

COMPETITION AND MONOPOLY:

SINGLE-FIRM CONDUCT UNDER

SECTION 2 OF THE SHERMAN ACT



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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

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.”).

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

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

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).

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

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.