kwoka, Jr. & Lawrence J. White eds., 2004)
- Isaac Ehrlich & Richard A. Posner, *An Economic Analysis of Legal Rulemaking*, 3 J. LEGAL STUD. 257 (1974)
- Einer Elhauge, *Defining Better Monopolization Standards*, 56 STAN. L. REV. 253 (2003)
- Einer Elhauge, *Why Above-Cost Price Cuts to Drive Out Entrants Are Not Predatory – and the Implications for Defining Costs and Market Power*, 112 YALE L.J. 681 (2003)
- EINER ELHAUGE & DAMIEN GERADIN, *GLOBAL COMPETITION LAW AND ECONOMICS* (2007)
- Kenneth G. Elzinga & Thomas F. Hogarty, *Utah Pie and the Consequences of Robinson-Patman*, 21 J.L. & ECON. 427 (1978)
- Kenneth G. Elzinga & David E. Mills, *Predatory Pricing in the Airlines Industry: Spirit Airlines v. Northwest Airlines*, in *THE ANTITRUST REVOLUTION* (John E. Kwoka & Lawrence J. White eds., 5th ed. 2008)
- Kenneth G. Elzinga & David E. Mills, *Predatory Pricing and Strategic Theory*, 89 GEO. L.J. 2475 (2001)
- Kenneth G. Elzinga & David E. Mills, *Testing for Predation: Is Recoupment Feasible?*, 34 ANTITRUST BULL. 869 (1989)
- Roy T. Englert, Jr., *Defending the Result in Lepage's v. 3M: A Response to Other Commentators*, 50 ANTITRUST BULL. 481 (2005)
- RICHARD A. EPSTEIN, *ANTITRUST CONSENT DECREES IN THEORY AND PRACTICE* (2007)
- David S. Evans & Michael Salinger, *Why Do Firms Bundle and Tie? Evidence from Competitive Markets and Implications for Tying Law*, 22 YALE J. ON REG. 37 (2005)
- Brian A. Facey & Dany H. Assaf, *Monopolization and Abuse of Dominance in Canada, the United States, and the European Union: A Survey*, 70 ANTITRUST L.J. 513 (2002)
- Joseph Farrell, *Deconstructing Chicago on Exclusive Dealing*, 50 ANTITRUST BULL. 465 (2005)
- Robin Cooper Feldman, *Defensive Leveraging in Antitrust*, 87 GEO. L.J. 2079 (1999)
- Franklin M. Fisher, *Diagnosing Monopoly*, Q. REV. ECON. & BUS., Summer 1979, at 7
- Franklin M. Fisher & John J. McGowan, *On the Misuse of Accounting Rates of Return to Infer Monopoly Profits*, 73 AM. ECON. REV. 82 (1983)
- Andrew I. Gavil, *Exclusionary Distribution Strategies by Dominant Firms: Striking a Better Balance*, 72 ANTITRUST L.J. 3 (2004)
- General Approaches to Defining Abusive/Monopolistic Practices – Roundtable*, in 2006 ANNUAL PROCEEDINGS OF THE FORDHAM COMPETITION LAW INSTITUTE 577 (Barry E. Hawk ed., 2007)
- David Genesove & Wallace P. Mullin, *Predation and Its Rate of Return: The Sugar Industry, 1887–1914*, 37 RAND J. ECON. 47 (2006)
- Douglas H. Ginsburg & Leah Brannon, *Determinants of Private Antitrust Enforcement in the United States*, COMPETITION POL'Y INT'L, Autumn 2005, at 29
- Kenneth L. Glazer & Brian R. Henry, *Coercive vs. Incentivizing Conduct: A Way Out of the Section 2 Impasse?*, ANTITRUST, Fall 2003, at 45
- Kenneth L. Glazer & Abbott B. Lipsky, Jr., *Unilateral Refusals to Deal Under Section 2 of the Sherman Act*, 63 ANTITRUST L.J. 749 (1995)
- Mark A. Glick et al., *Importing the Merger Guidelines Market Test in Section 2 Cases: Potential Benefits and Limitations*, 42 ANTITRUST BULL. 121 (1997)
- Elizabeth Granitz & Benjamin Klein, *Monopolization by "Raising Rivals' Costs": The Standard Oil Case*, 39 J.L. & ECON. 1 (1996)
- Patrick Greenlee et al., *An Antitrust Analysis of Bundled Loyalty Discounts*, 26 INT'L J. INDUS. ORG. 1132 (2008)

- Patrick Greenlee & David S. Reitman, *Competing with Loyalty Discounts* (Jan. 7, 2006) (unpublished working paper), available at <http://www.wcas.northwestern.edu/csio/Conferences/Papers2006/GreenleeandReitmanpaper.pdf>
- Andrew T. Guzman, *Antitrust and International Regulatory Federalism*, 76 N.Y.U. L. REV. 1142 (2001)
- Scott C. Hall, *Ross-Simmons v. Weyerhaeuser: Antitrust Liability in Predatory Bidding Cases*, ANTITRUST, Spring 2006, at 55
- George A. Hay, *A Monopolist's "Duty to Deal": The Briar Patch Revisited*, 3 SEDONA CONF. J. 1 (2002)
- George A. Hay, *Trinko: Going All the Way*, 50 ANTITRUST BULL. 527 (2005)
- Ken Heyer, *A World of Uncertainty: Economics and the Globalization of Antitrust*, 72 ANTITRUST L.J. 375 (2005)
- HERBERT HOVENKAMP, *THE ANTITRUST ENTERPRISE* (2005)
- HERBERT HOVENKAMP, *ANTITRUST LAW* (2d ed. 2005)
- Herbert Hovenkamp, *Exclusion and the Sherman Act*, 72 U. CHI. L. REV. 147 (2005)
- HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY* (3d ed. 2005)
- Herbert Hovenkamp, *The Law of Exclusionary Pricing*, COMPETITION POL'Y INT'L, Spring 2006, at 21
- Herbert Hovenkamp, *The Monopolization Offense*, 61 OHIO ST. L.J. 1035 (2000)
- Herbert Hovenkamp, *Signposts of Anticompetitive Exclusion: Restraints on Innovation and Economies of Scale*, in 2006 ANNUAL PROCEEDINGS OF THE FORDHAM COMPETITION LAW INSTITUTE 409 (Barry E. Hawk ed., 2007)
- HERBERT HOVENKAMP ET AL., *IP AND ANTITRUST* (Supp. 2006)
- Keith N. Hylton & Michael Salinger, *Tying Law and Policy: A Decision-Theoretic Approach*, 69 ANTITRUST L.J. 469 (2001)
- Michael Jacobs, *Introduction: Hail or Farewell? The Aspen Case 20 Years Later*, 73 ANTITRUST L.J. 59 (2005)
- Jonathan M. Jacobson, *Exclusive Dealing, "Foreclosure," and Consumer Harm*, 70 ANTITRUST L.J. 311 (2002)
- Jonathan M. Jacobson & Scott A. Sher, *"No Economic Sense" Makes No Sense for Exclusive Dealing*, 73 ANTITRUST L.J. 779 (2006)
- Charles A. James, *The Real Microsoft Case and Settlement*, ANTITRUST, Fall 2001, at 58
- Frédéric Jenny, *Globalization, Competition and Trade Policy: Convergence, Divergence and Cooperation*, in INTERNATIONAL AND COMPARATIVE COMPETITION LAW AND POLICIES 31 (Yang-Ching Chao et al. eds., 2001)
- Thomas E. Kauper, *Section Two of the Sherman Act: The Search for Standards*, 93 GEO. L.J. 1623 (2005)
- Roy W. Kenney & Benjamin Klein, *The Economics of Block Booking*, 26 J.L. & ECON. 497 (1983)
- John B. Kirkwood, *Buyer Power and Exclusionary Conduct: Should Brooke Group Set the Standards for Buyer-Induced Price Discrimination and Predatory Bidding?*, 72 ANTITRUST L.J. 625 (2005)
- Benjamin Klein, *Exclusive Dealing as Competition for Distribution "On the Merits,"* 12 GEO. MASON L. REV. 119 (2003)
- Benjamin Klein & Kevin M. Murphy, *Vertical Restraints as Contract Enforcement Mechanisms*, 31 J.L. & ECON. 265 (1988)
- William Kolasky, *Reinvigorating Antitrust Enforcement in the United States: A Proposal*, ANTITRUST, Spring 2008, at 85
- Sreya Kolay et al., *All-Units Discounts in Retail Contracts*, 13 J. ECON. & MGMT. STRATEGY 429 (2004)
- Roland H. Koller II, *The Myth of Predatory Pricing: An Empirical Study*, ANTITRUST L. & ECON. REV., Summer 1971, at 105
- William E. Kovacic, *The Antitrust Paradox Revisited: Robert Bork and the Transformation of Modern Antitrust Policy*, 36 WAYNE L. REV. 1413 (1990)
- William E. Kovacic, *Designing Antitrust Remedies for Dominant Firm Misconduct*, 31 CONN. L. REV. 1285 (1999)
- William E. Kovacic, *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix*, 2007 COLUM. BUS. L. REV. 1
- Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price*, 96 YALE L.J. 209 (1986)
- David M. Kreps & Robert Wilson, *Reputation and Imperfect Information*, 27 J. ECON. THEORY 253 (1982)
- Francine Lafontaine & Margaret E. Slade, *Retail Contracting: Theory and Practice*, 45 J. INDUS. ECON. 1 (1997)
- Thomas A. Lambert, *Evaluating Bundled Discounts*, 89 MINN. L. REV. 1688 (2005)
- Robert H. Lande, *Are Antitrust "Treble" Damages Really Single Damages?*, 54 OHIO ST. L.J. 115 (1993)
- Robert H. Lande, *Should Predatory Pricing Rules Immunize Exclusionary Discounts?*, 2006 UTAH L. REV. 863
- William M. Landes & Richard A. Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937 (1981)
- Thomas B. Leary, *The Dialogue Between Students of Business and Students of Antitrust: A Keynote Address*, 47 N.Y.L. SCH. L. REV. 1 (2003)
- Ari Lehman, Note, *Eliminating the Below-Cost Pricing Requirement from Predatory Pricing Claims*, 27 CARDOZO L. REV. 343 (2005)
- A. P. Lerner, *The Concept of Monopoly and the Measurement of Monopoly Power*, 1 REV. ECON. STUD. 157 (1934)

- Francois Leveque, *The Controversial Choice of Remedies to Cope with the Anti-Competitive Behavior of Microsoft* (Berkeley Program in Law & Econ. Working Paper Series, Paper No. 34, 2000), available at <http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1055&context=blewp>
- WILLIAM W. LEWIS, *THE POWER OF PRODUCTIVITY: WEALTH, POVERTY, AND THE THREAT TO GLOBAL STABILITY* (2004)
- Abbott B. Lipsky, Jr. & J. Gregory Sidak, *Essential Facilities*, 51 STAN. L. REV. 1187 (1999)
- Robert E. Litan & William D. Nordhaus, *Effective Structural Relief in U.S. v. Microsoft* (May 2000) (unpublished manuscript), available at http://aei-brookings.org/admin/authorpdfs/redirectsafely.php?fname=../pdffiles/Structural_Relief.pdf
- John E. Lopatka & Andrew N. Kleit, *The Mystery of Lorain Journal and the Quest for Foreclosure in Antitrust*, 73 TEX. L. REV. 1255 (1995)
- John E. Lopatka & William H. Page, *A (Cautionary) Note on Remedies in the Microsoft Case*, ANTITRUST, Summer 1999, at 25
- John E. Lopatka & William H. Page, *Devising a Microsoft Remedy that Serves Consumers*, 9 GEO. MASON L. REV. 691 (2001)
- JOHN R. LOTT, JR., ARE PREDATORY COMMITMENTS CREDIBLE? (1999)
- Paul D. Marquardt & Mark Leddy, *The Essential Facilities Doctrine and Intellectual Property Rights: A Response to Pitofsky, Patterson, and Hooks*, 70 ANTITRUST L.J. 847 (2003)
- R. Preston McAfee et al., *Multiproduct Monopoly, Commodity Bundling, and Correlation of Values*, 104 Q.J. ECON. 371 (1989)
- John S. McGee, *Predatory Price Cutting: The Standard Oil (N.J.) Case*, 1 J.L. & ECON. 137 (1958)
- A. Douglas Melamed, *Exclusionary Conduct Under the Antitrust Laws: Balancing, Sacrifice, and Refusals to Deal*, 20 BERKELEY TECH. L.J. 1247 (2005)
- A. Douglas Melamed, *Exclusive Dealing Agreements and Other Exclusionary Conduct – Are There Unifying Principles?*, 73 ANTITRUST L.J. 375 (2006)
- Michael J. Meurer, *Vertical Restraints and Intellectual Property Law: Beyond Antitrust*, 87 MINN. L. REV. 1871 (2003)
- Paul Milgrom, *Predatory Pricing*, in THE NEW PALGRAVE: A DICTIONARY OF ECONOMICS 937 (John Eatwell et al. eds., 1987)
- Paul Milgrom & John Roberts, *Predation, Reputation, and Entry Deterrence*, 27 J. ECON. THEORY 280 (1982)
- David E. Mills, *Market Share Discounts* (Aug. 8, 2006) (unpublished working paper), available at <http://www.virginia.edu/economics/papers/mills/Market%20Share%20Discounts.pdf>
- Timothy J. Muris, *The FTC and the Law of Monopolization*, 67 ANTITRUST L.J. 693 (2000)
- Barry Nalebuff, *Bundling as an Entry Barrier*, 119 Q.J. ECON. 159 (2004)
- Barry Nalebuff, *Bundling As a Way to Leverage Monopoly* (Yale Sch. of Mgmt., Working Paper No. ES-36, 2004)
- Janusz A. Ordover & Robert D. Willig, *An Economic Definition of Predation: Pricing and Product Innovation*, 91 YALE L.J. 8 (1981)
- Aaron M. Panner, *Bundled Discounts and the Antitrust Modernization Commission*, ESAPIENCE CENTER FOR COMPETITION POLICY, July 2007, at 6
- Mark R. Patterson, *The Sacrifice of Profits in Non-Price Predation*, ANTITRUST, Fall 2003, at 37
- Mark S. Popofsky, *Defining Exclusionary Conduct: Section 2, the Rule of Reason, and the Unifying Principle Underlying Antitrust Rules*, 73 ANTITRUST L.J. 435 (2006)
- RICHARD A. POSNER, ANTITRUST LAW (2d ed. 2001)
- Richard A. Posner, *Vertical Restraints and Antitrust Policy*, 72 U. CHI. L. REV. 229 (2005)
- Eric B. Rasmusen et al., *Naked Exclusion*, 81 AM. ECON. REV. 1137 (1991)
- Eric B. Rasmusen et al., *Naked Exclusion: Reply*, 90 AM. ECON. REV. 310 (2000)
- R. Craig Romaine & Steven C. Salop, *Alternative Remedies for Monopolization in the Microsoft Case*, ANTITRUST, Summer 1999, at 15
- Roundtable Discussion: Antitrust and the Roberts Court*, ANTITRUST, Fall 2007, at 8
- Daniel L. Rubinfeld, *3M's Bundled Rebates: An Economic Perspective*, 72 U. CHI. L. REV. 243 (2005)
- Steven C. Salop, *Exclusionary Conduct, Effect on Consumers, and the Flawed Profit-Sacrifice Standard*, 73 ANTITRUST L.J. 311 (2006)
- Margaret Sanderson & Ralph A. Winter, *"Profits" Versus "Rents" in Antitrust Analysis: An Application to the Canadian Waste Services Merger*, 70 ANTITRUST L.J. 485 (2002)
- Tim R. Sass, *The Competitive Effects of Exclusive Dealing: Evidence from the U.S. Beer Industry*, 23 INT'L J. INDUS. ORG. 203 (2005)
- Richard Schmalensee, *Another Look at Market Power*, 95 HARV. L. REV. 1789 (1982)
- Marius Schwartz & Gregory J. Werden, *A Quality-Signaling Rationale for Aftermarket Tying*, 64 ANTITRUST L.J. 387 (1996)
- Fiona Scott Morton, *Entry and Predation: British Shipping Cartels 1879–1929*, 6 J. ECON. & MGMT. STRATEGY 679 (1997)
- SECTION OF ANTITRUST LAW, AM. BAR ASS'N, ANTITRUST LAW DEVELOPMENTS (6th ed. 2007)
- SECTION OF ANTITRUST LAW, AM. BAR ASS'N, MARKET POWER HANDBOOK (2005)
- Ilya R. Segal & Michael D. Whinston, *Naked Exclusion: Comment*, 90 AM. ECON. REV. 296 (2000)

- Howard A. Shelanski & J. Gregory Sidak, *Antitrust Divestiture in Network Industries*, 68 U. CHI. L. REV. 1 (2001)
- Joseph Gregory Sidak, *Debunking Predatory Innovation*, 83 COLUM. L. REV. 1121 (1983)
- Robert M. Solow, *Technical Change and the Aggregate Production Function*, 39 REV. ECON. & STAT. 312 (1957)
- James B. Speta, *Antitrust and Local Competition Under the Telecommunications Act*, 71 ANTITRUST L.J. 99 (2003)
- Richard M. Steuer, *Customer-Instigated Exclusive Dealing*, 68 ANTITRUST L.J. 239 (2000)
- Richard M. Steuer, *Exclusive Dealing in Distribution*, 69 CORNELL L. REV. 101 (1983)
- George J. Stigler, *A Note on Block Booking*, in THE ORGANIZATION OF INDUSTRY 165 (1968)
- George W. Stocking & Willard F. Mueller, *The Cellophane Case and the New Competition*, 45 AM. ECON. REV. 29 (1955)
- E. Thomas Sullivan, *The Jurisprudence of Antitrust Divestiture: The Path Less Traveled*, 86 MINN. L. REV. 565 (2002)
- LAWRENCE SULLIVAN, HANDBOOK OF THE LAW OF ANTITRUST (1977)
- Willard K. Tom et al., *Anticompetitive Aspects of Market-Share Discounts and Other Incentives to Exclusive Dealing*, 67 ANTITRUST L.J. 615 (2000)
- Willard K. Tom & Gregory F. Wells, *Raising Rivals' Costs: The Problem of Remedies*, 12 GEO. MASON L. REV. 389 (2003)
- Kerrin M. Vautier, *International Approaches to Competition Laws: Government Cooperation for Business Competition*, in INTERNATIONAL AND COMPARATIVE COMPETITION LAW AND POLICIES 187 (Yang-Ching Chao et al. eds., 2001)
- John Vickers, *Market Power in Competition Cases*, 2 EUR. COMPETITION J. 3 (2006)
- Balder Von Hohenbalken & Douglas S. West, *Empirical Tests for Predatory Reputation*, 19 CAN. J. ECON. 160 (1986)
- David F. Weiman & Richard C. Levin, *Preying for Monopoly? The Case of Southern Bell Telephone Company, 1894-1912*, 102 J. POL. ECON. 103 (1994)
- Philip J. Weiser, Goldwasser, *The Telecom Act, and Reflections on Antitrust Remedies*, 55 ADMIN. L. REV. 1 (2003)
- Gregory J. Werden, *The American Airlines Decision: Not with a Bang but a Whimper*, ANTITRUST, Fall 2003, at 32
- Gregory J. Werden, *Identifying Exclusionary Conduct Under Section 2: The "No Economic Sense" Test*, 73 ANTITRUST L.J. 413 (2006)
- Gregory J. Werden, *Identifying Single-Firm Exclusionary Conduct: From Vague Concepts to Administrable Rules*, in 2006 ANNUAL PROCEEDINGS OF THE FORDHAM COMPETITION LAW INSTITUTE 509 (Barry E. Hawk ed., 2007)
- Gregory J. Werden, *The Law and Economics of the Essential Facility Doctrine*, 32 ST. LOUIS U. L.J. 433 (1987)
- Gregory J. Werden, *Market Delineation Under the Merger Guidelines: Monopoly Cases and Alternative Approaches*, 16 REV. INDUS. ORG. 211 (2000)
- Gregory J. Werden, *Remedies for Exclusionary Conduct Should Protect and Preserve the Competitive Process*, 76 ANTITRUST L.J. (forthcoming 2009)
- Michael D. Whinston, *Exclusivity and Tying in U.S. v. Microsoft: What We Know, and Don't Know*, J. ECON. PERSP., Spring 2001, at 63
- MICHAEL D. WHINSTON, LECTURES ON ANTITRUST ECONOMICS (2006)
- Michael D. Whinston, *Tying, Foreclosure, and Exclusion*, 80 AM. ECON. REV. 837 (1990)
- SIMON N. WHITNEY, ANTITRUST POLICIES (1958)
- Diane P. Wood, *Cooperation and Convergence in International Antitrust: Why the Light Is Still Yellow*, in COMPETITION LAWS IN CONFLICT 177 (Richard A. Epstein & Michael S. Greve eds., 2004)
- Diane P. Wood, *"Unfair" Trade Injury: A Competition-Based Approach*, 41 STAN. L. REV. 1153 (1989)
- B. S. Yamey, *Predatory Price Cutting: Notes and Comments*, 15 J.L. & ECON. 129 (1972)
- Richard O. Zerbe, Jr., *Monopsony and the Ross-Simmons Case: A Comment on Salop and Kirkwood*, 72 ANTITRUST L.J. 717 (2005)
- Richard O. Zerbe, Jr. & Michael T. Mumford, *Does Predatory Pricing Exist? Economic Theory and the Courts After Brooke Group*, 41 ANTITRUST BULL. 949 (1996)

Speeches and Testimony

- Antitrust Modernization Commission: Public Hearing Hr'g Tr., Feb. 15, 2006, available at http://govinfo.library.unt.edu/amc/commission_hearings/pdf/060215_International_Transcript_reform.pdf
- Thomas O. Barnett, Assistant Attorney Gen., U.S. Dept. of Justice, Section 2 Remedies: A Necessary Challenge (Sept. 28, 2007), available at <http://www.usdoj.gov/atr/public/speeches/226537.pdf>
- Thomas O. Barnett, Assistant Attorney Gen., U.S. Dept. of Justice, Section 2 Remedies: What to Do After Catching the Tiger by the Tail (June 4, 2008), available at <http://www.usdoj.gov/atr/public/speeches/233884.pdf>
- Eleanor M. Fox, Walter J. Derenberg Professor of Trade Regulation, N.Y. Univ. Sch. of Law, Testimony Before the Antitrust Modernization Commission Hearing on International Issues (Feb. 15, 2006), available at http://govinfo.library.unt.edu/amc/commission_hearings/pdf/statement_Fox_final.pdf

- William E. Kovacic, Gen. Counsel, Fed. Trade Comm'n, Private Participation in the Enforcement of Public Competition Laws (May 15, 2003), *available at* <http://www.ftc.gov/speeches/other/030514biicl.shtm>
- R. Hewitt Pate, Assistant Attorney Gen., U.S. Dep't of Justice, Antitrust in a Transatlantic Context – from the Cicada's Perspective (June 7, 2004), *available at* <http://www.usdoj.gov/atr/public/speeches/203973.pdf>
- Steven C. Salop, Avoiding Error in the Antitrust Analysis of Unilateral Refusals to Deal (Sept. 21, 2005), *available at* http://govinfo.library.unt.edu/amc/commission_hearings/pdf/Salop_Statement_Revised%209-21.pdf
- Alexander Schaub, Dir. Gen., DG Competition, European Comm'n, Continued Focus on Reform: Recent Developments in EC Competition Policy (Oct. 25, 2001), *available at* http://ec.europa.eu/comm/competition/speeches/text/sp2001_031_en.pdf
- Carl Shapiro, Exclusionary Conduct: Testimony Before the Antitrust Modernization Commission (Sept. 29, 2005), *available at* http://govinfo.library.unt.edu/amc/commission_hearings/pdf/Shapiro_Statement.pdf
- Randolph W. Tritell, Assistant Dir. for Int'l Antitrust, International Antitrust Issues (Feb. 15, 2006), *available at* http://govinfo.library.unt.edu/amc/commission_hearings/pdf/Statement_Tritell.pdf

