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MONOPOLY POWER: USE, PROOF AND RELATIONSHIP TO ANTICOMPETITIVE EFFECTS IN SECTION 2 CASES

by Thomas J. Klotz[*]

[*] The views expressed are those of the author and Policy Studies' staff and do not necessarily reflect the views of the Commission or any individual Commissioner. The paper derives from early drafts developed in the context of the FTC/Department of Justice Joint Hearings on Section 2 of the Sherman Act: Single-Firm Conduct as Related to Competition. Any language that overlaps with other commentaries on the hearings reflects its origin in the common drafts.

[1] United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966) (identifying "the possession of monopoly power in the relevant market" as an element of the offense of monopoly).

[2] Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447, 456 (1993).

[3] Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004).

[4] *See* Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 225 (1993) (noting that if conduct "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. . . . '[predators] must obtain enough market power to set higher than competitive

raising price, or reducing innovation. Stated differently, "Behavior that might otherwise not be of concern to the antitrust laws—or that might even be viewed as procompetitive—can take on exclusionary connotations when practiced by a monopolist."[5]

This screening function provides certainty to the vast majority of firms that their conduct is not unlawful under section 2. It also helps to reduce enforcement costs, keeping many meritless cases out of court and allowing others to be resolved without a trial. When it can be determined that a firm lacks monopoly power, an evaluation of the firm's conduct may be avoided.[6]

For purposes of this screening function, courts traditionally have focused on whether monopoly power is present or likely to be obtained, i.e., they have tried to assess the *level* of market power. Yet, as discussed below, precise and reliable assessment of the presence of monopoly power is often difficult, and any screening inquiry is likely to be imperfect.

A second function of the monopoly power requirement often is intertwined with the assessment of the challenged conduct's effects. When the analysis turns to assessing effects, the focus shifts to whether there is a *change* in the level of market power that results from particular conduct.[7] As a recent commentary phrases it:

> [T]he ultimate economic question in antitrust litigation is almost never whether a firm or set of firms have market power. The case almost invariably concerns an economic objection to the challenged conduct . . . that turns on whether the conduct has increased (in a retrospective case) or is likely to increase (in a

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prices, and then must sustain those prices'" (quoting Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 590–91 (1986))); Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1, 20 (1984) ("Firms that lack [market] power cannot injure competition no matter how hard they try. They may injure a few consumers, or a few rivals, or themselves . . . by selecting 'anticompetitive' tactics. When the firms lack market power, . . . they cannot persist in deleterious practices.").

5 Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 U.S. 451, 488 (1992) (Scalia, J., dissenting); *see also* 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.").

6 *See* Dennis W. Carlton, *Market Definition: Use & Abuse*, COMPETITION POL'Y INT'L, Spring 2007, at 3, 19 ("[I]f there is no market power after the alleged bad act, then the antitrust inquiry ends.").

7 *See id.* at 19 ("[T]he central issue in a Section 2 case is whether some alleged bad act enables additional market power to be exercised, and, if so, whether any exercise of additional market power is offset by the additional provision of valuable services made profitable as a result of the price increase.").

[8] Jonathan B. Baker & Timothy F. Bresnahan, *Economic Evidence in Antitrust: Defining Markets & Measuring Market Power*, *in* HANDBOOK OF

discussed below, to the extent that courts use a variant of market power—an economic concept suitable for assessing anticompetitive effects—for purposes not directly related to that objective, analytical tension and implementation problems result.

This paper reviews relevant case law, scholarship, and presentations at the Federal Trade Commission/Department of Justice Hearings on Section 2 of the Sherman Act to examine the definition of monopoly power, evidence that demonstrates the existence of monopoly power, and conclusions that can be drawn from particular types of evidence. Section II considers the legal and economic definitions of monopoly power and the relationship between monopoly power and market power. Section III examines categories of evidence that courts have used to determine whether a firm possesses monopoly power, including market definition and market share, profitability, and direct evidence of the exercise of monopoly power. The discussion identifies the limitations of these types of evidence. Given those limitations, Sections IV and V present a framework for assessing whether a firm possesses monopoly power based on market share and the presence of anticompetitive effects. Section IV discusses the ability to draw conclusions based on a firm's market share; it suggests a rebuttable presumption that a firm with less than a 50% share of a properly defined relevant market lacks monopoly power. Section V discusses the inferences that may be supported by a demonstration of actual or likely anticompetitive effects and a causal link between the challenged conduct and anticompetitive harm; it urges recognition of the potential of such evidence to establish the presence of monopoly power. Finally, Section VI summarizes the conclusions.

II. The Definition of Monopoly Power[13]

Despite the prominent role of monopoly power in section 2 analysis, its meaning remains "open to much debate and interpretation."[14] The terms "market power" and "monopoly power" can have varied meanings, and this can generate semantic differences and disputes.

Market power is defined by economists as the ability profitably to price above marginal cost.[15] As a matter of economics, a firm possesses market power when the conditions of perfect competition are absent, so that the firm faces a downward-sloping demand curve. Firms in markets with differentiated products may face downward-sloping demand curves even if they do

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[13] This section analyzes the meaning of "monopoly power." Related issues raised by the attempt offense—requiring a "dangerous probability" of obtaining monopoly power—were not addressed in the hearings and generally are not examined in this paper.

[14] Alan J. Dashkin & Lawrence Wu, *Observations on the Multiple Dimensions of Market Power*, ANTITRUST, Summer 2005, at 53.

[15] *See* ABA SECTION OF ANTITRUST LAW, MARKET POWER HANDBOOK 1 (2005) ("Economists define 'market power' as the ability of a firm or group of firms within a market to profitably charge prices above the competitive level for a sustained period of time.") (emphasis omitted).

[16] *See, e.g.*, Sherman Act Section 2 Joint Hearing: Concluding Session Hr'g Tr. 55, May 8,

[19] *See* ABA SECTION OF ANTITRUST LAW, *supra* note 15, at 3 ("Economists often use the terms 'market power' and 'monopoly power' interchangeably . . . ."). *But cf.* DENNIS W. CARLTON & JEFFREY M. PERLOFF, M

[23] *See* Dickson v. Microsoft Corp., 309 F.3d 193, 199 n.1 (4th Cir. 2002) (citation omitted); United States v. Microsoft Corp., 253 F.3d 34, 51 (D.C. Cir. 2001) (en banc) (per curiam) (citation omitted); AD/SAT v. Associated Press, 181 F.3d 216, 227 (2d Cir. 1999) (citation omitted).

[24] *See* Mar. 7 Hr'g Tr. at 87 (White) (stating that 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.").

[25] Andrew I. Gavil, *Copperweld 2000: The Vanishing Gap Between Sections 1 and 2 of the Sherman Act*, 68 ANTITRUST L.J. 87, 102 (2000).

[26] *See* Eastman Kodak Co. v. Image Technical Services, Inc., 504 U.S. 451, 481 (1992) (concluding, without elaboration that evidence that Kodak "control[led] nearly 100% of the parts market and 80 to 95% of the service market, with no readily available substitutes," was sufficient to survive summary judgment).

[27] Copperweld Corp. v. Independence Tube Corp., 467 U.S. 752, 775 (1984); *see supra*

of both monopoly power under section 2 and market power under section 1.[29]

In sum, to the extent that market power and monopoly power address the same core policy issue—whether the firm is able profitably to maintain price above a competitive level—there is no clear means for distinguishing between the concepts.[30] To the extent that monopoly power requires "something greater," as added protection against chilling procompetitive conduct, that increment cannot be derived from competition analysis and will likely be somewhat arbitrary.

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[29] *See, e.g.*, Reazin v. Blue Cross & Blue Shield of Kan., Inc., 899 F.2d 951, 967–72 (10th Cir. 1990) (finding sufficient evidence that both market and monopoly power were present); Deauville Corp. v. Federated Dep't Stores, Inc., 756 F.2d 1183, 1192 (5th Cir. 1985) (finding the evidence insufficient for either market power under section 1 or monopoly power under section 2 because there was no finding that the conduct affected competition); *cf.* U.S. Anchor Mfg., Inc. v. Rule Indus., Inc. 7 F.3d 986, 994 n.12 (11th Cir. 1993) (treating the terms "monopoly power" and "market power" as synonymous); International Distrib. Ctrs., Inc. v. Walsh Trucking, 812 F.2d 786, 791 n.3 (2d Cir. 1987) (same).

[30] *See* Thomas G. Krattenmaker, Robert H. Lande & Steven C. Salop, *Monopoly Power and Market Power in Antitrust Law*, 76 GEO. L.J. 241, 247 (1987) ("Economists use both 'market power' and 'monopoly power' to refer to the power of a single firm or group of firms to price profitably above marginal cost."); Mar. 7 Hr'g Tr. at 32 (White) ("The way I was taught, it is all the same thing . . . ."); *id.* at 149–50 (Krattenmaker) (market power and monopoly power are "qualitatively the same"); CARLTON & PERLOFF, *supra* note 19, at 93 (terms monopoly power and market power typically are used to mean the ability to profitably set price above competitive levels); Hay, *supra* note 27, at 808 (equating the presence of market power with the potential for competitive harm); *cf.* Gregory J. Werden, *Demand Elasticities in Antitrust Analysis*, 66 ANTITRUST L.J. 363, 374 (1998) ("The precise distinction between 'market power' and 'monopoly power' requires an extended discussion, but the one critical point is that the courts use the term 'monopoly power' in a manner compatible with the economic concept of 'market power.'").

As discussed in Section II.B., *infra*, monopoly power invokes the additional consideration of durability. Moreover, in the context of section 1 or other areas of antitrust law, market power includes the ability of a *group* of firms to maintain price above the competitive level. Many section 1 cases address collusion, where the market power of a group of firms acting together is able to cause competitive harm. In such cases, the group jointly possesses the necessary market power; no single firm may possess sufficient market power. In contrast, under section 2, the concern is the power of a single firm. *See* Hay, *supra* note 27, at 818 n.43.

[31] *See* United States v. Dentsply Int'l, Inc., 399 F.3d 181, 188–89 (3d Cir. 2005) ("[I]n evaluating monopoly power, it is not market share that counts, but the ability to *maintain* market share.") (internal citation omitted); AREEDA & HOVENKAMP, *supra* note 21, ¶ 801d, at 387 ("Monopoly power must be shown to be persistent in order to warrant judicial intervention, which is always costly."); May 8 Hr'g Tr. at 48 (Pitofsky) ("If you have market power, but it only survives for a year and then is displaced by some other product that is not really market power.").

[32] *See, e.g.*, Am. Prof'l Testing Serv., Inc. v. Harcourt Brace Jovanovich Legal & Prof'l Pubs., Inc., 108 F.3d 1147, 1154 (9th Cir. 1997) ("'The plaintiff must show that new rivals are barred from entering the market and show that existing competitors lack the

[36] *See* Mar. 7 Hr'g Tr. at 82–83, 84–85 (Gavil).

[37] *See* AREEDA & HOVENKAMP, *supra* note 21, ¶ 801a, at 383 ("Few cases have paid much attention to the length of time that market power has been held.").

[38] Mar. 7 Hr'g Tr. at 87 (White). *But see* AREEDA & HOVENKAMP, *supra* note 21, ¶ 801a, at

In the *Cellophane* case,[45] the issue before the Supreme Court was whether the relevant market was cellophane or flexible packaging materials. Du Pont produced over seventy percent of the cellophane in the United States.[46] Cellophane, however, "constituted less than 20% of all 'flexible packaging material' sales."[47] The Court concluded that cellophane's interchangeability with other materials made it part of a broader, flexible packaging market.

The opinion has been widely criticized because the Court mistakenly assessed the alternatives for cellophane *after* du Pont already had raised its price to the monopoly level and failed to recognize that even a monopolist faces constraints on its ability to raise price. A monopolist maximizes profits by raising its price until the increased profit from the higher price is offset by the diminished profit from the reduced quantity sold. A further price increase above that level would be unprofitable because it would induce a significant number of consumers to switch to substitutes or to cease buying the product.[48] Thus, simply observing that a firm cannot increase its price profitably from its current level allows no inference about a firm's market power.[49]

Commentators agree that by starting the analysis from the prevailing price the Court drew an incorrect conclusion about the relevant market in *Cellophane*.[50] Including alternative products that are attractive to consumers only after the monopolist already has elevated price expands the market beyond the group of substitutes that may constrain the dominant firm from increasing prices above competitive levels. The expanded market reduces the firm's market

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Benefits and Limitations, 42 ANTITRUST BULL. 121, 145–46 (1997).

45 *Cellophane*, 351 U.S. 377.

46 *Id.* at 379.

47 *Id.*

48 *See* Landes & Posner, *supra* note 21, at 961.

49 Lawrence J. White, Market Power and Market Definition in Monopolization Cases: A Paradigm is Missing 7–8 (Jan. 24, 2007), http://www.ftc.gov/os/sectiontwohearings/docs/0703LawrenceWhitepaper.pdf, *published in* 2 ABA SECTION OF ANTITRUST LAW, ISSUES IN COMPETITION LAW AND POLICY 913 (2008) ("[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.").

50 *See, e.g.*, George W. Stocking & Willard F. Mueller, *The Cellophane Case and the New Competition*, 45 AM. ECON. REV. 29, 54–57 (1955); Landes & Posner, *supra* note 21, at 960–61.

[51] *See* White, *supra* note 49, at 6–7; Mar. 7 Hr'g Tr. at 35–36 (White).

[52] Horizontal Merger Guidelines, *supra* note 18, § 1.11.

[53] *See* Gregory J. Werden, *Market Delineation Under the Merger Guidelines: Monopoly Cases & Alternative Approaches*, 16 REV. INDUS. ORG. 211, 212 (2000) ("[T]he issue in many cases arising under Section 2 of the Sherman Act is whether ongoing or threatened

it is applied to the pre-conduct world.[55]

To the extent that conduct is not quickly challenged, however, the exercise may require determining the availability and attractiveness of substitutes in the distant past. This may pose serious practical problems. Further, intervening new product introductions and the demise of competing products, perhaps from causes unrelated to the challenged conduct, may make the pre-conduct market anachronistic.

More important, the approach would still be subject to the *Cellophane* Fallacy if the challenged conduct was adopted to maintain pre-existing monopoly power, rather than to acquire monopoly power. In monopoly maintenance cases, using pre-conduct prices to define a pre-conduct market will build any pre-existing monopoly power into the market definition process. Consequently, it will distort an inquiry into whether the firm possessed monopoly power that it sought to shelter from erosion.

Using a more competitive benchmark price. A second approach to avoid the *Cellophane* Fallacy is to substitute a more competitive price for the prevailing price in current market circumstances. The appropriate benchmark price will vary depending upon the inquiry at issue. If the question is the one typically addressed in the case law—whether the firm possesses monopoly power—then a benchmark based on the competitive price is appropriate to identify whether alternative products will constrain the exercise of monopoly power.[56] When the goal is to examine the competitive effects of the allegedly exclusionary conduct—whether the given conduct confers or enhances the ability profitably to raise price, reduce output, or diminish quality—the appropriate benchmark is the price that would have prevailed but for the conduct.[57]

Practical problems in determining these benchmarks, however, can be severe,[58] and, for

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55 *Id.* ("mentally, we can go back to before the [conduct] and still ask [what was the share of the defendant in that market, what was the share of the excluded competitors and are there other sources of competitive discipline including entry] and there is a relevant market that's pertinent for this analysis").

56 *See* Nelson, *supra* note 16, at 6 (indicating that to avoid the *Cellophane* Fallacy, "market definition must be based on substitution at competitive prices, not monopoly prices").

57 *See* Mar. 7 Hr'g Tr. at 105 (Katz) (stating that "the competitive effects analysis would look for a but-for price and would take into account a specific practice"); Werden, *supra* note 53, at 215 ("[T]he proper benchmark price for purposes of evaluating whether conduct is unlawfully exclusionary is the price that would prevail but for the challenged conduct. That price often is not the competitive price.").

58 Nat'l Econ. Research Assocs., *The Role of Market Definition in Monopoly and Dominance Inquiries* 19 (U.K. Office of Fair Trading, Econ. Discussion Paper No. 2, July 2001), http://www.oft.gov.uk/shared_oft/reports/comp_policy/oft342.pdf. ("[I]n practice it is extremely difficult and in most cases impossible to determine the

these purposes, if "the benchmark price is not known, one cannot define the correct market."[59] In contrast, if these benchmark prices can be determined, the market definition exercise may be superfluous. If the competitive price is known, then a comparison of the prevailing market price and the competitive price will allow a direct inference about market competitiveness.[60] Similarly, if the but-for price is known, assuming other conditions such as quality and service are constant, a direct comparison with the prevailing price would provide evidence about whether the firm acquired the ability to exercise additional market power.[61]

3. Implications: The Hypothetical Monopolist Test in Section 2 Analysis

Unless a correction is available, the *Cellophane* Fallacy presents a challenge for accurately delineating markets in many section 2 contexts. Joined with other considerations discussed in this section, this suggests a need to examine alternative methods for assessing monopoly power.

As already indicated, the most frequently used analytical approach for defining antitrust markets is described in the Agencies' Horizontal Merger Guidelines, which, as a general matter, define a relevant market by asking whether a hypothetical monopolist over various groups of products and areas would be able profitably to raise price above the *prevailing* level.[62] The Horizontal Merger Guidelines themselves recognize that the prevailing price sometimes may not be appropriate for the analysis.[63] When translated to section 2 contexts, the potential problem

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competitive price level. This difficulty has profound implications for the application of the [approach]."); Carlton, *supra* note 6, at 20 ("It may sometimes be difficult to figure out the [but-for] benchmark price, though not always.").

59 Carlton, *supra* note 6, at 20 n.32.

60 *Id*. at 20 ("If one knows . . . the competitive price . . . then the market definition exercise is useless. . . . There is no need to define a market and calculate market share . . . "); Nelson, *supra* note 16, at 9 ("Why bother to define a relevant market and undertake the rest of the monopolization case market power paradigm if one already knows what the competitive price is and thus can compare it to the current price to determine if a firm has market power?"); Nat'l Econ. Research Assocs., *supra* note 58, at 19.

61 *See* Werden, *supra* note 53, at 213 ("It may be possible to measure a defendant's market power directly, by observing the extent to which price was raised after rivals were excluded.").

62 Horizontal Merger Guidelines, *supra* note 18, § 1.11; *see supra* note 42.

63 Horizontal Merger Guidelines, *supra* note 18, § 1.11 (stating that market definition analysis uses prevailing prices unless "premerger circumstances are strongly suggestive of coordinated interaction, in which case the Agency will use a price more reflective of the competitive price"); *accord* U.S. Dep't of Justice & Fed. Trade Comm'n, Antitrust

Guidelines for Collaborations Among Competitors § 3.32(a) (2000) ("[W]hen circumstances strongly suggest that the prevailing price exceeds what likely would have prevailed absent the relevant agreement, the Agencies use a price more reflective of the price that likely would have prevailed.").

[64] The Horizontal Merger Guidelines examine a hypothetical monopolist's ability to raise its own price (*i.e.*

Moreover, analysts suggest that, despite inherent limitations in many monopolization contexts, the hypothetical monopolist test and the ensuing identification of market participants appropriately focus on demand and supply substitution and thereby help to avoid *ad hoc* conclusions regarding boundaries of the market and effects of the conduct. *See* Mar. 7 Hr'g Tr. at 130 (Bishop) (stating that "even just using the SSNIP test as a thought process can actually provide a useful discipline on how to define relevant markets"); Nat'l Econ. Research Assocs., *supra* note 58, at 19 ("[D]emand and supply substitution—concepts at the heart of the [hypothetical monopolist] test—will always be

. . you never get to the question. . . . Does the conduct really raise prices. And most of the time that's pretty obvious . . . .");

component of a monopolization claim" where there is direct evidence of monopoly power); Mar. 7 Hr'g Tr. at 73–74 (Katz) (taking the position that it would be a significant error if a legal requirement led a case involving differentiated products to be dismissed because proof of precise boundaries for one relevant market definition were insufficiently demonstrated when clear anticompetitive effects were shown within each possible definition of relevant market when alternative definitions of relevant markets are offered).

77 *E.g.*, Shoppin' Bag of Pueblo, Inc. v. Dillon Cos., 783 F.2d 159, 162 (10th Cir. 1986) ("Market share alone, however, is not enough to determine a firm's capacity to achieve monopoly.").

78 Carlton, *supra* note 6, at 12.

79 For example, in one a simple, yet common, model, when a dominant firm, in the presence of smaller, price-taking rivals, sets price to maximize profits, high market shares are correlated with the exercise of market power, but a high market share is not sufficient to prove market power. Algebraically, a firm's demand elasticity (ε_F), which reflects its ability to increase price, depends on *three* factors— the market's demand elasticity (ε_D), the firm's market share (S), and its rivals' supply elasticity (ε_R):

$$|\varepsilon_F| = \frac{|\varepsilon_D| + (1-S)\varepsilon_R}{S}.$$

See Landes & Posner, *supra* note 21, at 939–40, 944– 47 ("Although the . . . equation . . . provides an economic rationale for inferring market power from market share, it also suggests pitfalls in mechanically using market share data to measure market power."). The firm's demand elasticity, in turn, is inversely related to the Lerner index, a measure

A simple example illustrates the potential pitfalls. Suppose a large firm competes with a fringe of small rivals, all producing a homogeneous product. In this model, the large firm's market share is a determinant of its power over price. It is, however, only one determinant. Even a huge share does not guarantee substantial power over price for a significant period: if the fringe firms readily can substantially increase production from their existing plants in response to a small increase in the market price (that is, if the fringe supply is highly elastic), a large firm's output restriction would not be profitable, and hence the firm would not have market power.[80] Similarly, market shares do not take account of potential entrants' supply. Even when no current rival exists, if barriers to entry are low, an attempt to raise prices anticompetitively may lead to an influx of competitors that would make the price increase unprofitable.[81]

On the other hand, conclusions based solely on market share also may underestimate market power. If rivals' supply is unusually inelastic—such as when all capacity is already in full use—a firm with relatively modest market share may be able to exercise substantial market power.[82] Other factors, such a firm's ability to exert control over rivals through essential intellectual property holdings, may also contribute to market power beyond what would be expected from market share based on the firm's sales alone.

2. Market Shares May Provide Inaccurate Information

Obviously, market shares are dependent on market definition. The difficulties encountered in defining relevant markets must be overcome in order for market shares to be accurate and useful in evaluating monopoly power. In some settings, even apart from questions of market definition, reliance on market shares is particularly likely to yield faulty conclusions regarding monopoly power.

In markets characterized by rapid technological change, a high market share based on

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of market power, defined as the firm's price minus its marginal cost, all divided by its price. *Id.* at 939–40.

80 In addition, some models of competition (*e.g.*, Bertrand price competition with homogeneous goods) yield the competitive result with very few firms. *See* CARLTON & PERLOFF, *supra* note 19, at 174.

81 *See, e.g.*, United States v. Syufy Enters., 903 F.2d 659, 666–69 (9th Cir. 1990).

82 *See, e.g.*, Paul L. Joskow & Edward Khan, *A Quantitative Analysis of Pricing Behavior in California's Electricity Market During Summer 2000* (AEI-Brookings Joint Center for Regulatory Studies, Working Paper 01-01, Jan. 2001) (explaining that in peak power electricity markets, output reductions by firms with relatively small shares may raise price by large amounts because the supply elasticities of other firms are low).

current sales or production may be consistent with the presence of robust dynamic competition.[83] Any "power" a firm possesses in such a situation may be transient because new products might

[83] Sherman Act Section 2 Joint Hearing: Monopoly Power Hr'g Tr. 11–12, Mar. 8, 2007 [hereinafter Mar. 8 Hr'g Tr.] (Schmalensee) (observing that network effects can lead to large shares, yet the market still may be subject to "vigorous Schumpeterian competition, in which the next hot product may displace the leader"); Mar. 7 Hr'g Tr. at 78–79 (Katz) (noting that "the R&D capabilities and the distribution of the assets . . . may be much more important than current market shares in terms of understanding innovation"); May 8 Hr'g Tr. 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").

[84] Michael L. Katz, Market Definition, Concentration, & Section 2, at 5 (Mar. 7, 2007), http://www.ftc.gov/os/sectiontwohearings/docs/0703KatzPresentation.pdf.

[85] *See, e.g.*, Sherman Act Section 2 Joint Hearing: Remedies Hr'g Tr. 65, Mar. 29, 2007 (Lao); May 1 Hr'g Tr. at 147–48 (Baker).

[86] *See* Richard Schmalensee, Diagnosing Monopoly Power in Markets with Rapid Technological Change (RTC Markets) 4 (Mar. 8, 2007), http://www.ftc.gov/os/sectiontwohearings/docs/0703RichardSchmalensee.pdf ("Need to be thoughtfully skeptical to avoid two errors: [1] Ignoring disruptive innovations under serious development[;] [2] Assuming all sexy new technologies will actually disrupt").

[87] *See* Mar. 8 Hr'g Tr. at 18–19 (Schmalensee); Schmalensee, *supra* note 86, at 7.

[88] Mar. 8 Hr'g Tr. at 18–19 (Schmalensee) (arguing that "the need to balance means competition on either side can dissipate profits"); Carlton, *supra* note 6, at 26 (stating that if one ignores the competitive effort on one side of the market to attract customers on the other side, "one could find market power when in fact there is none"); Dennis L. Weisman, *Assessing Market Power: The Trade-Off Between Market Concentration &*

of identifying the correct price on one side of the market when the price on the other side affects the attractiveness of the product "will make market definition in two sided markets more difficult than in the typical case and will therefore further limit reliability of market definition and market shares."[89]

Panelists also have identified settings where market share evidence may fail to identify monopoly power. Market shares do not directly indicate whether a firm is able to raise prices by excluding or raising the costs of others or raising entry barriers.[90] That is, market shares do not directly reflect "exclusionary market power," although relative shares may provide important information on whether counter-strategies by rivals are likely to be effective or regarding the expense a firm is likely to be willing to undertake to employ an exclusionary strategy.[91] Conduct that excludes competitors and results in future power over price does not require current market dominance; as one panelist noted, "Current share of

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Multi-Market Participation, 1 J. COMPETITION L. & ECON. 339, 346–47 (2005) (discussing potential bias of concentration measures under conditions of multi-market participation and demand interdependence, with application to merger analysis).

89 Carlton, *supra* note 6, at 26.

90 *See* Krattenmaker, Lande & Salop, *supra* note 30, at 255 ("It is the exclusionary conduct that creates the market power being evaluated, not the other way around. . . . [Pre-existing] market power is not a prerequisite for a successful exclusionary strategy.").

91 *See id*. at 259–60 ("[T]he use of market share for gauging the degree of [exclusionary] market power to exclude competitors profitably by raising their costs is somewhat different than its role in detecting classical . . . market power . . . . The greater the disparity in market shares between the firm seeking to raise its rivals' costs and the rivals, the greater the firm's anticipated reward for achieving a higher price for its output. Hence, such a firm would be willing to spend more in attempting to exclude rivals to gain power over price.").

92 Katz, *supra* note 84, at 4 (emphasis omitted).

93 *See* Mar. 8 Hr'g Tr. at 22–27 (Williams).

94 *Id.* at 23–24.

and a fact-finder's insistence that a plaintiff demonstrate accurate market shares may result in rejecting liability even when a firm possesses monopoly power. At the same time, difficulties in assigning market shares might cause the analysis to omit, or assign small shares to, important competing technologies and thus to incorrectly conclude that a firm possesses monopoly power.

One panelist argued that imperfect information may limit consumers' ability to assess costs, prices, or other market circumstances, and that deception or an opportunistic manipulation of imperfect or asymmetric information may confer market power.[95] In such situations, it is possible that limited information may enable a firm to influence price at lower market shares than if information were more perfect.[96]

C. Identifying Monopoly Power Through Performance Evidence

In addition to a firm's market share, other measures have been identified that may help to determine whether a firm possesses monopoly power. In some instances, however, no one method may provide reliable and sufficient results.

1. Profitability

Market power and monopoly power are described as a firm's ability *profitably* to maintain price above the competitive level. These descriptions implicitly reference economic models in which the firm earns higher than normal profits, compared to a firm constrained by competition. Consequently, "[t]hrough the 1970s, profit data were a standard part of the plaintiff's efforts to show that the defendant possessed market power . . . . Indeed, one could argue that the examination of profit rates was *the paradigm* used for the determination of market power . . . prior to the 1980s."[97]

Whether profitability is assessed based on total profit or on price-cost margins, which evaluates whether price exceeds average cost or marginal cost, respectively, accounting measures of profit often bear little relation to the underlying economic concepts pertinent to

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95 *See id.* at 41 (Lande) ("Market power in antitrust cases can also come . . . from significantly imperfect information, deception, asymmetric information, or other sources of market failure that are more commonly associated with consumer protection violations.").

96 *Id.* (arguing that when these factors are present, "market power can [arise] even if no firm has a market share large enough for a finding of traditional market share-based market power"). *But cf.* Carl Shapiro, *Aftermarkets and Consumer Welfare: Making Sense of* Kodak, 63 ANTITRUST L.J. 483, 488–89 (1995) (noting that poorly informed buyers may in effect be protected by informed buyers, whose presence constrains any exercise of monopoly power).

97 White, *supra* note 48, at 9.

[98] *See* George J. Benston, *Accounting Numbers and Economic Values*, 27 ANTITRUST BULL. 161 (1982); Franklin M. Fisher & John J. McGowan, *On the Misuse of Accounting Rates of Return to Infer Monopoly Profits*, 73 AMER. ECON. REV. 82 (1983); *see also* White, *supra* note 48, at 9 n.22.

[99] *See* Nelson, *supra* note 16, at 17 ("Economists have come to recognize that accounting data often are flawed, which argues against relying exclusively on price-cost margins or rates of return as indicia of market power."); Jonathan B. Baker & Timothy F. Bresnahan, *Empirical Methods of Identifying and Measuring Market Power*, 61 ANTITRUST L.J. 3, 5 (1992) (noting that problems with accounting profits "loom so large that antitrust today does not rely heavily on profitability measures in making inferences about market power"); *see also*

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[100] *See* Franklin M. Fisher, *Diagnosing Monopoly*, 19 Q. REV. ECON. & BUS., Summer 1979, at 7, 22 (noting that "a firm with an advantageous location ought to be thought of as making its extra money as a return on that location—a true 'rent' which the firm pays to itself as a landlord).

[101] *See* CARLTON & PERLOFF, *supra* note 19, at 93 (a firm that makes a profit when it sets its price optimally above its marginal cost has monopoly power).

[102] *See* Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697, 716 (1975) (noting that marginal cost "cannot readily be inferred from conventional business accounts"); Diane P. Wood, *"Unfair" Trade Injury: A Competition-Based Approach*, 41 STANFORD L. REV. 1153, 1181 n.96 (1989) (noting that marginal cost fi

hand, even a monopolist exercising substantial market power may incur losses in the short run, such as when an unexpected reduction in demand results in excess capacity. Finally, similar to an assessment of total profit, there is no objective standard for determining whether the amount by which price exceeds marginal cost is significant.[104]

2. Demand Elasticity

The elasticity of a firm's demand curve may provide information about the firm's market power—at an extreme, in a perfectly competitive model, each firm faces a horizontal demand curve, which is infinitely elastic. In addition, a firm's demand elasticity is equal to the inverse of the firm's price-cost margin, which, as previously discussed, has also been suggested as a measure of market power.

Estimates of demand elasticity, however, generally do not provide clear evidence of monopoly power. Sufficient data for applying the relevant econometric techniques often are unavailable. Even when the necessary data are present, estimated demand elasticities do not distinguish between a firm with monopoly power and a firm that sells a differentiated product in a market with free entry.[105] The analysis might show that demand is not perfectly elastic, which implies that price exceeds short-run marginal cost, but it would not identify the source of the price-cost margin.[106] Finally, although demand elasticities may provide useful general insights regarding the likelihood of monopoly power, there is no defined standard calibrating the relationship between a particular elasticity of demand and a corresponding likelihood of

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excludes more efficient rivals).

[104] Dennis W. Carlton, *Does Antitrust Need to be Modernized?*, J. ECON. PERSPECTIVES, Summer 2007, at 155, 164 ("[P]resumably 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."); Mar. 7 Hr'g Tr. at 87 (White) (agreeing that a price exceeding marginal cost by 10 percent may be a proper threshold, "but I have just picked [that] out of the air, and I do not have any further basis").

[105] *See* Mar. 7 Hr'g Tr. at 38 (White); *see also* May 8 Hr'g Tr. at 56 (Muris) ("[I]t is difficult to have simple uses of Lerner indexes and downward sloping demand as measures of anything meaningful.").

[106] *See generally* Werden, *supra* note 30, at 382 (stating that "a firm's measured elasticity of demand permits a reasonable inference of the extent to which it is pricing in excess of short-run marginal cost, but says nothing about pricing in relation to long-run marginal cost or about the durability of market power").

monopoly power.[107]

3. Direct Observation that Prices are Above Competitive Levels

In some circumstances, an exercise of monopoly power may be directly observed by comparing an alleged monopolist's price to a competitive benchmark. If an exercise of monopoly power is observed, then one may conclude that the firm has monopoly power.

For example, it may be possible to compare an alleged monopolist's price with prices in other geographic markets that appear structurally to be more competitive.[108] Such cross-sectional price differences, so long as not cost-based, may provide direct evidence that the firm possesses monopoly power in particular markets. One challenge in applying this approach is that it may be difficult to hold constant all determinants of price other than market concentration.

Similarly, time series analysis that shows output, price, or profitability "changes over time can provide insights into the extent to which a firm is insulated from competition in certain situations."[109] Such natural experiments that show the alleged monopolist's response to cost shocks, entry, exit, and shifts in demand or supply can provide evidence that the firm possesses monopoly power or is constrained by competition.[110]

IV. Threshold Market Shares that Support Inferences of Monopoly Power or the Absence of Monopoly Power

While acknowledging that market share is only one step in the analysis and requiring sufficient indicia of durability, courts have nonetheless treated particular market shares as supporting inferences regarding the presence or absence of monopoly power. Most cases

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[107] *See generally* Mar. 7 Hr'g Tr. at 62 (Gilbert) (noting the difficulty of drawing precise conclusions from demand elasticities); *id.* at 90 (Gilbert) (indicating that low and high demand elasticities, respectively might suggest, in general terms that "we should" or "shouldn't be worried").

[108] *See* White, *supra* note 49, at 8; Werden, *supra* note 53, at 217; Baker & Bresnahan, *supra* note 8, at 10–11; *cf.* FTC v. Staples, Inc., 970 F. Supp. 1066 (D.D.C. 1997) (in a merger case, prices charged by Staples were lower in cities where Staples competed with other office superstores).

[109] *See* Nelson, *supra* note 16, at 18.

[110] Such analyses often use fixed-effect regression models and panel data to estimate the effect of market structure on prices. *See, e.g.*, *In re* Evanston Northwestern Healthcare Corp., No. 9315, at 27–35 (F.T.C. Aug. 3, 2007), *available at* http://www.ftc.gov/os/adjpro/d9315/070806opinion.pdf (Commission opinion discussing fixed-effects analysis in a merger case).

ultimately cite to *United States v. Aluminum Co. of America ("Alcoa")*, which stated that while a "percentage [over ninety] is enough to constitute a monopoly; it is doubtful whether sixty or

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[111] United States v. Aluminum Co. of Am., 148 F.2d 416, 424 (2d Cir. 1945) (Hand, L., J.).

[112] Broadway Delivery Corp. v. United Parcel Serv. of Am., Inc., 651 F.2d 122, 127 (2d Cir. 1981); Mar. 7 Hr'g Tr. at 48–49 (Gavil) ("all Judge Hand did was . . . survey[] the previous cases and look[] at winners and losers . . . [and] synthesize them and [he] came up with this benchmark").

[113] AREEDA & HOVENKAMP, *supra* note 21, ¶ 801a1, at 385.

[114] *See generally* Richard Schmalensee, *Inter-Industry Studies of Structure and Performance*, *in* 2 HANDBOOK OF INDUSTRIAL ORGANIZATION 951 (Richard Schmalensee & Robert D. Willig, eds., 1989); Baker & Bresnahan, *supra* note 8, at 24 (structure-conduct-performance hypothesis that "attempted to connect firm or industry market power reliably with market concentration . . . was not convincingly demonstrated"); Adkinson et al., *supra* note 11, at Sections IV.A., IV.B.

[115] Baker & Bresnahan, *supra* note 8, at 24.

[116] 1 ABA SECTION OF ANTITRUST LAW, ANTITRUST LAW DEVELOPMENTS

[121] Tops Mkts., Inc. v. Quality Mkts., Inc., 142 F.3d 90, 98 (2d Cir. 1998); *see also* Baker &

individually control price over any significant period”).

[127] *See, e.g.*, Bailey v. Allgas, Inc., 284 F.3d 1237, 1250 (11th Cir. 2002) (“A market share at or less than 50% is inadequate as a matter of law to constitute monopoly power.”); Exxon Corp. v. Berwick Bay Real Estates Partners, 748 F.2d 937, 940 (5th Cir. 1984) (“monopolization is rarely found when the defendant’s share of the relevant market is below 70%”); *cf*. Hunt-Wesson Foods, Inc. v. Ragu Foods, Inc., 627 F.2d 919, 924–25 (9th Cir. 1980) (stating that “market shares on the order of 60 per cent to 70 per cent have supported findings of monopoly power”).

[132] *See* Adkinson et al., *supra* note 11, at Section V.A.

[133] *See, e.g.*, May 8 Hr'g Tr. at 41–42 (Rill) (stating that "[as] a starting point" a market-share safe harbor set at "70 percent sounds reasonable, . . . maybe a little higher" and noting that such a safe harbor could be coupled with a conduct-based, "operational safe harbor[s]"); *id.* at 41 (Eisenach) (stating "I'm not opposed in any way to a 75 percent safe harbor or a 70 percent safe harbor," but adding "surely we can do better than share of the top firm as a metric"); Mar. 7 Hr'g Tr. at 216, 218–21 (Bishop) (discussing market share safe harbors in the context of European case law); *id.* at 216, 219–21 (de la Mano) (same); *h a r b o r [s] ")*

firm is somehow the proposed safe harbor in the first step of a market power test").

[143] Fed. Trade Comm'n & U.S. Dep't of Justice, Commentary on the Horizontal Merger Guidelines 27 (2006), *available at*

market shares can inform the analysis of the likely competitive impact of many forms of single-firm conduct and may provide insights regarding whether the conduct was undertaken for reasons other than its possible anticompetitive effects.

V. Anticompetitive Effects as Indicia of Monopoly Power

As previously discussed, courts typically examine whether a firm possesses monopoly power as a threshold matter, often using that inquiry as a screen to avoid difficult issues regarding the competitive effects and business justification of the alleged conduct. Yet, there sometimes is no good method of defining markets, and there was substantial agreement at the hearings that market shares should play a smaller role in the analysis of monopolization.[155] In fact, to the extent that many section 2 cases examine past or continuing conduct, reliance solely on the indirect evidence provided by market shares may ignore observable information about the conduct's actual effect.

An assessment of whether there are substantial anticompetitive effects arising from the alleged conduct sometimes may be the preferred initial inquiry. In some circumstances, the implausibility of anticompetitive effects or causation may serve as an effective screen that enables courts or enforcement officials to conclude a case is not viable without tackling difficult market definition and monopoly power inquiries.[156] For example, one panelist would bring horizontal competitive effects "to the forefront" by asking whether it is possible that greater competition is possible and that the challenged conduct "works to move the market" from monopoly to more competitive results.[157] Similarly, if the cost of the conduct to the alleged monopolist exceeds the likely benefit of increased prices, then the implausibility of an

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deceiving a standard-setting organization is post-conduct, rather than pre-conduct); Multistate Legal Studies, Inc. v. Harcourt Brace Jovanovich Legal & Prof'l Pubs., Inc., 63 F.3d 1540, 1554 (10th Cir. 1995) (concluding that for assessing an attempted monopolization claim, the relevant market share is the defendant's share "at the time of litigation or the largest share he possessed during the period of the alleged offense").

[155] *See supra* note 71.

[156] *See* Timothy F. Bresnahan, The Economics of Monopolization: A Simple (as possible) Antitrust Analysis 3 (Jan. 31, 2007), http://www.ftc.gov/os/sectiontwohearings/docs/bresnahan_section2_hearings.pdf ("Much can be gained by thinking carefully about the competitive effects and causation arguments first").

[157] *See* Jan. 31 Hr'g Tr. at 93–95 (Bresnahan) (stating that analysis is able to screen out many cases by "thinking about the anticompetitive theory . . . [and asking] is it possible that there could be less competition and also there could be more competition in this industry?").

[158] *See* Mar. 7 Hr'g Tr. at 27–29 (Simons) (making the argument that comparing the costs of

courts have accepted such evidence as a basis for finding monopoly power[163] or acknowledged a willingness to accept an inference of monopoly power based on evidence of competitive effects.[164] Of course, contrary evidence, such as a demonstration that market shares are relatively low, would also be considered and could cause reassessment of any initial inference. A thoughtful conclusion would give appropriate weight to all relevant evidence.

Panelists also stated that monopoly power can be inferred from a demonstration of likely, rather than observed, anticompetitive effects.[165] Such an analysis may be useful evidence of monopoly power in settings where anticompetitive conduct prevented price from falling to a more competitive level. This type of analysis sometimes may avoid the need to define a relevant

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an arrangement has the potential for genuine adverse effects on competition, '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.'"); Toys "R" Us, Inc. v. FTC, 221 F.3d 928, 937 (7th Cir. 2000) ("[T]he share a firm has in a properly defined relevant market is only a way of estimating market power, which is the ultimate consideration. The Supreme Court has made it clear that there are two ways of proving market power. One is through direct evidence of anticompetitive effects.") (citations omitted); *In re* Schering-Plough Corp., 136 F.T.C. 956, 974–75 (2003) (stating that for purposes of determining whether an agreement is a prohibited restraint of trade, "it is not necessary to rely on indirect proof that Schering has a monopoly share in a relevant market when the competitive effects of the 'restraint' can be shown directly"), *rev'd on other grounds*, Schering-Plough Corp. v. FTC, 402 F.3d 1056 (11th Cir. 2005).

[163] *See* Re/Max Int'l Inc. v. Realty One, Inc., 173 F.3d 995, 1018 (6th Cir. 1999) (citing Byars v. Bluff City News Co., 609 F.2d 843, 850 (6th Cir. 1979)) ("[T]he simplest way of showing monopoly power is to marshal evidence showing the exercise of actual control over prices or the actual exclusion of competitors.").

[164] *See* Broadcom Corp. v. Qualcomm Inc., 501 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, 107–08 (2d Cir. 2002); Conwood Co., L.P. v. U.S. Tobacco Co., 290 F.3d 768, 783 n.2 (6th Cir. 2002) (noting that monopoly power "may be proven directly by evidence of the control of prices or the exclusion of competition" (quoting Tops Markets, Inc. v. Quality Markets, 142 F.3d 90, 97–98 (2d Cir. 1998))); Coastal Fuels of P.R., Inc. v. Caribbean Petroleum Corp., 79 F.3d 182, 196–97 (1st Cir. 1996); Rebel Oil Co. v. Atl. Richfield Co., 51 F.3d 1421, 1434 (9th Cir. 1995).

[165] *See* Mar. 7 Hr'g Tr. at 25–26 (Simons) (arguing that a possible first condition for analysis could be whether the conduct would be reasonably likely to significantly raise price or reduce quality); *id.* at 39–40 (White) (proposing that analysis of alleged exclusion compare existing market, with exclusion, to hypothetical consequences absent exclusion).

[166] *See id*. at 62 (Gilbert) (stating that the focus on "additional competition and whether it

finding of anticompetitive effects must rest on harm to competition and consumers, not just to competitors. Mere exclusion of a competitor is insufficient basis for inferring the existence of monopoly power.[172] Even a firm operating in a competitive market will seek to obtain the business of its rivals, and winning that business may only demonstrate vigorous competition.[173] To demonstrate harm to competition, the evidence must show market-level effects such as reduced output, higher prices, diminished quality, or reduced innovation.

Second, the evidence must show causation. Absent evidence of a sufficient causal link between the conduct and the anticompetitive effects, there is a risk that the inquiry would falsely establish liability.

Third, proof of substantial anticompetitive effects at most may demonstrate that the firm possesses monopoly power. This alone does not establish section 2 liability. Any business justification for the alleged conduct still must be evaluated and taken into account.[174]

Finally, allowing an inference of monopoly power by demonstrating anticompetitive effects does not mean that direct evidence of monopoly power is a required mode of analysis or an added evidentiary burden for all plaintiffs.[175] Monopoly power may still be shown by market

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[172] Consequently, market definition still may be required to demonstrate effects at the market level, rather than only showing harm to a competitor. *But cf.* Jan 31 Hr'g Tr. at 146–51 (Shapiro) (taking the position that when conduct causes obvious increase in market power and anticompetitive effects, it may be possible to shortcut market definition).

[173] *See*, *e.g.*, Ball Mem'l Hosp., Inc. v. Mutual Hosp. Ins., Inc., 784 F.2d 1325, 1338 (7th Cir. 1986) ("Competition is a ruthless process. A firm that reduces cost and expands sales injures rivals—sometimes fatally. . . . These injuries to rivals are byproducts of vigorous competition, and the antitrust laws are not balm for rivals' wounds. The antitrust laws are for the benefit of competition, not competitors.").

[174] *See* Grimm, *supra* note 147.

[175] Indeed, direct evidence of actual anticompetitive effects will not be available when the alleged monopolist has not exercised its market power, yet exercise of monopoly power is not a requirement for liability under section 2. *See* Am. Tobacco Co. v. United States, 328 U.S. 781, 811 (1946) ("[T]he material consideration in determining whether a monopoly exists is not that prices are raised and that competition actually is excluded but that power exists to raise prices or to exclude competition when it is desired to do so."); *cf.* United States v. Microsoft Corp., 253 F.3d 34, 57 (D.C. Cir. 2001) (rejecting argument that relatively low price of product was evidence that firm lacked monopoly power). Such cases are likely to be unusual; when found, they raise questions as to why the alleged monopolist has not exercised available monopoly power that may yield a deeper understanding of the workings of the relevant market.

definition, market shares, and elasticities of demand and supply.

VI. Conclusion

Although possession of, or a dangerous probability of obtaining, monopoly power is one legal element of a section 2 violation, the Sherman Act prohibits neither the possession nor the exercise of monopoly power. The static, legal element—the existence of monopoly power—is not, in itself, the focus of the statute's prohibitions. Rather, section 2 proscribes improper conduct that contributes to the acquisition or maintenance of monopoly power. The monopoly power inquiry, consequently, is intertwined with issues of competitive effects, such as whether the firm has sufficient market power that exclusionary conduct can have a substantial anticompetitive effect and whether the challenged conduct will enable the firm to exercise or prevent the erosion of substantial market power.

Courts established, and traditionally have used, the monopoly power element as a screen to dispose of meritless cases with minimum cost or effort. Such a screen provides valuable guidance to firms contemplating business strategies. In keeping with this objective, this paper suggests a rebuttable presumption that a firm with less than a 50 percent market share in a properly defined relevant market lacks monopoly power.

Modern antitrust analysis, however, no longer views market share or firm profitability as conclusive evidence of monopoly power or its absence. This suggests a need for flexible approaches in examining issues of monopoly power and for consideration of appropriate inferences based on the analysis of competitive effects in conjunction with other available, relevant data. Indeed, as the United States encourages internationally, the analysis of single-firm conduct does not end with a determination that the firm possesses monopoly power; it is necessary to consider the competitive effects of the challenged conduct. Such inquiries are not easy, but the analysis of competitive effects may yield valuable inferences regarding the presence of monopoly power. For any analysis based on competitive effects, a proper assessment requires demonstration of harm to market-level competition, not merely harm to a competitor; an adequate causal link between the challenged conduct and the anticompetitive effects; and consideration of any associated efficiencies.