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Alan J. Meese

William & Mary Law School, ajmees@wm.edu

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DON'T DISINTEGRATE MICROSOFT (YET)

*Alan J. Meese**

INTRODUCTION

Outside the state of nature, cooperation is the basis of economic productivity. Such cooperation can take many forms. Texaco "cooperates" with drillers it has never met when it purchases oil on the spot market.¹ It "cooperates" with dealers when it consents to their use of its trademark and promises to meet their requirements of gasoline. Dealers, in turn, might reciprocate by agreeing to keep certain hours, maintain clean premises, charge reasonable prices, and distribute only Texaco's gasoline.²

The cooperation described thus far occurs between firms, and takes the form of market contracting. Much cooperation, however, occurs *within* firms, which are themselves aggregations of contracts between otherwise independent actors.³ Texaco, for instance, can and does purchase and own its own oil fields; it could also hire its own dealers and own the stations that distribute its products.⁴ By definition, all business firms are "vertically integrated" in this manner to some extent, involving, as they do, the coordination of some economic activity they could otherwise conduct by market contracting.⁵ All firms must constantly make choices between performing tasks internally or relying upon the market to get the job done. Moreover, the "market" is not a unitary phenomenon, but instead consists of a spectrum of choices between "spot" transactions and long term contracting.⁶ Even so-called "spot" markets are often the result of complex contractual arrangements between competitors.⁷ Not surprisingly, the choice between

* Cabell Research Professor of Law, William and Mary School of Law; J.D., University of Chicago; A.B., The College of William and Mary. Felicia Burton and Della Harris provided helpful assistance in preparation of the manuscript.

¹ F. A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519 (1945).

² See *Yentsch v. Texaco, Inc.*, 630 F.2d 46, 49 (2d Cir. 1980) (describing such an agreement).

³ See, e.g., Armen A. Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, 62 AM. ECON. REV. 777 (1972).

⁴ Of course, some oil companies have done just that, owning some of the service stations that distribute their gasoline. See Keith K. Wollenberg, Note, *An Economic Analysis of Tie-In Sales: Reexamining the Leverage Theory*, 39 STAN. L. REV. 737, 754-55 n.114 (1987) (reporting that for many years Standard Oil owned all of the service stations operating under its trademark located on interstate highways).

⁵ Steven N. S. Cheung, *The Contractual Nature of the Firm*, 26 J.L. & ECON. 1-5 (1983); Ronald H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386, 388 (1937) (noting that "if production is regulated by price movements, production could be carried on without any organisation at all.").

⁶ Cheung, *supra* note 5, at 19; Benjamin Klein, *Vertical Integration, Appropriable Rents and the Competitive Contracting Process*, 21 J.L. & ECON. 297, 326 (1978).

⁷ See RONALD H. COASE, *The Firm, the Market, and the Law*, in *THE FIRM, THE MARKET, AND THE LAW*, 8-10 (1988); Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1, 1 (1984).

organizing activity "within" the firm, or "on" the market depends upon an assessment of the relative costs and benefits of alternative arrangements, an assessment that may vary over time and between firms.⁸ In an economy that is predominantly competitive, the mode of cooperation that two or more firms choose is presumptively beneficial.⁹

Productive cooperation is not limited to relationships between purchasers and suppliers. Such cooperation can also take place between actual or potential competitors, often with beneficial effects. Two competitors can merge completely, pooling their assets and talents to form a single, more effective competitor. Firms can also cooperate in some respects while competing in others.¹⁰ Texaco, Skadden Arps, the Rolling Stones—all involve a fusion of talents that may produce more when combined than when separate.¹¹ Society could "increase" competition in some sense by breaking Texaco (or Skadden Arps) into two, three, or four parts, but it does not, choosing instead to reap the benefits of cooperation between potential antagonists. So long as these firms do not harm others, they should be free to cooperate through contract, complete integration, or otherwise.

These principles apply in any free society and therefore to the American computer industry. Hewlett Packard makes PCs; it also makes printers, packaging both items for sale to consumers. Apple buys computer chips from Motorola which it then uses to make PCs; the firm also writes its own operating systems and software applications.¹² Like Apple, IBM makes its

("Every market entails substantial cooperation over some domain in order to facilitate competition elsewhere. . . . Markets themselves are organized. The Chicago Board of Trade, perhaps the closest of modern markets to the textbook ideal, has a sheaf of rules and cooperative arrangements that reduce the cost of competition."). See, e.g., *Chicago Bd. of Trade v. United States*, 246 U.S. 231, 241 (1918) (finding certain restraints ancillary to creation of Chicago Board of Trade to be reasonable); *Hopkins v. United States*, 171 U.S. 578, 603 (1898) (finding livestock exchange and various restraints ancillary to it lawful under the Sherman Act).

⁸ COASE, *supra* note 5, at 390-92, 394-98.

⁹ Cf. ROBERT H. BORK, *THE ANTITRUST PARADOX* 122-23 (1978) ("If a practice does not raise a question of output restriction, however, we must assume that its purpose and therefore its effect are either the creation of efficiency or some neutral goal.").

¹⁰ *Chicago Prof'l Sports Ltd. v. NBA*, 95 F.3d 593, 597-99 (7th Cir. 1996) (finding National Basketball Association to be legitimate joint venture between otherwise competing entities); *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 216-30 (D.C. Cir. 1986) (sustaining as reasonable joint venture bylaw that fixed minimum prices charged by members operating under venture's trademark); *Nat'l Bancard Corp. v. VISA U.S.A., Inc.*, 779 F.2d 592, 599-603 (11th Cir. 1986); *Polk Bros. v. Forest City Enters.*, 776 F.2d 185, 191 (7th Cir. 1985) (sustaining as reasonable ancillary agreement among competitors that divided authority to sell different products).

¹¹ Cf. Easterbrook, *supra* note 7, at 1 ("The dichotomy between cooperation inside a 'firm' and competition in a 'market' is just a convenient shorthand for a far more complicated continuum. Antitrust law permits, even encourages, cooperation within a 'firm,' for such cooperation is the basis of economic productivity. But everything done within a firm could be done by market transactions as well. The degree of integration is variable, and some firms are integrated through many more stages of production than others. The firm itself is just a legal name for a complicated set of contractual arrangements among workers, managers, and contributors of capital.").

¹² *Digital Equip. Corp. v. Uniq Digital Techs.*, 73 F.3d 756, 761-63 (7th Cir. 1996) (analyzing

own PCs and software.¹³ Moreover, while the firm once sold CPUs and keyboards separate from disk drives, which independent vendors sold, it now makes all three items, which it "bundles" in a single product.¹⁴ America Online sells access to the internet; it sells internet browsers to some, and purchases browsers from others. It also produces content for distribution. Society could increase "competition" by breaking these firms into several parts or preventing various forms of contractual cooperation, but such an approach would do more harm than good.

The Sherman Act was not designed to interfere with productive cooperation. It did not, according to Justice Holmes, explode the economy into individual atoms, making eternal the war of all against all.¹⁵ Quite the contrary, the Act rested on a recognition that protection of the right to own property and make legitimate contracts was the most effective guarantor of competition and the benefits therefrom.¹⁶ Properly construed, the Act *encourages* cooperation—even cooperation between actual and potential competitors—by voiding only those practices that fall outside the legitimate exercise of the rights of property and contract by raising prices above the

Digital Equipment Corporation's bundle of computers and operating systems, and noting that Apple and other firms engage in similar bundling).

¹³ See *infra* note 51 and accompanying text.

¹⁴ ILC Peripherals Leasing Corp. v. IBM Corp., 448 F. Supp. 228, 230-32 (N.D. Cal. 1978); Telex Corp. v. IBM Corp., 367 F. Supp. 258, 347 (N.D. Okla. 1973).

¹⁵ N. Sec. Co. v. United States, 193 U.S. 197, 411 (1904) (Holmes, J., dissenting) ("I am happy to know that only a minority of my brethren adopt an interpretation of [the Sherman Act] which in my opinion would make eternal the *bellum omnium contra omnes* and disintegrate society so far as it could into individual atoms. If that were its intent I should regard calling such a law a regulation of commerce as a mere pretense. It would be an attempt to reconstruct society. I am not concerned with the wisdom of such an attempt, but I believe that Congress was not entrusted by the Constitution with the power to make it, and I am deeply persuaded that it has not tried."); *id.* at 361 (Brewer, J. concurring) ("Congress did not intend to reach and destroy those minor contracts in partial restraint of trade which the long course of decisions at common law had affirmed were reasonable and ought to be upheld. . . . Further, the general language of the act is also limited by the power which each individual has to manage his own property and determine the place and manner of its investment.").

¹⁶ Standard Oil Co. v. United States, 221 U.S. 1, 62 (1911) (Sherman Act was premised upon belief that "the freedom of the individual right to contract when not unduly or improperly exercised [is] the most efficient means for the prevention of monopoly, since the operation of the centrifugal and centripetal forces resulting from the right to freely contract [is] the means by which monopoly would be inevitably prevented if no extraneous or sovereign power imposed it and no right to make unlawful contracts having a monopolistic tendency were permitted."); United States v. Am. Tobacco Co., 221 U.S. 106, 181 (1911) (Sherman Act "did not embrace all those normal and usual contracts essential to individual freedom and the right to make which were necessary in order that the course of trade might be free . . ."); *Whitwell v. Cont'l Tobacco Co.*, 125 F. 454, 460-61 (8th Cir. 1903) ("There is nothing [in the Sherman Act] which deprived any of these competitors of these rights [of contract and property]. If there had been, the law itself would have destroyed competition more effectively than any contracts or combinations of persons or of corporations could possibly have stifled it. The exercise of these undoubted rights is essential to the very existence of free competition . . ."). See generally Alan J. Meese, *Liberty and Antitrust in the Formative Era*, 79 B.U. L. REV. 1 (1999) (demonstrating that formative era courts construed Sherman Act and state antitrust statutes to be consistent with liberty of contract).

competitive level.¹⁷ Mergers, partnerships, joint ventures—all are presumed lawful, as are the (horizontal) ancillary restraints that further their legitimate purposes.¹⁸

Courts have not always appreciated the proper scope of the Sherman Act or the benefits of cooperation. For decades, an inhospitality tradition ruled antitrust, a tradition hostile to cooperation, be it by contract or complete integration.¹⁹ The dominant economic theories of the time saw no beneficial purposes for such practices, which most economists instead saw as attempts to “leverage” or enhance a firm’s market power.²⁰ Moreover,

¹⁷ *United States v. Joint Traffic Ass’n*, 171 U.S. 505, 568-69 (1898) (holding that the Sherman Act does not outlaw ordinary contracts, including mergers and the formation of partnerships, even though such agreements restrain trade in some sense); Meese, *supra* note 16, at 43-67 (asserting formative-era caselaw voided only those contracts that directly raised prices, leaving others protected by liberty of contract); MARTIN J. SKLAR, *THE CORPORATE RECONSTRUCTION OF AMERICAN CAPITALISM: 1870-1916, THE MARKET, THE LAW, AND POLITICS* 105-17 (1988) (Congress rejected proposals to ban all contracts limiting competition because of constitutional concerns). As Judge Easterbrook put it recently:

[A]ntitrust law permits, indeed encourages, cooperation inside a business organization the better to facilitate competition between that organization and other producers. To say that participants in an organization may cooperate is to say that they may control what they make and how they sell it: the producers of *Star Trek* may decide to release two episodes a week and grant exclusive licenses to show them, even though this reduces the number of times episodes appear on TV in a given market.

Chicago Prof’l Sports Ltd. v. NBA, 95 F.3d 593, 598 (7th Cir. 1996). *See also* *United States v. Syufy Enters.*, 903 F.2d 659, 672-73 (9th Cir. 1990) (stating that the competitive market thrives on firms “buying out competitors”).

¹⁸ *Joint Traffic Ass’n*, 171 U.S. at 568-69; *United States v. Addyston Pipe & Steel Co.*, 85 F. 271, 280-83 (6th Cir. 1898). *See also* *Northern Securities*, 193 U.S. at 361 (Brewer, J. concurring). Judge Easterbrook has summarized the Sherman Act’s attitude toward voluntary cooperation well:

Cooperation is the basis of productivity. It is necessary for people to cooperate in some respects before they may compete in others, and cooperation facilitates efficient production. Joint ventures, mergers, systems of distribution—all these and more require extensive cooperation, and all are assessed under a Rule of Reason that focuses on market power and the ability of cooperators to raise price by restricting output. The war of all against all is not a good model for any economy. Antitrust law is designed to ensure an appropriate blend of cooperation and competition, not to require all economic actors to compete full tilt at every moment. When cooperation contributes to productivity through the integration of efforts, the Rule of Reason is the norm.

Polk Bros. v. Forest City Enters., 776 F.2d 185, 188 (7th Cir. 1985) (citations omitted); *see also Chicago Prof’l Sports*, 95 F.3d at 598 (“Even a single firm contains many competing interests. One division may make inputs for another’s finished goods. . . . Conflicts are endemic in any multi-stage firm, such as General Motors or IBM.”); *Chicago Bd. of Trade v. United States*, 246 U.S. 231, 239-41 (1918) (analyzing horizontal restraint ancillary to creation of grain exchange under full blown Rule of Reason); *Hopkins v. United States*, 171 U.S. 578, 603 (1898) (finding livestock exchange and various restraints ancillary to it were not restraints of trade).

¹⁹ Frank H. Easterbrook, *Is There a Ratchet in Antitrust Law*, 60 TEX. L. REV. 705, 715 (1982) (describing inhospitality tradition of antitrust). The phrase “inhospitality tradition” was coined by Professor Donald Turner, who was head of the Antitrust Division under President Johnson. *See* Stanley Robinson, 1968 N.Y. St. Bar Ass’n Antitrust Law Symp. 29 (“I approach [vertical] restrictions not hospitably in the common law tradition, but inhospitably in the tradition of antitrust law.”) (introducing and quoting Donald Turner).

²⁰ OLIVER WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM* 7 (1985) (describing

the dominant normative theories of the era treated decentralization of power and liberty *from* contract as unalloyed goods, with little regard to the economic effects of enforcing these policies.²¹ During this “populist” era, judges frowned on all attempts to expand firm boundaries by merger—horizontal, vertical, or conglomerate.²² Attempts to cooperate by contract were also curtailed, even when such cooperation enhanced social welfare or *lowered* prices, as courts voided tying contracts, maximum resale price maintenance, exclusive territories, and exclusive dealing.²³ According to these courts, the Sherman Act was meant to achieve an “open market,” free

assumptions of neoclassical price theory and their influence on industrial organization); *id.* at 19-26, 370-73 (describing influence of this paradigm on antitrust thinking). Professor Coase captured the spirit of this era with the following statement:

One important result of this preoccupation with the monopoly problem is that if an economist finds something—a business practice of one sort or another—that he does not understand, he looks for a monopoly explanation. And as we are very ignorant in this field, the number of ununderstandable practices tends to be rather large, and the reliance upon monopoly explanation frequent.

Ronald H. Coase, *Industrial Organization: a Proposal for Research*, reprinted in *THE FIRM, THE MARKET, AND THE LAW* 57, 60-61 (1988). Classic examples of this inhospitality approach include William S. Comanor, *Vertical Territorial and Customer Restrictions: White Motor and its Aftermath*, 81 HARV. L. REV. 1419, 1436 (1968); Donald F. Turner, *The Validity of Tying Arrangements Under the Antitrust Laws*, 72 HARV. L. REV. 50 (1958).

²¹ See, e.g., *United States v. Topco Assocs.*, 405 U.S. 596, 612 (1972); *Albrecht v. Herald Co.*, 390 U.S. 145, 152 (1968) (holding maximum resale price maintenance unlawful per se even though it reduces prices because it “cripple[s] the freedom of traders and thereby restrain[s] their ability to sell in accordance with their judgment.”); *United States v. Von’s Grocery Co.*, 384 U.S. 270, 274 (1966); *Brown Shoe Co. v. United States*, 370 U.S. 294, 344 (1962) (“[W]e cannot fail to recognize Congress’ desire to promote competition through the protection of viable, small, locally owned business. Congress appreciated that occasional higher costs and prices might result from the maintenance of fragmented industries and markets.”); *Fashion Originators’ Guild of Am., Inc. v. FTC*, 312 U.S. 457, 467-68 (1941). See also Harlan M. Blake & William K. Jones, *Toward a Three-Dimensional Antitrust Policy*, 65 COLUM. L. REV. 422, 422-23 (1965) (contending that antitrust law reflects a populist tradition emphasizing decentralized economic power and individual freedom); Harlan M. Blake & William K. Jones, *In Defense of Antitrust*, 65 COLUM. L. REV. 377, 384 (1965) (arguing that antitrust policy should protect individuals from economic power).

²² *FTC v. Procter & Gamble Co.*, 386 U.S. 568, 581 (1967) (condemning conglomerate merger because, *inter alia*, it led to advertising efficiencies); *Von’s Grocery*, 384 U.S. at 273-78 (condemning horizontal merger despite presence of over 3000 independent firms in relevant market); *Brown Shoe*, 370 U.S. at 344 (condemning vertical merger in unconcentrated market because of minimal “foreclosure”).

²³ See, e.g., *N. Pac. Ry. v. United States*, 356 U.S. 1, 8 (1958) (announcing per se rule against ties obtained by firms with market power); *Albrecht*, 390 U.S. 145 *passim* (declaring maximum resale price maintenance per se unlawful); *United States v. Arnold, Schwinn, & Co.*, 388 U.S. 365, 379 (1968) (holding exclusive territories per se unlawful); *Topco Assocs.*, 405 U.S. at 608 (declaring horizontal ancillary division of territories unlawful per se despite finding by district court that such agreements were procompetitive); *United States v. Sealy, Inc.*, 388 U.S. 350, 354-58 (1967) (same); *Standard Oil Co. v. United States*, 337 U.S. 293, 294 (1949) (holding exclusive dealing contracts involving a substantial share of the market were unlawful without consideration of justifications).

It should be noted that the per se rule against tying contracts applied only to those agreements obtained by firms with market power. *N. Pac. Ry.*, 356 U.S. at 6-7. However, courts found market power so readily that this element had little meaningful impact. See, e.g., *United States v. Loew’s, Inc.*, 371 U.S. 38, 45 n.4 (1962) (holding that, without more, possession of a copyright establishes market power); *Siegel v. Chicken Delight, Inc.*, 448 F.2d 43, 49 (9th Cir. 1971) (holding possession of attractive trademark confers market power for tying purposes).

courts, the Sherman Act was meant to achieve an "open market," free of the constraining influence of such "monopolistic" practices, thus assuring "competition on the merits."²⁴ Even intrafirm cooperation suffered, as courts penalized "conspiracies" between divisions of the same firm and invoked section 2 of the Sherman Act to thwart vertical integration and "predatory expansion."²⁵

Economic theory has evolved since this populist era. Economists and most antitrust lawyers now understand that various contracts and other practices once presumed "monopolistic" can in fact enhance the competitive process by facilitating the beneficial coordination of productive activity.²⁶ This is particularly true of vertical arrangements. Tying contracts, distributional restraints, and complete vertical integration—all can be means of overcoming the transaction costs that would otherwise result from reliance on contracting in the "open market," or "competition on the merits."²⁷ Some of these same advances in theory have also led to more benign explanations of horizontal mergers, joint ventures, and contractual restraints, all once deemed patently anticompetitive.²⁸ At the same time, most scholars and courts agree that "consumer welfare" is the sole objective of antitrust law, without regard to the decentralization of power and liberty

²⁴ See, e.g., *Fortner Enters. v. United States Steel Corp.*, 394 U.S. 495 (1969) (holding tying agreements presumptively unlawful because they interfere with competition on the merits); *Brown Shoe*, 384 U.S. at 321 (holding that exclusive dealing contract "conflicts with the central policy of both section 1 of the Sherman Act and section 3 of the Clayton Act against contracts which take away freedom of purchasers to buy in an open market"); *Klor's Inc. v. Broadway-Hale Stores, Inc.*, 359 U.S. 207, 213 (1959) (declaring group boycott per se unlawful absent proof of harm to consumers because the combination "takes from Klor's its freedom to buy appliances in an open competitive market . . ." and "deprives the manufacturers and distributors of their freedom to sell to Klor's . . ."). See also *Perma Life Mufflers, Inc. v. Int'l Parts Corp.*, 392 U.S. 134, 139 (1968); *Atl. Ref. Co. v. FTC*, 381 U.S. 357, 369-72 (1965) (condemning potentially "economical method of assuring efficient product distribution among dealers" because the practice purportedly involved the "utilization of economic power in one market to curtail competition in another").

²⁵ *Kiefer-Stewart v. Joseph E. Seagram & Sons*, 340 U.S. 211, 215 (1951) (finding unlawful conspiracy between two subsidiaries of the same firm); *United States v. Yellow Cab Co.*, 332 U.S. 218, 227-28 (1947) (same); *United States v. ALCOA*, 148 F.2d 416, 424 (2d Cir. 1945) (finding ALCOA guilty of unlawfully maintaining monopoly because it increased output in response to additional demand). See also *Indus. Bldg. Materials, Inc. v. Interchemical Corp.*, 437 F.2d 1336, 1342-43 (9th Cir. 1970) (finding a manufacturer's efficiencies-based forward integration an abuse of monopoly power).

²⁶ See generally WILLIAMSON, *supra* note 20; Easterbrook, *supra* note 19, at 706-10, 715.

²⁷ See, e.g., Alan J. Meese, *Tying Meets the New Institutional Economics: Farewell to the Chimera of Forcing*, 146 U. PA. L. REV. 1 (1997) [hereinafter Meese, *Forcing*]; Alan J. Meese, *Price Theory and Vertical Restraints: A Misunderstood Relation*, 45 UCLA L. REV. 143 (1997) [hereinafter Meese, *Price Theory*]; Robert H. Bork, *The Rule of Reason and the Per Se Concept: Price Fixing and Market Division*, 75 YALE L.J. 373, 430-38 (1966); Frank H. Easterbrook, *Maximum Price Fixing*, 48 U. CHI. L. REV. 886 (1981); Lester G. Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J.L. & ECON. 86 (1960).

²⁸ See, e.g., Alan J. Meese, *Farewell to the Quick Look*, 68 ANTITRUST L.J. 461, 478-81; See also Timothy J. Brennan, "Vertical" Excuses for Horizontal Practices: Should There Be Any Per Se Antitrust Rules?, 45 ANTITRUST BULL. 467 (2000).

from contract.²⁹

As a result of these advances in theory and law, antitrust courts have slowly undone many of the more extreme manifestations of the inhospitality tradition.³⁰ Courts generally refuse to second-guess the exact manner of cooperation that one or more firms might choose. Courts no longer condemn separate units of the same firm for "conspiring" with each other,³¹ and decisions to enter new lines of business or expand output on a current line are presumptively lawful.³² Furthermore, courts generally refuse to second-guess a firm's choice between "the firm" and "the market": nearly all forms of cooperation, whether by contract, merger, or something in between, are presumptively lawful, and almost all survive analysis under the Rule of Reason.³³

The inhospitality tradition is not dead yet, however. Indeed, the tradition is alive and well in certain antitrust doctrines embraced by the United States.³⁴ Tying contracts, for instance, are unlawful per se whenever the

²⁹ BORK, *supra*, note 9, at 50-71; Robert H. Lande, *Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged*, 34 HASTINGS L.J. 65 (1982); *Cont'l TV, Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 53 n.21 (1978) (rejecting concern for freedom of traders as a value of independent importance under the Sherman Act).

³⁰ Meese, *supra* note 28, at 474-76.

³¹ *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 777 (1984); *Chicago Prof'l Sports Ltd. v. NBA*, 95 F.3d 593, 598 (7th Cir. 1996).

³² *Jack Walters & Sons Corp. v. Morton Bldg., Inc.*, 737 F.2d 698, 710 (7th Cir. 1983) ("Vertical integration is a universal feature of economic life and it would be absurd to make it a suspect category under the antitrust laws just because it may hurt suppliers of the service that has been brought within the firm. . . . [V]ertical integration usually is procompetitive. If there are cost savings from bringing into the firm a function formerly performed outside it, the firm will be made a more effective competitor."); *Fruehauf Corp. v. FTC*, 603 F.2d 345, 352 n.9 (2d Cir. 1979) (finding significant market foreclosure does not itself doom vertical merger); *In re E.I. DuPont de Nemours & Co.*, 96 F.T.C. 653, 731-51 (1980) (construing precedents involving "predatory expansion" narrowly).

³³ See, e.g., *State Oil v. Khan*, 522 U.S. 3, 22 (1997) (overturning per se ban on maximum resale price maintenance); *Bus. Elecs. Corp. v. Sharp Elecs. Corp.*, 485 U.S. 717, 735-36 (1988) (holding vertical restraints not per se illegal without agreement on price or price levels); *Cont'l TV*, 433 U.S. at 58 (overturning per se ban on exclusive territories). See also, e.g., *Rothery Storage & Van Co. v. Atlas Van Lines*, 792 F.2d 210, 216-30 (D.C. Cir. 1986) (finding horizontal price restraints ancillary to joint venture analyzed under Rule of Reason); *Polk Bros. v. Forest City Enters.*, 776 F.2d 185, 191 (7th Cir. 1986) (holding horizontal territorial restraints ancillary to joint venture analyzed under Rule of Reason). See also Douglas H. Ginsburg, *Vertical Restraints: De Facto Legality Under the Rule of Reason*, 60 ANTITRUST L.J. 67 (1990).

Some have suggested that the difficulty of establishing liability under the Rule of Reason suggests the existence of numerous false negatives, i.e., instances in which anticompetitive restraints escape detection and punishment. See Stephen Calkins, *California Dental Association: Quick Look But Not the Full Monty*, 67 ANTITRUST L.J. 495, 521 (2000). As I have noted elsewhere, however, the relative dearth of cases finding liability under the Rule of Reason is also consistent with an alternative hypothesis, namely, that per se rules are still somewhat overinclusive, and that the vast majority of contracts subject to Rule of Reason analysis are in fact procompetitive or benign. See Meese, *supra* note 28, at 484 n.101.

³⁴ See Meese, *supra* note 28, at 476-77. By "United States," I mean the antitrust enforcement agencies during the period 1993-2000. Previous administrations, it should be noted, attempted to undo some of these doctrines. See, e.g., Meese, *Forcing*, *supra* note 27, at 48-49 (discussing government

defendant possesses market power.³⁵ Minimum resale price maintenance and horizontal maximum price maintenance are also unlawful per se, regardless whether the parties to the restraint possess market power.³⁶ Moreover, certain ancillary restraints, and certain practices pursued by monopolists, are presumed unlawful without any requirement that the plaintiff prove anticompetitive effect.³⁷

Although one suspects that these rules will eventually fall by the wayside, they are still the “the law of the land,” at least in the lower federal courts.³⁸ Moreover, two of these doctrines played a prominent role in the *Microsoft* case, namely, the per se rule against tying and the doctrine of monopolization. The United States chose to rely upon these outmoded doctrines, and Judge Jackson faithfully followed current law regarding tying and monopolization. No one should have been surprised when that law led to a verdict for the government.

The government, however, was not content with preventing Microsoft’s unlawful practices. Nor was it content with behavioral relief prohibiting plainly lawful conduct.³⁹ Instead, the government sought an extraordinary remedy—the disintegration of Microsoft into two new companies.⁴⁰

amicus brief in *Jefferson Parish*) (calling for retreat from per se rule against tying contracts).

³⁵ *Eastman Kodak Co. v. Image Technical Servs.*, 504 U.S. 451, 462 (1992); *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 9-18 (1985). See also *infra* notes 41-47 and accompanying text (describing support by the United States in *Microsoft* for the per se rule against tying).

³⁶ *Dr. Miles Med. Co. v. John D. Park & Sons*, 220 U.S. 373, 409 (1911) (finding minimum resale price maintenance agreement unlawful); *Bus. Elecs. Corp.*, 485 U.S. at 724-26 (assuming that minimum resale price maintenance remains unlawful per se); *Arizona v. Maricopa County Med. Soc’y*, 457 U.S. 332, 342-57 (1982) (reaffirming per se rule against horizontal maximum price fixing agreements). See generally Jill Bolyston Herndon & John E. Lopatka, *Managed Care and the Questionable Relevance of Maricopa*, 44 ANTITRUST BULL. 117, 136-42 (1999) (describing reliance by Department of Justice upon *Maricopa*’s per se rule in the healthcare context).

³⁷ *NCAA v. Bd. of Regents*, 468 U.S. 85, 98-120 (1984) (declaring certain ancillary restraints presumptively unlawful without requiring proof of anticompetitive effect) (alternate holding); *Chicago Prof’l Sports Ltd. v. NBA*, 961 F.2d 669, 674-76 (7th Cir. 1992). Cf. *United States v. Topco Assocs.*, 405 U.S. 596 *passim* (1972) (declaring certain restraints ancillary to legitimate venture per se unlawful). See also Federal Trade Commission and U.S. Department of Justice Guidelines for Collaborations Among Competitors § 3.3, reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13,161 at 20,856 (stating that enforcement agencies will presume agreements unlawful when “the likelihood of anticompetitive harm is evident from the nature of the agreement”). See also *infra* notes 85-89 and accompanying text (describing law of monopolization supported by the United States in *Microsoft*).

³⁸ *State Oil v. Khan*, 522 U.S. 3, 20 (1998) (holding lower courts are bound by Supreme Court precedents, even if those precedents are doomed for reversal).

³⁹ For instance, the remedy sought and obtained by the government prohibits Microsoft from entering exclusive dealing contracts with vendors of its software. *United States v. Microsoft Corp.*, 97 F. Supp. 2d 59, 68 (D.D.C. 2000). Many such contracts are perfectly lawful, however, even if entered into by monopolists. Indeed, the district court expressly found that Microsoft’s numerous exclusive dealing contracts were not unlawful under section 1 of the Sherman Act. *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30, 51-54 (D.D.C. 2000).

⁴⁰ Plaintiffs’ Memorandum in Support of Proposed Final Judgment at 20-24, *Microsoft* (No. 98-1232) (arguing for “reorganization” of Microsoft into two different entities), available at <http://www.usdoj.gov/atr/cases/f4600/4642.htm>. See also Plaintiffs’ Revised Proposed Final Judgment,

Under the terms of the government's proposal, one firm, dubbed "OpCo," would develop and market the firm's Windows operating system and any other subsequently developed operating systems.⁴¹ The other, dubbed "AppCo," would house the firm's applications, including Internet Explorer, Microsoft Office, and others.⁴² While the proposed remedy would allow the firms to cooperate by contract, the terms of such cooperation would be set by decree and subjected to judicial oversight.⁴³ In pressing for this relief, the government sought to undo cooperation, in the form of vertical integration, that has produced an operating system and applications software that have thrived in the marketplace. In its place, the government would substitute its own approved form of contractual collaboration.

The government's request for relief rested upon various assumptions regarding the effect of Microsoft's unlawful conduct, as well as predictions about the consequences of divestiture.⁴⁴ Among other things, the government claimed that disintegration of Microsoft would have no efficiency implications and might even enhance the welfare of the firm's stockholders. Naturally, Microsoft has taken issue with these assumptions. Both sides, as well as amici, supported their positions with lengthy affidavits and offers of proof regarding the consequences of the government's remedy.⁴⁵ Nevertheless, Judge Jackson rejected Microsoft's request for a hearing to explore these competing contentions and granted the government's request *in toto*. In so doing, he made no findings of fact; nor did he discuss or evaluate the various legal and economic theories the government proffered in support of its relief.⁴⁶ Instead, he held that the government deserved deference because of its expertise, and was presumptively entitled to the relief it sought.⁴⁷

Judge Jackson did not cite any authority for the proposition that victory "on the merits" presumptively entitles the government to the remedy of

Microsoft (No. 98-1232), available at <http://www.usdoj.gov/atr/cases/f4800/4894.htm>.

⁴¹ Plaintiffs' Revised Proposed Final Judgment at 2-3; *id.* at 13-16 (defining Applications Business and Operating System Business).

⁴² *Id.* at 13-16.

⁴³ *Id.* at 3-5 (proposing provisions governing contractual and other relationships between OpCo and AppCo).

⁴⁴ See *infra* notes 54-85 and accompanying text.

⁴⁵ For instance, the government supported its proposal with a memorandum of law as well as affidavits by economists, software experts, and financial experts. Microsoft countered with a memorandum of its own, supported by affidavits by economic, financial, and software experts. Amici Curiae also made substantial submissions. See, e.g., Breakup And Compulsory Licensing: Remedies Or Bad Medicine? (30 page white paper submitted by Amici Association for Competitive Technology and Sidley & Austin), available at <http://www.actonline.org/pubs/paper.pdf>; see also Proposal of the Association for Competitive Technology for Establishment of an Orderly Procedure for Public Participation on the Issue of Remedies, Microsoft (No. 98-1232), available at <http://www.actonline.org/events/motionbrief.asp>.

⁴⁶ United States v. Microsoft Corp., 97 F. Supp. 2d 59 (D.D.C. 2000).

⁴⁷ *Id.* at 62 ("Plaintiffs won the case, and for that reason alone have some entitlement to a remedy of their choice.").

its choice. And, there is significant authority at least suggesting that there is no such presumption.⁴⁸ To be sure, the Supreme Court has said that courts should resolve “doubts” in favor of the prevailing party.⁴⁹ However, one cannot have “doubts,” in any meaningful sense, until one actually considers the contending evidence.⁵⁰ As shown below, consideration of the parties’ contentions should have led the district court to reject the government’s plea for disintegration, at least absent further factual findings. The district court’s findings of fact, copious as they are, do not justify the sort of extreme interference, requested by the government, in Microsoft’s legitimate exercise of its property rights.⁵¹ In fact, by choosing to rely at trial upon outmoded doctrines that reflect the inhospitality tradition, the government avoided any requirement to prove that Microsoft’s unlawful tactics actually reduced competition in the relevant market. Thus, the government’s own trial strategy ensured the absence of the sort of factual findings that might have justified the extraordinary relief that it now seeks. Absent additional proceedings, such interference with presumptively beneficial integration cannot be justified.

I. THE GOVERNMENT’S CASE FOR DISINTEGRATION

Like IBM and Apple, Microsoft designs and writes operating systems

⁴⁸ *United States v. United Shoe Mach. Corp.*, 391 U.S. 244, 250-51 (1968) (holding that trial courts may consider means of remedying monopoly less drastic than disintegration sought by the government); *see also supra* note 45 (collecting authorities rejecting remedies proposed by the government after victory on the merits).

⁴⁹ *See, e.g., Ford Motor Co. v. United States*, 405 U.S. 562, 575 (1972).

⁵⁰ Indeed, Judge Jackson seemed to believe that such findings were impossible or useless. *Microsoft*, 97 F. Supp. 2d at 62 (“In its experience the Court has found testimonial predictions of future events generally less reliable even than testimony as to historical fact, and cross-examination to be of little use in enhancing or detracting from their accuracy.”). Such epistemological pessimism, however, is no basis for refusing to investigate contending good faith claims about the effect of a proposed remedy. The question whether the disintegration or integration of two firms will enhance or detract from competition necessarily requires a predictive judgment, of the sort that antitrust courts often make. *Brown Shoe Co. v. United States*, 370 U.S. 294, 323 (1962) (finding that merger analysis requires analysis of probabilities). The difficulty of such an analysis does not dispense with its necessity. *United States v. Falstaff Brewing Corp.*, 410 U.S. 526, 566-67 n.19 (Marshall, J., concurring); *see also* OLIVER WENDELL HOLMES, *THE COMMON LAW* 48 (1923) (“If justice requires the fact to be ascertained, the difficulty of doing so is no ground for refusing to try.”). Judge Jackson’s apparent refusal to give serious consideration to Microsoft’s legal and factual arguments against disintegration and resulting abdication to the Department of Justice would seem to offend the bedrock principle that the ultimate decisionmaker must actually consider the evidence before depriving a defendant of liberty or property. *See Morgan v. United States*, 298 U.S. 468, 481 (1936) (“The one who decides must hear.”).

⁵¹ *United States v. United Shoe Mach. Co.*, 247 U.S. 32, 46 (1918) (stating that remedy of dissolution and separation of monopolist into competing units “is extreme, even in its mildest demands”); *Standard Oil Co. v. United States*, 221 U.S. 1, 78 (1911) (courts crafting antitrust remedies must keep in mind that “injury to the public by the prevention of an undue restraint on, or the monopolization of trade or commerce is the foundation upon which the prohibitions of the statute rest, and moreover that one of the fundamental purposes of the statute is to protect, not to destroy, rights of property.”) (emphasis added).

and various applications. Most notably, Microsoft is the proud author of the Windows operating system, along with the Internet Explorer (IE) browser and the Microsoft Office Suite, a package of word processing applications including Microsoft Word and Excel. Like other forms of cooperation in the software industry, the intrafirm cooperation that brought us Microsoft Word and IE is presumptively procompetitive, just like the cooperation within IBM that brought us OS/2 and numerous compatible applications.⁵² Indeed, this is the very sort of cooperation that the antitrust laws protect and encourage, by prohibiting only those practices that interfere with the workings of the marketplace in a manner that enhances consumer prices.⁵³ Nevertheless, the government sought to undo this cooperation, and Judge Jackson complied with its request.

The government does not assert that the intrafirm cooperation that produced IE, Microsoft Office, or any other Microsoft applications itself violated the Sherman Act. Nor has the government tried to rebut the well-founded presumption that such cooperation produced benefits for consumers.⁵⁴ The government's case for disintegration is far more subtle, and centers around its attempt to engineer the evolution of so-called "middleware," that is, an application that can support other applications. By forcing Microsoft to divest its application business, it is said, the remedy proposed by the government will create a firm with the ability and incentive necessary to develop middleware, thus undermining the monopoly that Microsoft unlawfully maintained.⁵⁵

How will the creation of a middleware firm remedy Microsoft's unlawful maintenance of monopoly power in the market for operating systems? The government argued, and the district court found, that the relevant market did *not* include middleware.⁵⁶ Creation of a middleware firm, then, would not itself alter Microsoft's market share or resulting market power. Still, according to the government, middleware has the potential to undo Microsoft's monopoly by lowering a barrier to entry that purportedly protects it. To understand how this could occur, it is necessary to review briefly the government's theory, adopted by the district court, about the nature and source of Microsoft's apparent market power.

Consumers do not buy computers and operating systems for their own

⁵² United States v. Microsoft Corp., 84 F. Supp. 2d 9, ¶ 115 (D.D.C. 1999) (noting that IBM currently markets a "SmartSuite bundle of office productivity applications as an alternative to Microsoft's Office suite.").

⁵³ See *supra* notes 15-18 and accompanying text.

⁵⁴ See *supra* notes 40-50 and accompanying text.

⁵⁵ Plaintiffs' Memorandum in Support of Proposed Final Judgment, at 32-35, United States v. Microsoft Corp., 97 F. Supp. 2d 59 (D.D.C. 2000) (No. 98-1232).

⁵⁶ United States v. Microsoft Corp., 87 F. Supp. 2d 30, 36-37 (D.D.C. 2000) (defining relevant market as "Intel-compatible PC operating systems"); United States v. Microsoft, 84 F. Supp. 2d 9, ¶ 29 (D.D.C. 1999) (finding that, even in best case scenario, "it would take several years for middleware . . . to constrain the pricing of [Intel-based PC operating systems].").

sake—they instead purchase them as “platforms” on which to run applications, like browsers, word processing software, and games. The development of such applications involves substantial upfront, fixed costs, in what is essentially the research and development of a complex software program.⁵⁷ Because more consumers use Windows than any other operating system, Independent Software Vendors (ISVs) are more likely to write applications compatible with the Windows operating system than, for instance, IBM’s OS/2 or Linux.⁵⁸ As a result, any firm that offers a competing operating system finds itself at an immediate disadvantage vis à vis Microsoft.⁵⁹ Indeed, the government continually claimed at trial, and the district court found, that there are about 70,000 applications available that are compatible with Windows 98, and only about 12,000 that are compatible with the operating system with the next largest base of users.⁶⁰ These and other factors led the district court to conclude that “Intel-based PC operating systems” comprised the relevant market, as a monopolist of such operating systems could profitably maintain a significant price increase, given the absence of other operating systems that consumers deemed to be close substitutes.⁶¹

Of course, mere possession of a large share of a relevant market does not by itself establish the existence of monopoly power.⁶² The district court also found that a significant barrier to entry protects this share.⁶³ In particular, the court found that a new entrant that offered an Intel-based PC

⁵⁷ *Microsoft*, 84 F. Supp. 2d at ¶ 38 (“Software development is characterized by substantial economies of scale. The fixed costs of producing software, including applications, is very high.”).

⁵⁸ *Id.* at ¶ 41 (“In deciding whether to develop an application for a new operating system, an ISV’s first consideration is the number of users it expects the operating system to attract.”).

⁵⁹ *Id.* at ¶ 30 (“The overwhelming majority of consumers will only use a PC operating system for which there already exists a large and varied set of high-quality, full-featured applications, and for which it seems relatively certain that new types of applications and new versions of existing applications will continue to be marketed at pace with those written for other operating systems.”).

⁶⁰ *Id.* at ¶ 40 (finding that Windows “supports over 70,000 applications”); *id.* at ¶ 47 (noting that “Apple’s Mac OS supports more than 12,000 applications”); *id.* at ¶ 46 (finding that, “at its peak, [IBM’s] OS/2 ran approximately 2,500 applications and had 10% of the market for Intel-compatible PC operating systems”). *But see* Richard McKenzie, Microsoft’s “Applications Barrier to Entry”: The Missing 70,000 Programs, Cato Institute Policy Analysis No. 380 (Aug. 31, 2000) (arguing that the 70,000 figure vastly overstates the number of unique applications available for Windows), available at <http://www.cato.org/pubs/pas/pa380.pdf>.

⁶¹ *Microsoft*, 84 F. Supp. 2d at ¶ 20 (finding that, for instance, current owners of Intel-based PCs would face significant costs in switching to non-Intel operating systems); *id.* at ¶¶ 24-26 (finding that network computers are not a reasonable substitute for Intel-based PCs); *id.* at ¶ 21 (finding that “relative dearth of applications written to run on the Mac OS” suggested that few consumers would substitute to an Apple OS in the face of a significant increase in the price of Intel-based PC Operating Systems).

⁶² *United States v. Syufy Enters.*, 903 F.2d 659, 664 (9th Cir. 1990); *Ball Mem’l Hosp. v. Mut. Hosp. Ins.*, 784 F.2d 1325, 1336-37 (7th Cir. 1986).

⁶³ *Microsoft*, 84 F. Supp. 2d at ¶¶ 36-52. Indeed, the government and the district court could have pushed this logic even further. Given its larger installed base that supports the proliferation of Windows-based applications, it would seem that Windows is itself a relevant market, in which Microsoft has a 100% share.

operating system would find itself at a severe disadvantage *vis à vis* Microsoft, unless it could somehow ensure the availability of tens of thousands of compatible applications.⁶⁴

Enter Netscape, which in 1994 had a monopoly share of the market for a vital software application—internet browsers. Netscape was a “killer” application.⁶⁵ Almost everyone who buys a PC wants to browse the internet, and they need a browser to do so. Netscape’s Navigator was compatible with fifteen different operating systems, and was the browser of choice, with about eighty percent of the market.⁶⁶ Moreover, unlike most other applications, Netscape had the potential to evolve into “middleware.”⁶⁷ More precisely, Netscape had begun to include with Navigator software code known as APIs—application programming interfaces—that provided a template to which ISVs could write software applications.⁶⁸ Although early versions of Navigator included relatively few APIs, Netscape resolved ultimately to include an API set that would rival that contained in Windows.⁶⁹

At the same time, Sun Microsystems was creating a sort of middleware of its own. In particular, Sun was developing Java, a programming language that could empower ISVs to write once and nevertheless know that their applications would run on any operating system.⁷⁰ Merely writing a program in the Java language, however, would not ensure that an application ran “cross-platform.” Instead, applications written in Java would only run on PCs that contained so-called Java Class Libraries—APIs on which ISVs writing in Java could rely, as well as a so-called Java Virtual Machine, which helped translate Java software code into instructions compre-

⁶⁴ *Id.* at ¶ 40 (“To provide a viable substitute for Windows, another PC operating system would need a large and varied enough base of compatible applications to reassure consumers that their interests in a variety, choice, and currency would be met to more-or-less the same extent as if they chose Windows.”); *id.* at ¶¶ 45-47 (finding that IBM and Apple were not viable substitutes for Windows because of the relative absence of applications compatible for these operating systems).

⁶⁵ Plaintiffs’ Memorandum in Support of Proposed Final Judgment at 16, *United States v. Microsoft Corp.*, 97 F. Supp. 2d 59 (D.D.C. 2000) (No. 98-1232); *see also Microsoft*, 84 F. Supp. 2d at ¶ 69 (“Netscape Navigator possesses three key middleware attributes that endow it with the potential to diminish the applications barrier to entry.”).

⁶⁶ *Microsoft*, 84 F. Supp. 2d at ¶ 69; *id.* at ¶ 360 (finding that Netscape’s share of the browser market was “above eighty percent” in January 1996). This is not to say that Netscape possessed “monopoly power” for purposes of section 2 of the Sherman Act. Such a conclusion would require the identification of some barrier to entry not apparent from the record. Nonetheless, the government seemed to believe that, but for Microsoft’s campaign against it, Netscape would have maintained a dominant share of the market for this brand new product indefinitely. *See infra* notes 75-78 and accompanying text.

⁶⁷ *Id.* at ¶¶ 69, 76-77.

⁶⁸ *Id.*; *id.* at ¶ 68 (defining middleware).

⁶⁹ *Id.* at ¶ 77 (finding that as of 1998, Navigator and JavaClass Libraries combined had fewer than 1000 APIs, compared to about 10,000 for Windows 98).

⁷⁰ *Id.* at ¶ 74 (“The inventors of Java at Sun Microsystems intended the technology to enable applications written in the Java language to run on a variety of platforms with minimal porting.”).

hensible to the underlying operating system.⁷¹ Microsoft apparently refused to distribute the Java Class Libraries and the Java Virtual Machine along with Windows.⁷² In 1995, however, Netscape agreed to include Java Class Libraries as well as the Java Virtual Machine along with its Navigator browser.⁷³ Sun, however, was far from its goal of including enough APIs in its Java Class Libraries to allow for a true “write once, run anywhere” environment.⁷⁴

Had Netscape and/or Sun been successful, the story goes, ISVs could have written applications that would run on any PC that included Netscape, essentially bypassing the underlying operating system.⁷⁵ Because Netscape would have been present on so many desktops, it would have changed fundamentally the economics of software application development, as ISVs could write a single version of an application, confident that it would run on the vast majority of PCs, without regard to the identity of the underlying operating system.⁷⁶ As a result, the number of applications written to run on Netscape and/or Java would have dwarfed the number written for Apple’s Mac OS or IBM’s OS/2, thus bringing down the applications barrier to entry. In such an environment, firms seeking to enter the operating systems market could do so confident that a significant pool of applications written to run *on Netscape* (or Java) would be compatible with their system, regardless of the new entrant’s own market share.

The government contends that Microsoft took various unlawful steps that advantaged its own browser and undermined Netscape’s dominant share of the browser market.⁷⁷ By driving Netscape from the desktop of most PCs, it is said, Microsoft helped maintain its own monopoly by undermining Netscape’s threat to the applications barrier to entry. As Netscape’s share of the browser market fell, the government claims, so too did the chance that ISVs would write applications that ran on Netscape. And, without any assurance that ISVs would, in fact, write applications that ran on its browser, Netscape lost the requisite incentive to add to its browser the thousands of APIs that were necessary to support a wide range of applications. At the same time, Microsoft allegedly took various steps that undermined Sun’s Java strategy. According to the government, Microsoft’s unlawful actions “raised” and then “maintained” the applications barrier to

⁷¹ *Id.* at ¶ 73.

⁷² *Id.* at ¶ 76.

⁷³ *Id.*

⁷⁴ *Id.* at ¶ 77.

⁷⁵ It should be noted that Java could have been successful without Netscape, if it could have found a different vehicle for distributing the Java Class Libraries and the Java Virtual Machine.

⁷⁶ *Microsoft*, 84 F. Supp. 2d at ¶¶ 29, 68-70; *id.* at ¶ 74 (describing Java’s “write once, run anywhere” strategy).

⁷⁷ Plaintiffs’ Memorandum in Support of Proposed Final Judgment at 15-24, *United States v. Microsoft Corp.*, 97 F. Supp. 2d 59 (D.D.C. 2000) (No. 98-1232) (summarizing government’s contentions).

entry, thus entrenching Microsoft's status as a monopolist.⁷⁸

The mere fact that Microsoft employed unlawful tactics that maintained its monopoly power, however, does not justify disintegration of the firm.⁷⁹ Moreover, even if the government could articulate a persuasive rationale for divestiture of Microsoft's browser business, such a rationale would not in any way provide a basis for disintegration of Microsoft's entire applications business. Why, then, should the district court disintegrate Microsoft? According to the government, such a breakup would be the most logical way of restoring the prospect of middleware competition, and thus would deprive Microsoft of the fruits of its anticompetitive acts—the monopoly power it purportedly enjoys because it “raised” and “maintained” the applications barrier to entry.⁸⁰ In particular, the government asserts that, unlike Microsoft's current applications business, an independent applications company that owns Microsoft's various applications would have incentives to develop the sort of middleware that Netscape and Java failed to produce.⁸¹ Most importantly, the United States points out that Microsoft Office—a bundle of a few word processing applications—may well be a candidate for middleware, just as Netscape was in 1995.⁸² Most people who purchase PCs also want word processing capability and Office is by far the most popular bundle of such applications.⁸³ Once separated from the current Microsoft, AppCo could add thousands of APIs to Office, thus developing middleware with a “built in” installed base.⁸⁴ Spinning off a separate AppCo could thus restore the competitive landscape that existed before Microsoft embarked on its predatory attack on Netscape and Java.⁸⁵

⁷⁸ *Id.* at 15 (stating that Microsoft's tactics “raised entry barriers”); *see also id.* at 18 (stating that Microsoft took various steps to “increase entry barriers”); *id.* at 19 (same); *id.* at 22 (same).

⁷⁹ *United States v. United Shoe Mach. Corp.*, 110 F. Supp. 295, 346-51 (D. Mass. 1953) *aff'd*, 347 U.S. 521 (1954) (refusing to grant government's request to disintegrate monopolist that had maintained its power by unlawful means); *United States v. Aluminum Co. of Am.*, 91 F. Supp. 333, 416-19 (S.D.N.Y. 1950) (same).

⁸⁰ Plaintiffs' Memorandum in Support of Proposed Final Judgment at 18-22, *Microsoft* (No. 98-1232).

⁸¹ *Id.* at 19-21.

⁸² *Id.* at 34 (“Office has all three of the characteristics that made Netscape such a potent threat to Microsoft's operating system monopoly: It can support APIs and thus be a platform for other applications; it could function on multiple operating systems; and it is a ‘killer application’ in that it provides functions that nearly everyone needs.”) (internal citations omitted).

⁸³ *Id.* at 28 (contending that Microsoft Office “has been dominant in its category since 1993, and [that] about 80 percent of all electronic information in most companies is stored in Office documents.”).

⁸⁴ *Id.* at 33-55.

⁸⁵ *Id.* The government does not seek to justify disintegration solely on the grounds that this remedy may result in the creation of middleware. It also argues, for instance, that an independent AppCo would be more likely to “port” applications like Word and other components of Microsoft Office to operating systems such as Linux that compete with Windows, thus undermining the applications barrier. *Id.* at 19. As noted earlier, however, the district court did not explain on which ground or grounds it was granting relief, so there are no findings about whether, in fact, such porting would occur. *See supra* notes 45-50 and accompanying text. At any rate, it does not appear that such porting could have any appreciable effect on the applications barrier to entry. As one of Microsoft's experts points out, Micro-

II. WHERE'S THE PROOF?

As explained above, the government justifies the harsh remedy of disintegration on the ground that such relief can lower the application barrier to entry that Microsoft purportedly "raised" and then "maintained" by means of its anticompetitive conduct.⁸⁶ In so doing, the government claims that mere behavioral relief will not suffice.⁸⁷ The government's argument fails for three independent reasons. First, the government has not shown

soft has ported Office and related programs to Apple's Mac OS, without thereby rendering Macintosh a substitute for Windows. See Declaration of Dr. Stan Liebowitz at 13-14, *Microsoft*, 97 F. Supp. 2d 50 (D.D.C. 2000) (No. 98-1232), available at http://www.neramicrosoft.com/level_1/nera_tt.htm. Indeed, at trial the government argued, and the district court found, that operating systems like Macintosh could not hope to compete with Windows because of the dearth of applications available for such non-Windows systems. *Microsoft*, 84 F. Supp. 2d at ¶ 21 ("consumer demand for Apple PC systems suffers on account of the relative dearth of applications written to run on the MAC OS."). The government cannot have it both ways: it cannot claim that a firm contemplating entry into the operating system market must be assured of tens of thousands of compatible applications while at the same time asserting that porting a package of a few applications will appreciably lower the applications barrier. See, e.g., *Astor Chauffeured Limousine Co. v. Runnfeldt Inv. Corp.*, 910 F.2d 1540, 1547-49 (7th Cir. 1990) (doctrine of judicial estoppel prevents party who prevailed under one version of the facts to assert contrary version in same or subsequent litigation). At any rate, even if such porting could have such a powerful effect, there would be no basis for an order of disintegration, as the court could achieve the very same purposes simply by ordering porting. The balance of this paper will therefore focus on the government's assertion that disintegration of Microsoft can introduce middleware and thus lower the applications barrier to entry.

⁸⁶ The government begins its legal argument in favor of disintegration in this case with a quote from *United States v. E.I. DuPont de Nemours & Co.*, 366 U.S. 316, 330-31 (1961) for the proposition that "divestiture is 'the most important of antitrust remedies. It is simple, relatively easy to administer, and sure.'" See Plaintiffs' Memorandum in Support of Proposed Final Judgment at 31, *Microsoft* (No. 98-1232). This quotation is entirely inapposite, however. *DuPont* dealt with a divestiture of stock which the defendant had purchased in violation of section 7 of the Clayton Act. It did not involve the dismemberment of a unitary corporate structure the creation of which was presumptively procompetitive. Moreover, the government has wrenched the quotation in question from the midst of a paragraph that was only concerned with the appropriateness of divestiture of stock purchased in violation of section 7. The paragraph is worth quoting in full, with the two sentences quoted by the government in bold.

It cannot be gainsaid that complete divestiture is peculiarly appropriate *in cases of stock acquisition that violate § 7*. That statute is specific and 'narrowly directed,' *Standard Oil Co. v. United States*, 337 U.S. 293, 312 (1949), and it outlaws a particular form of economic control—stock acquisitions which tend to create a monopoly of any line of commerce. The very words of § 7 suggest that an undoing of the acquisition is a natural remedy. Divestiture or dissolution has traditionally been the remedy for Sherman Act violations whose heart is intercorporate combination and control, and it is reasonable to think immediately of the same remedy *when § 7 of the Clayton Act*, which particularizes the Sherman Act standard of illegality, is involved. Of the very few litigated § 7 cases which have been reported, most decreed divestiture as a matter of course. **Divestiture has been called the most important of antitrust remedies. It is simple, relatively easy to administer, and sure.** It should always be in the forefront of a court's mind *when a violation of § 7 has been found*.

DuPont, 366 U.S. at 328-31 (emphases added). See also *Ford*, 405 U.S. at 573 (citing *DuPont* for the proposition that "[c]omplete divestiture is particularly appropriate where asset or stock acquisitions violate the antitrust laws.").

⁸⁷ Plaintiffs' Memorandum In Support Of Proposed Final Judgment at 7-8, *Microsoft* (No. 98-1232) (summarizing government's assertion that behavioral relief will not suffice).

that Microsoft's unlawful conduct—as opposed to its perfectly lawful and procompetitive development and marketing of IE—deprived Netscape of its dominant share of the internet browser market. Instead, by relying upon outmoded doctrines regarding tying and monopolization, the government absolved itself of any obligation to prove that Microsoft's *unlawful* tactics had the effect that the government now claims. Second, the government did not prove that, but for Netscape's failure to maintain its status as the dominant browser, Netscape would have in fact evolved into middleware of the sort that would have undermined the applications barrier to entry. Nor did the government prove that Sun's Java middleware strategy would have been successful. Third, even if the government could show that Microsoft's unlawful tactics were primarily responsible for the failure of Netscape and/or Java to evolve into middleware, thereby lowering the applications barrier, the government did not show that disintegration of Microsoft is necessary to enhance competition. There were, and are, numerous other candidates for middleware, and the district court awarded behavioral relief designed to prevent Microsoft from interfering with the entry of such middleware into the marketplace. As a result, the remedy proposed by the government will not further legitimate purposes that behavioral relief would not otherwise accomplish.

It may be tempting to order disintegration in any event, on the off chance that the division of Microsoft will introduce middleware competition that otherwise would not have occurred. Anything is possible. Yet, one cannot justify the disintegration of a going concern based on the mere possibility that such action will produce competitive benefits. While the inhospitality tradition presumed the absence of benefits from vertical integration, most economists and antitrust lawyers now know better, recognizing that such integration often creates significant benefits. Absent some showing by the government that the various benefits of integration proffered by Microsoft do not exist, the firm should remain intact.

A. *Did Microsoft Unlawfully “Raise” or “Maintain” the Applications Barrier?*

The assertion that Microsoft “raised” or “increased” the applications barrier in any sense that would justify antitrust relief is plainly false. The applications barrier was the natural result of Windows' wide acceptance in the marketplace, as well as Microsoft's (procompetitive) efforts to encourage the production of Windows-compatible applications.⁸⁸ Indeed, when

⁸⁸ *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9, ¶ 39 (D.D.C. 1999) (“The main reason that demand for Windows experiences positive network effects, however, is that the size of Windows' installed base impels ISVs to write applications first and foremost to Windows, thereby ensuring a large body of applications from which consumers can choose.”); *id.* at ¶ 44 (“Microsoft works closely with

defending an earlier consent decree that it had negotiated with Microsoft, the government expressly stated that the firm had obtained its monopoly position lawfully—by accident and perhaps superior business acumen.⁸⁹ This position of *lawful* monopoly—and not any anticompetitive conduct—led ISVs to write tens of thousands of applications to run on Windows.⁹⁰ Of course, the availability of these applications helped to fortify Microsoft's position, and contributed to its attainment of monopoly power. But this is just another way of saying that any given form of operating system software is characterized by increasing returns in consumption, at least given the current state of software technology.⁹¹

This is exactly the position the government took when it defended its decision not to pursue Microsoft's acquisition of monopoly power.⁹² Ultimately, then, the government's claim that Microsoft "raised" the applications barrier to entry boils down to an assertion that possession of a monopoly protected by barriers to entry can somehow form the basis for the firm's disintegration.⁹³ Yet, without more, possession of a monopoly forti-

ISVs to help them adapt their applications to the newest version of the operating system"); *id.* at ¶ 43 (noting that Microsoft spends "hundreds of millions of dollars . . . each year inducing ISVs to write applications for Windows.").

⁸⁹ *United States v. Microsoft Corp.*, 56 F.3d 1448, 1452 (D.C. Cir. 1995) ("The government did not allege and does not contend—and this is of crucial significance to this case—that Microsoft *obtained* its alleged monopoly position in violation of the antitrust laws. The government believes that Microsoft's initial acquisition of monopoly power in the operating systems market was the somewhat fortuitous result of IBM choosing for its PCs the operating system introduced by Microsoft ("MS-DOS"), which, with Microsoft's successful exploitation of that advantage, led Microsoft to obtain an installed base on millions of IBM, and IBM-compatible, PCs."); Brief For Appellant United States of America at 4, *Microsoft*, 56 F.3d 1448 (No. 95-5037) ("By June 1994, the Department had reached two principal conclusions [as a result of its investigation]. First, there was no basis for an antitrust challenge to Microsoft's acquisition of monopoly power in the market for operating system software for IBM-compatible personal computers; the government concluded that this had resulted from Microsoft's obtaining an enormous installed base on millions of personal computers ("PCs") through its successful exploitation of its initial advantage as IBM's chosen PC operating system."). The government's expert, Nobel Laureate Kenneth Arrow, agreed. "Clearly, the six-fold growth in the installed base [of consumers using Microsoft's operating system] is primarily the result of the extraordinary commercial success of the IBM-compatible PC platform, in which Microsoft's product development and marketing played a part." Declaration of Kenneth Arrow at 11, *Microsoft*, 56 F.3d 1448 (No. 95-5037).

⁹⁰ The district court did not hold or suggest that Microsoft "raised" or otherwise created the applications barrier to entry. Instead, the court suggested the Microsoft attempted to "protect" the barrier and to prevent others from "diminishing" it. *Microsoft*, 84 F. Supp. 2d at ¶¶ 407-11. This finding is consistent with the court's assumption that Microsoft obtained its monopoly honestly, without engaging in any predatory tactics. *See supra* note 89 and accompanying text.

⁹¹ *Microsoft*, 56 F.3d at 1452 ("It is undisputed that the software market is characterized by 'increasing returns,' resulting in natural barriers to entry."). *See also, e.g.*, David Evans & Richard Schmalensee, *A Guide to the Antitrust Economics of Networks*, 10 ANTITRUST 36 (1996) (contending that "network externalities" can arise where increasing demand for the product in question "spur[s] the demand [and production of] complementary products.").

⁹² *See supra* notes 88-91 and accompanying text.

⁹³ The government seems to assert that Microsoft's campaign against Netscape itself raised the applications barrier. *See supra* notes 88-91 and accompanying text. Netscape, however, never did constitute middleware of the sort that could lower the applications barrier; the "height" of the barrier

fied by such natural competitive advantages does not give rise to liability under the Sherman Act.⁹⁴ To be sure, the government adduced “more;” it proved that the firm maintained its monopoly and violated section 2 *after* it acquired monopoly power. As already noted, however, any decision to dismember the company must rest on more than that.⁹⁵ The government’s position—that business success and naturally resulting “barriers to entry” taken together justify the extraordinary remedy of divestiture—is unprecedented and would radically expand the availability of such relief. After all, the lawful acquisition of a monopoly necessarily excludes less efficient firms and almost always calls forth various competitive advantages—including the goodwill that naturally accrues to a successful firm—that competitors and others would characterize as “barriers to entry.”⁹⁶ The government’s position, then, would require divestiture in most cases in which a firm improperly maintained an otherwise lawful monopoly, regardless

was thus unaffected by Netscape’s presence. Thus, removal of Netscape as a *potential* author of mid-*leware* did not “increase” any barrier.

⁹⁴ See *Ala. Airlines v. United Airlines*, 948 F.2d 536, 947-49 (9th Cir. 1991); see also Mark A. Lemley, *Antitrust and the Internet Standardization Problem*, 28 CONN. L. REV. 1041, 1068 (1996) (“applying section 2 to a standardized software market with a single dominant firm arguably does not fit very well with existing precedent. . . . While in the ordinary case control of a market by a single firm may raise section 2 concerns, in this case the monopolist may have some legitimate claim that its monopoly has been ‘thrust upon it’ and is therefore not illegal under the rule of *United States v. Aluminum Company of America (ALCOA)*.”).

⁹⁵ See *supra* note 94 and accompanying text.

⁹⁶ See generally *Alaska Airlines*, 948 F.2d at 947-49. Of course, there is a respectable argument that such goodwill should not be deemed a barrier to entry in the first place, since it is the natural result of the sort of competitive process that the antitrust laws encourage. *United States v. Waste Mgmt., Inc.*, 743 F.2d 976, 984 (2d Cir. 1984) (“We fail to see how the existence of good will achieved through effective service is an impediment to, rather than the natural result of, competition.”). See also *Stearns Airport Equip. Co. v. FMC Corp.*, 170 F.3d 518, 531 (5th Cir. 1999); *Advo, Inc. v. Philadelphia Newspapers, Inc.*, 51 F.3d 1191, 1202-03 (3d Cir. 1995) (explaining that without more, reputation cannot be deemed a “barrier to entry” for antitrust purposes); *United States v. Syufy Enters.*, 903 F.2d 659, 669 (9th Cir. 1990). See generally GEORGE J. STIGLER, *THE ORGANIZATION OF INDUSTRY* 67 (1968) (defining entry barriers as any cost of production borne by new entrants that is or was not borne by incumbents); HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY* 553 (1999) (“Nothing is a more effective barrier to entry than a firm’s capacity to produce a high quality product at a low price, or to provide improved service to customers.”). Regardless whether such goodwill is properly deemed a barrier to entry for antitrust purposes, there is no economically meaningful basis for distinguishing this business advantage from other advantages associated with monopoly, including the widespread availability of complements that constitutes the “applications barrier to entry.” Indeed, some commentators have argued that antitrust law should be *less* concerned with the sort of “barriers to entry” generated by network effects. See Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479, 503-04 (1998) (“Network effects are an inherent part of certain markets, not a ‘market failure’ for which the law must necessarily correct. . . . Antitrust law is properly concerned in non-network markets with high barriers to entry. . . . Strong network effects are themselves a barrier to entry, though it is not at all clear that entry into such a market ought to be encouraged.”); Evans & Schmalensee, *supra* note 91, at 39 (arguing that dominance in industries characterized by network effects is more fragile than in other industries with the result that there is no rationale for exceptionally close antitrust scrutiny of monopolists in such markets). Thus, there is no way to limit the government’s argument on this score to those cases involving an “applications barrier to entry,” as opposed to other types of barriers.

whether less intrusive remedies were equally effective. If accepted, such a position would essentially punish success, contravening ninety years of section 2 precedent holding that, without more, mere size is not a concern under the Act.⁹⁷ Even monopolists are allowed to compete, and success in the competitive struggle is not a "barrier to entry" that justifies extraordinary relief.⁹⁸

⁹⁷ *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 610-11 (1985); *United States v. United States Steel Corp.*, 251 U.S. 417, 444 (1920); *Standard Oil Co. v. United States*, 221 U.S. 1, 62 (1911) (noting that Sherman Act does not forbid "monopoly in the concrete"). *See also* *Spectrum Sports, Inc. v. McQuillan Enters.*, 506 U.S. 447, 458 (1993) ("The purpose of the [Sherman] Act is not to protect businesses from the working of the market; it is to protect the public from the failure of the market. The law directs itself not against conduct which is competitive, even severely so, but against conduct which *unfairly* tends to destroy competition itself.") (emphasis added); *Cargill, Inc. v. Monfort of Colorado, Inc.*, 479 U.S. 104, 116 (1986) ("[I]t is in the interest of competition to permit dominant firms to engage in vigorous competition . . .") (quoting *Arthur S. Langenderfer, Inc. v. S.E. Johnson Co.*, 729 F.2d 1050, 1057 (6th Cir. 1984)); *Alaska Airlines*, 948 F.2d 547-49; *United States v. ALCOA*, 148 F.2d 416, 430 (2d Cir. 1945) ("[T]he Act does not mean to condemn the resultant of those very forces which it is its prime object to foster: *finis opus coronat*. The successful competitor, having been urged to compete, must not be turned upon when he wins."); *Berkey Photo, Inc. v. Eastman Kodak, Inc.*, 603 F.2d 263, 276 (2d Cir. 1979) ("[A] large firm does not violate § 2 simply by reaping the competitive rewards attributable to its efficient size, nor does an integrated business offend the Sherman Act whenever one of its departments benefits from association with a division possessing monopoly in its own market."); Declaration of Kenneth Arrow at 4, *Microsoft*, 56 F.3d 1448 (No. 95-5037) ("A rule of penalizing market successes that are not the result of anticompetitive practices will, among other consequences, have the effect of taxing technological improvements and is unlikely to improve welfare in the long run.").

⁹⁸ *United States v. United Shoe Mach. Corp.*, 110 F. Supp. 295, 346-48 (D. Mass. 1953), *aff'd*, 347 U.S. 521 (1954) (refusing to grant divestiture despite finding that defendant had unlawfully maintained its monopoly power that was also protected by naturally occurring barriers to entry). Indeed, in *United Shoe*, the court specifically found that United Shoe's monopoly was protected by goodwill and the availability of complements:

To combat United's market control, a competitor must be prepared with knowledge of shoemaking, engineering skill, capacity to invent around patents, and financial resources sufficient to bear the expense of long developmental and experimental processes. The competitor must be prepared for *consumers' resistance founded on their long-term, satisfactory relations with United*, and on the cost to them of surrendering United's leases. Also, the competitor must be prepared to give, or point to the source of, repair and other services, and to the sources of supplies for machine parts, expendable parts, and the like.

Id. at 344 (emphases added). Despite the presence of these naturally occurring "barriers to entry," including increasing returns in consumption of United Shoe's machines, the court refused to order divestiture, and the Supreme Court affirmed. *United Shoe*, 347 U.S. at 521.

To be sure, the Supreme Court all but ordered divestiture over a decade later. *See* *United States v. United Shoe Mach. Corp.*, 391 U.S. 244, 252 (1968) (reversing and remanding trial court's denial of government petition for divestiture). *See also* Plaintiffs' Memorandum In Support Of Proposed Final Judgment at 32, *Microsoft* (No. 98-1232) (invoking this decision as an instance involving disintegration of an otherwise unitary enterprise). This decision, however, rested on the Court's conclusion that the behavioral relief initially ordered by the district court had not, in fact, entirely undone the effect of the defendant's anticompetitive practices. *United Shoe*, 391 U.S. at 251-52. *But cf.* *United States v. United Shoe Mach. Corp.*, 266 F. Supp. 328, 332 (D. Mass. 1967) (finding that there were 126 suppliers of new shoe machines and that "United is subject to constant full and free competition from competitors' machines"). *See also* John E. Lopatka & William H. Page, *A (Cautionary) Note on Remedies in the Microsoft Case*, 13 ANTITRUST 25, 28 (1998). At most, then, the Supreme Court's decision in *United Shoe* stands for the proposition that, in a decade or so, the district court should revisit the effects of any be-

On the other hand, an assertion that Microsoft *maintained* the applications barrier would seem uncontroversial, at least in a legal sense. After all, the government prevailed at trial on its claims that Microsoft unlawfully “bundled” IE with the Windows operating system, “forcing” OEMs to install IE even though some might have preferred Netscape.⁹⁹ The government also prevailed on its claim that Microsoft “maintained” its operating system monopoly by bundling, negotiating exclusive or primary dealing contracts, and taking steps to forestall Java’s entry into the marketplace.¹⁰⁰ Finally, the government prevailed on its claim that Microsoft attempted to monopolize the browser market.¹⁰¹ These various tactics, the government alleged, prevented Netscape from evolving into middleware, a development that would have lowered the applications barrier, necessitating the remedy that the government seeks. It would seem to follow, then, that Microsoft’s acts did, in fact, maintain the applications barrier.

While the government prevailed on these three claims, it did so without demonstrating that Microsoft did in fact maintain the applications barrier. More precisely, the first two claims depended upon outmoded legal doctrine, descended from the inhospitality tradition, doctrine that dispensed with any requirement that the government actually prove anticompetitive effects. The third claim, attempted monopolization, while resting on a sounder doctrinal foundation, required no proof that the applications barrier to entry existed, let alone that Microsoft’s anticompetitive conduct maintained it.

1. Tying

Consider first the claim that Microsoft unlawfully “tied” or “bundled” IE to Windows 95, and then to Windows 98. According to the government, such bundling took several forms, including: 1) the requirement that OEMs purchase and install IE along with Windows; 2) contractual provisions preventing OEMs from removing the IE “icon” from the PC desktop before shipment to consumers; and 3) contractual provisions preventing OEMs from disabling IE.¹⁰² To prevail on this claim, the government did not have to show that the bundle was anticompetitive. Instead, the government invoked, and the district court applied, the *per se* rule against tying reaffirmed in *Jefferson Parish Hospital Dist. No. 2 v. Hyde*.¹⁰³ To prevail under a *per*

havioral relief it might order. It does not, as the government seems to suggest, support disintegration *instantly*.

⁹⁹ *Microsoft*, 87 F. Supp. 2d at 47-51.

¹⁰⁰ *Id.* at 37-44.

¹⁰¹ *Id.* at 45-46.

¹⁰² *Id.* at 47; Plaintiffs’ Joint Response to Microsoft’s Motion for Summary Judgment and Reply in Support of Motions for Preliminary Injunction at 53-54, *Microsoft* (No. 98-1232).

¹⁰³ *Microsoft*, 87 F. Supp. 2d at 47; Plaintiffs’ Joint Response To Microsoft’s Motion For Sum-

se analysis, the government merely had to show that: 1) Microsoft possessed market power; 2) Windows and IE were separate products for anti-trust purposes; 3) Microsoft "conditioned" the licensing of Windows to OEMs on their agreement also to purchase IE; and 4) the arrangement involved a not insubstantial amount of interstate commerce.¹⁰⁴ Under *Jefferson Parish*, satisfaction of this test doomed the challenged arrangement, regardless of its actual benefits and costs.¹⁰⁵

Given the district court's factual findings, the tying claim was a cakewalk for the government. Microsoft had a ninety percent share of the relevant market for Intel-based PC operating systems. Moreover, there was a "separate demand" for operating systems and browsers, with the result that the two were properly deemed separate products under the test articulated

mary Judgment And Reply In Support Of Motions For Preliminary Injunction at 48 (arguing that "Microsoft's Forced Licensing Of Internet Explorer to OEMs" is unlawful per se); Plaintiffs' Joint Proposed Conclusions of Law at 53-61, *Microsoft* (No. 98-1232) (same). See also *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 26-29 (1985).

¹⁰⁴ *Jefferson Parish*, 466 U.S. at 12-18. See also *Eastman Kodak, Inc. v. Image Technical Servs.*, 504 U.S. 451, 461-62 (1992).

¹⁰⁵ *Jefferson Parish*, 466 U.S. at 34-35 (O'Connor, J. concurring) (criticizing the per se rule as overinclusive because it condemns certain contracts without any inquiry into their actual harms and benefits.). To be sure, some lower courts have recognized certain affirmative defenses to tying contracts that are otherwise unlawful per se. See, e.g., *Mozart Co. v. Mercedes-Benz of N. Am.*, 833 F.2d 1342, 1348-49 (9th Cir. 1987). However, the recognition of such a defense would seem inconsistent with the best reading of Supreme Court precedent. Meese, *Forcing*, *supra* note 27, at 21 n.74. At any rate, the United States assumed that such a defense was not available, and the district court apparently agreed. Plaintiffs' Joint Conclusions of Law at 54, *Microsoft* (No. 98-1232) ("The requirements for application of the per se rule are met in this case by Microsoft's several means of forcing licensees—whether personal computer manufacturers or end users—to take (and often actually use) a browser along with the operating system. . . . That is enough for liability. In addition, it is clear that, *even under a Rule of Reason analysis*, there is no business justification for Microsoft's tying practices and that those practices have threatened anticompetitive effects in the browser market and maintained Microsoft's monopoly in the operating system market.") (emphasis added); *Microsoft*, 87 F. Supp. 2d at 47 (stating that "liability for tying exists" when four *Jefferson Parish* factors are present); *id.* at 47-51 (finding a tying violation without mentioning possibility of a business justification); *cf. id.* at 40 (considering possible business justifications as part of analysis of monopoly maintenance claim).

To be sure, the separate products inquiry does serve to "filter out" and save from condemnation some procompetitive bundles. Ford's bundle of a transmission and engine, for instance, would not be deemed unlawful per se, even if the firm were a monopolist. Indeed, at one time, lower courts at least employed the single product portion of the inquiry as a sort of "mini-rule of reason." See, e.g., *Principe v. McDonald's Corp.*, 631 F.2d 303, 307-11 (4th Cir. 1980) (finding that franchise trademark and lease of franchise premises were a single product because "the challenged aggregation is an essential ingredient for the franchise system's formula for success."); HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* 366 (1994) ("[before *Jefferson Parish*] creative courts have manipulated the judicial test so as to distinguish efficient from inefficient forced sales."). *Jefferson Parish*, however, rejected this approach, in favor of the so-called "separate demand" standard. As I have argued elsewhere, the "separate demand" test is underinclusive in that it only recognizes those efficiencies that are universally realized by all market participants. See Meese, *Monopoly Bundling in Cyberspace*, 44 ANTITRUST BULL. 65, 86-89 (1999) [hereinafter Meese, *Monopoly Bundling*]. Thus, in those instances in which only some market participants find bundling an efficient practice, the per se rule will condemn the arrangement whenever the seller has market power, without allowing the seller an opportunity to justify the practice. *Id.* at 86-88.

in *Jefferson Parish*.¹⁰⁶ Finally, Microsoft plainly “conditioned” the sale of Windows upon an agreement by OEMs to accept IE.¹⁰⁷

Still, proof that the Windows/IE bundle was unlawful per se did not establish that the bundle in fact harmed consumers, let alone that the practice maintained the applications “barrier to entry.” Satisfaction of the per se test does not identify ties that are anticompetitive in any meaningful sense. Instead, the per se rule purportedly identifies those instances in which a seller with market power “forces” a purchaser to buy a tied product that it otherwise would not have wanted, thus thwarting “competition on the merits.”¹⁰⁸ Such forcing, of course, does not harm competition or consumer welfare in any meaningful sense, but is instead analogous to contractual unconscionability.¹⁰⁹ Moreover, even if one assumes that “forcing” should itself establish antitrust liability, proof of the elements necessary to establish a per se violation does not establish its existence. Tying contracts—even those entered by monopolists—can serve beneficial purposes, and beneficial contracts are presumptively examples of voluntary integration, and thus not “forced” on purchasers.¹¹⁰ Still, the per se rule does not allow

¹⁰⁶ *Eastman Kodak*, 504 U.S. at 462-63; *Jefferson Parish*, 466 U.S. at 21-22 (articulating and applying separate demand test). More precisely, the government established that some manufacturers of operating systems allowed OEMs to choose which browser to purchase and install on their PCs. *Microsoft*, 87 F. Supp. 2d at 49; *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9, ¶ 153 (D.D.C. 1999) (“A number of operating system vendors offer consumers the choice of licensing their operating systems without a browser. Others bundle a browser with their operating system products but allow OEMs, value added resellers, and consumers either to not install it or, if the browser has been pre-installed, to uninstall it.”). Under the *Jefferson Parish* test, the fact that some sellers allowed purchasers to select their own browsers established a “separate demand” for this “product.” Meese, *Monopoly Bundling*, *supra* note 105, at 96-97.

Of course, Microsoft argued that the “separate demand” test for identifying separate products should not apply to alleged ties that involve the innovative integration of previously separate functions into a single software program. Defendant Microsoft Corporation’s Proposed Conclusions of Law 2-13, *Microsoft* (No. 98-1232). *See also* *United States v. Microsoft Corp.*, 147 F.3d 935, 950 (D.C. Cir. 1998) (finding that combination of previously separate functionalities that created plausible benefits was an “integrated product” and thus beyond scope of 1994 consent decree). I have argued elsewhere that there is no justification for treating software innovations any differently from other innovations under the Sherman Act. *See* Meese, *Monopoly Bundling*, *supra* note 105, at 105-107.

¹⁰⁷ *Microsoft*, 87 F. Supp. 2d at 50.

¹⁰⁸ *Eastman Kodak*, 504 U.S. at 464 n.9 (“The essential characteristic of an invalid tying arrangement lies in the seller’s exploitation of its control over the tying product to force the buyer into the purchase of a tied product that the buyer either did not want at all, or might have preferred to purchase elsewhere on different terms. When such ‘forcing’ is present, competition on the merits in the market for the tied item is restrained and the Sherman Act is violated.”) (quoting *Jefferson Parish*, 466 U.S. at 12); *Jefferson Parish*, 466 U.S. at 14-15 (holding that market power inquiry is designed to identify instances of forcing); Meese, *Forcing*, *supra* note 27, at 20-21 (showing that tying law depends upon the normative assumption that mere forcing constitutes anticompetitive harm);

¹⁰⁹ Richard Craswell, *Tying Requirements in Competitive Markets: the Consumer Protection Issues*, 62 B.U. L. REV. 661, 667 (1982) (noting that injury from tying contracts as assumed by current doctrine is akin to a tort against “coerced” purchasers). This is not to say that all tying contracts are “unconscionable” and thus unenforceable under the general law of contracts. Mere procedural unconscionability does not suffice to void a contract; a party seeking to avoid such an agreement must show substantive unconscionability as well. Were it otherwise, monopolists could never enforce contracts.

not “forced” on purchasers.¹¹⁰ Still, the per se rule does not allow monopolists to justify ties on such grounds and rests upon a false presumption that *all* ties obtained by monopolists are the result of forcing.¹¹¹ Indeed, the district court recognized that the per se rule embraced by the government, including the “separate demand” test for identifying separate products, is vastly overinclusive, particularly when applied to industries characterized by rapid innovation.¹¹² Nevertheless, the district court refused the advice of its own amicus curiae to craft an alternative standard that would have required the plaintiff actually to prove significant anticompetitive risk in order to establish the existence of “separate products,” and thus liability on the tying claim.¹¹³ Thus, even if one were to take the economic premises of the per se rule as a given, the government’s victory on the tying claim established only that Microsoft had “forced” OEMs to purchase IE. This victory in no way established, or even suggested, that Microsoft had, in fact, “maintained” the applications barrier to entry.¹¹⁴

¹¹⁰ Meese, *Forcing*, *supra* note 27, at 59-91.

¹¹¹ See *supra* note 105; Meese, *Forcing*, *supra* note 27, at 86-94 (arguing that the Supreme Court should abandon the per se rule for this reason). Cf. *Eastman Kodak*, 504 U.S. at 466-67 (arguing that antitrust presumptions should rest on market realities and not formalistic distinctions).

¹¹² *Microsoft*, 87 F. Supp. 2d at 51 (“A court mechanically applying a strict “separate demand” test [for determining whether two products are present] could improvidently wind up condemning “integrations” that represent genuine improvements to software that are benign from the standpoint of consumer welfare and a competitive market. . . . To the extent that the Supreme Court has spoken authoritatively on these issues, however, this Court is bound to follow its guidance and is not at liberty to extrapolate a new rule governing the tying of software products.”); *id.* at 51 n.6 (appearing to endorse the suggestion by amicus curiae Lawrence Lessig that the per se rule be limited to instances where seller bundles partial substitutes as a means of “sabotag[ing] a nascent technology that might compete with the tying product but for its foreclosure from the market.”) (quoting 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW 495 (Supp. 1999)). It should be noted that the test proposed by Professor Lessig apparently did not require proof that Microsoft in fact maintained the applications barrier as a condition for liability under the tying count. See *infra* note 113 (describing approach suggested by Professor Lessig). Nevertheless, the Lessig test was a substantial improvement over current law, as it would have substantially narrowed the class of ties deemed presumptively unlawful.

¹¹³ In particular, Professor Lessig argued that Windows 98 and Internet Explorer were separate products under the *Jefferson Parish* separate demand standard but that the court should also craft an alternative standard in light of modern antitrust thinking and the peculiarities of software technology. Brief of Amicus Curiae Lawrence Lessig at 22-26, *Microsoft* (No. 98-1232); *id.* at 43 n.35 (noting that proposed standard could be characterized as a Rule of Reason or per se test). Under Professor Lessig’s proposed approach, two software functionalities bundled in a new way, whether by contract or technology, would be deemed a single product and thus beyond tying scrutiny *unless* the plaintiff could show that such bundling would likely have an anticompetitive impact. See *id.* at 38-43. Professor Lessig also suggested that, in fact, the government had made such a showing, because Netscape was a partial substitute for Windows. See *id.* at 41. Professor Lessig also apparently assumed that Netscape would have remained on the vast majority of desktops and evolved into middleware absent Microsoft’s unlawful tactics, although this assumption was not necessary to a determination of liability under the test he proposed. Although it may be possible that the evidence presented at trial could have supported such a conclusion, it must be emphasized that the district court did not actually make this finding. See *infra* note 114.

¹¹⁴ It should be noted that the government also argued that the bundle did not pass muster under the Rule of Reason. See Plaintiffs’ Joint Proposed Conclusions of Law at 61-62, *Microsoft* (No. 98-

The per se rule was particularly overinclusive in this case. As suggested above, the government sought and the district court granted application of the rule to the initial bundling *as well as* the licensing provisions that prevented OEMs from “unbundling.”¹¹⁵ These latter provisions, however, cannot be plausibly characterized as tying agreements; they operated only after title had passed to those who were “forced” to purchase the tied product.¹¹⁶ They were, therefore, post-sale vertical restraints, and thus properly analyzed under the Rule of Reason.¹¹⁷ Such an analysis would have revealed important information about the effect of these post-sale restraints, information that could have supported (or undermined) the government’s assertion that Microsoft “maintained” the applications barrier to entry.¹¹⁸

1232). However, the district court did not address this argument. Instead, the court simply stated that proof of the four elements of the per se test was also “required” for a Rule of Reason claim. *But cf.* Alan J. Meese, *Antitrust Balancing in a (Near) Coasean World: The Case of Franchise Tying Contracts*, 95 MICH. L. REV. 111, 145-46 (1996) (showing that power in the tying product market is not necessary to a showing that tying contract works competitive harm). The court did not indicate what sort of proof would be *sufficient* to establish such a claim. *Microsoft*, 87 F. Supp. 2d at 51-54 (evaluating and rejecting government’s claim that exclusive and primary dealing contracts were unreasonable).

¹¹⁵ See *infra* note 118; see also Plaintiffs’ Joint Proposed Conclusions of Law at 54, *Microsoft* (No. 98-1232) (contending that “the requirement that OEMs include [Internet Explorer] along with Windows [and] the refusal to allow use of an add/remove or uninstall option by OEMs” were “means of forcing licensees . . . to take (and often actually to use) a browser along with the operating system.”).

¹¹⁶ The district court did not explain why it treated these contractual restraints as tying agreements. The United States suggested that the agreements were tying contracts because they forced *ultimate consumers*—not OEMs—to purchase Internet Explorer. See Plaintiffs’ Joint Proposed Conclusions of Law at 54, *Microsoft* (No. 98-1232). However, the contracts in question did not purport to bind consumers to do or not do anything, but instead operated only against the OEMs. These post-sale restrictions do not themselves “force” third parties to do anything. Deletion of the software code that provides browser functionality apparently destroys operating system functionality, and no OEM has expressed a desire to remove that functionality and thus destroy the very system for which there are purportedly no substitutes. See Meese, *Monopoly Bundling*, *supra* note 105, at 115. While OEMs may wish to hide the IE icon or disable browser functionality, these less drastic steps do not in any way remove or delete from a PC the software code that provides browser functionality. *United States v. Microsoft Corp.*, 147 F.3d 935, 940-41 (D.C. Cir. 1998). Instead, such actions leave this code fully intact with the result that ultimate purchasers are free to summon browser functionality by typing a line of software code. *Id.* Thus, any consumer who purchases a PC that includes Windows necessarily “purchases” the browser functionality known as Internet Explorer, regardless whether licensing agreements prevent OEMs from hiding the icon or disabling browser functionality. These contractual restraints, then, do not themselves “force” consumers to do anything. Instead the “forcing,” if it exists, is a result of Microsoft’s technological integration of browser and operating system functionality.

¹¹⁷ Meese, *Monopoly Bundling*, *supra* note 105, at 115 (explaining that post-sale contractual restrictions on OEMs are properly “subject to rule of reason scrutiny as non-price vertical restraints”).

¹¹⁸ For instance, analysis of such restraints under the Rule of Reason would have required the government to demonstrate—or attempt to demonstrate—that, but for these restraints, a significant number of OEMs would have disabled Internet Explorer and/or removed the Internet Explorer icon *and* that these steps would have significantly enhanced Netscape’s market position. Such proof, of course, would have gone a long way toward establishing that the combination of bundling and post-contractual restraints actually maintained the applications barrier to entry.

2. Monopolization

But what about the monopolization count? Surely the government had to establish that Microsoft actually maintained the applications barrier to prove its claim of monopoly maintenance. Apparently not. Instead, under the standards sought by the government and applied by the district court, the government merely had to prove that Microsoft engaged in “exclusionary conduct” instead of “competition on the merits” and that that conduct impaired Sun’s Java strategy and deprived Netscape of access to a significant number of consumers.¹¹⁹ There was no requirement that the government show that such conduct would drive Netscape from the marketplace, prevent the emergence of a viable Java language, or otherwise raise the applications barrier to entry. To the contrary, proof that Microsoft’s conduct significantly impaired Netscape’s and Sun’s business opportunities by itself cast upon Microsoft a burden of justification.¹²⁰ Moreover, Microsoft could not meet this burden by merely showing that its conduct produced substantial benefits that outweighed any competitive harm. The government also had to show that these benefits did not explain the “full extent” of Microsoft’s conduct.¹²¹ Failure to meet this burden established liability on this count.¹²²

The monopolization standards sought and obtained by the government quite plainly reflected the influence of the inhospitality tradition. Indeed, the very distinction between “competition on the merits” and “exclusionary conduct” the government invoked reflects a bias against contractual devices that reach beyond the boundaries of the firm—devices economists generally presume to be procompetitive.¹²³ Competition “on the merits,” after all,

¹¹⁹ *Microsoft*, 87 F. Supp. 2d at 37-38; accord *Eastman Kodak, Inc. v. Image Technical Servs.*, 504 U.S. 451, 483-85 (1992); Plaintiffs Joint Proposed Conclusions of Law at 15, *Microsoft* (No. 98-1232) (“The [Supreme] Court has used the language of ‘exclusionary’ or ‘anticompetitive’ or ‘predatory’ to label the unlawful conduct and to distinguish it from competition on the merits reflected in *Grinnell*’s reference to ‘superior product, business acumen, or historic accident.’”) (citations omitted).

¹²⁰ *Microsoft*, 87 F. Supp. 2d at 38 (“If the evidence reveals a significant exclusionary impact in the relevant market, the defendant’s conduct will be labeled ‘anticompetitive’—and liability will attach—unless the defendant comes forward with specific, procompetitive business motivations that explain the full extent of its exclusionary conduct.”). The United States suggested a standard even less forgiving to defendants. Plaintiffs’ Joint Proposed Conclusions of Law at 16, *Microsoft* (No. 98-1232) (arguing that conduct that “tends to impair rivals’ opportunities” must be justified) (emphasis added).

¹²¹ *Microsoft*, 87 F. Supp. 2d at 38 (stating that the specific business motivations offered by the defendant must “explain the full extent of its exclusionary conduct.”) (emphasis added) (citing *Eastman Kodak*, 504 U.S. at 483.).

¹²² *Microsoft*, 87 F. Supp. 2d at 38; accord *Eastman Kodak*, 504 U.S. at 483.

¹²³ Cf. *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 12 (1985) (holding that ties obtained by firms with market power involve unjustified contractual interference with “competition on the merits”); *Fortner Enters. v. United States Steel Co.*, 394 U.S. 495, 508 (1969) (holding that tying contracts obtained by firms with market power necessarily curtail “competition on the merits”); *Brown Shoe Co. v. United States*, 384 U.S. 316, 321-22 (1966) (concluding that exclusive dealing contracts offended “central policy” of the Sherman Act “against contracts which take away freedom of purchasers

is limited to unilateral activities such as the creation of a superior product, greater productive efficiencies, and the like.¹²⁴ By contrast, just about any vertical arrangement entered by a monopolist will "impair the opportunities of rivals," and thus cast upon the defendant a burden of justification.¹²⁵ Tying, for instance, is not "competition on the merits," but instead presumptively unlawful if accomplished by a monopolist.¹²⁶ So are exclusive dealing or supply contracts.¹²⁷ Neither of these presumptions, of course, is justified by modern economic theory.¹²⁸

Current law does allow for the rebuttal of this presumption. Still, this opportunity is sometimes more illusory than real, particularly in light of the requirement imposed by some courts that the legitimate objective or objectives explain the "full extent" of the conduct under scrutiny.¹²⁹ This requirement is, of course, simply an application of the "less restrictive alternative" test commonly employed in litigation under the Rule of Reason.¹³⁰

to buy in an open market"). See also WILLIAMSON, *supra* note 20, at 28 (concluding that there is a "rebuttable presumption that non-standard forms of contracting have efficiency purposes.").

¹²⁴ See Plaintiffs' Joint Proposed Conclusions of Law at 15, *Microsoft* (No. 98-1232) (equating competition on the merits with a "superior product, business acumen, or historic accident") (quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966)). See also *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 604 (1985) (distinguishing "between practices which tend to exclude or restrict competition on the one hand, and the success of a business which reflects only a superior product, a well-run business, or luck, on the other."). Of course, even unilateral acts can constitute exclusionary conduct for purposes of section 2; predatory pricing is the most prominent example. See generally *Aspen Skiing Co.*, 472 U.S. at 605 n.32 (conduct is unlawfully exclusionary if it furthers "competition on the merits . . . in an unnecessarily restrictive way."). Nevertheless, the standards governing such unilateral action are far more lenient than those governing contractual arrangements. Compare *Matsushita Elec. Indus. Corp. v. Zenith Radio Corp.*, 475 U.S. 574, 585-88 (1986) (requiring significant evidence to sustain predatory pricing claim in the face of summary judgment attack) with *Eastman Kodak*, 504 U.S. at 483-85 (holding tying contracts presumptively exclusionary for summary judgment purposes). See also, e.g., *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 223 (1993) (treating above cost prices as "competition on the merits" or otherwise beyond judicial cognizance); *Morgan v. Ponder*, 892 F.2d 1355, 1360 (8th Cir. 1989) (granting "strong presumption" of legality for prices above variable cost even if they entirely exclude rivals from the market). This deferential treatment of conduct like pricing that occurs "within" the firm and contracts that extend beyond the firm is a product of the inhospitality tradition. See, e.g., Meese, *Forcing*, *supra* note 27, at 8-9, 50-51 (asserting that the traditional approach to tying contracts rests upon unjustified hostility toward attempts to reach beyond the boundaries of the firm by contract).

¹²⁵ Plaintiffs' Joint Proposed Conclusions of Law at 16, *Microsoft* (No. 98-1232).

¹²⁶ *Eastman Kodak*, 504 U.S. at 483-85; *Jefferson Parish*, 466 U.S. at 12.

¹²⁷ *Grinnell*, 384 U.S. at 578.

¹²⁸ See *supra* notes 26-33 and accompanying text (describing developments in economic theory that have undermined the economic assumptions that formed the basis of the inhospitality tradition).

¹²⁹ *Microsoft*, 87 F. Supp. 2d at 38; *Eastman Kodak*, 504 U.S. at 483. But see Ronald A. Cass & Keith Hylton, *Preserving Competition: Economic Analysis, Legal Standards and Microsoft*, 8 GEO. MASON L. REV. 1, 27-28 (1999) (contending that imposition of less restrictive alternative test is not consistent with the best view of current monopolization law).

¹³⁰ See, e.g., *Capital Imaging Assocs. v. Mohawk Valley Med. Assocs.*, 996 F.2d 537, 543 (2d Cir. 1993) (dicta). Indeed, *Eastman Kodak*, upon which the district court relied, itself relied upon tying cases brought under section 3 of the Clayton Act. 504 U.S. at 484 (citing *Int'l Salt Co. v. United States*, 332 U.S. 392, 397-98 (1947); *IBM v. United States*, 298 U.S. 131, 139-40 (1936)).

Under such an approach, restraints that are on balance beneficial will nevertheless be condemned if less anticompetitive means could produce the same benefits.¹³¹ Strangely, this requirement can penalize restraints not for reducing competition, but for failing to increase it enough.¹³² Moreover, the influence of the inhospitality tradition has often led courts and the government to declare certain less *effective* alternatives to be less restrictive alternatives, the purported existence of which justifies condemnation of the restraint under scrutiny.¹³³

Of course, in some cases, defendants will be able to justify presumptively unlawful arrangements, even under the sort of strict scrutiny required by current law. Indeed, a court could mitigate somewhat the harsh results produced by the preference for "competition on the merits" by allowing defendants a meaningful opportunity to explain their conduct, or by dispensing with the less restrictive alternative test.¹³⁴ Still, the existence of such a "safety valve" for efficient practices will not ensure that all such practices escape condemnation. Some efficient practices just cannot be explained, and plausible explanations sometimes fall on "deaf ears."¹³⁵ Fur-

¹³¹ *Capital Imaging*, 996 F.2d at 543; 7 AREEDA & HOVENKAMP, *supra* note 112, at 385-89. It should be noted that judges have not universally embraced the less restrictive alternative test. *See, e.g.*, *American Motor Inns, Inc. v. Holiday Inns, Inc.*, 521 F.2d 1230, 1249 (3d Cir. 1975); *NFL v. N. Am. Soccer League*, 459 U.S. 1074, 1079 (1982) (Rehnquist, J. dissenting) ("The antitrust laws impose a standard of reasonableness, not a standard of absolute necessity."). *Cf. Cont'l T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 58 (1977) (finding that location restriction should be subject to the Rule of Reason even though it was "neither the least nor the most restrictive provision that [Sylvania] could have used.")

¹³² An example from the merger context will suffice to prove this counter-intuitive assertion. Under the Merger Guidelines, efficiencies will justify an otherwise unlawful merger if: the efficiencies "likely would be sufficient to reverse the merger's potential to harm consumers in the relevant market, e.g., by preventing price increases in that market" and the efficiencies are specific to the merger in question, *i.e.*, cannot be achieved by means of a less restrictive alternative. *See* Revision to the Horizontal Merger Guidelines Issued by the U.S. Department of Justice and the Federal Trade Commission, § 4 (Apr. 8, 1997), 1997 FTC LEXIS 283. Thus, the enforcement agencies will reject mergers that will on balance benefit consumers if an alternative and hypothetical arrangement would benefit consumers even more.

¹³³ Meese, *Price Theory*, *supra* note 27, at 189-95 (demonstrating that various purported less restrictive alternatives to vertical distribution restraints are less effective); *see also* Meese, *Forcing*, *supra* note 27, at 71-86 (demonstrating that purportedly less restrictive alternatives to tying contracts are generally less effective as well).

¹³⁴ *See Trans Sport, Inc. v. Starter Sportswear, Inc.*, 964 F.2d 186, 188-91 (2d Cir. 1992) (Marshall, J.); *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 303 (2d Cir. 1979) (holding that the presence of a less restrictive alternative does not *ipso facto* require condemnation of a purportedly monopolistic practice). *See also* Cass & Hylton, *supra* note 129, at 30-36 (arguing that courts should penalize conduct by a monopolist only where there is no plausible business justification for it).

¹³⁵ Meese, *supra* note 28, at 485-86. For instance, in *United States v. Topco Assocs., Inc.*, 405 U.S. 596 (1972), the defendants argued that territorial restraints ancillary to the creation of a legitimate purchasing cooperative were reasonably necessary to ensure effective promotion of the private label products created by the venture. Brief For Topco Associates, Inc. at 22-23, *Topco Assocs.* (No. 70-82). The district court found that the venturers lacked market power and that, in fact, the restraints accomplished this purpose and were therefore procompetitive. *See United States v. Topco Assocs., Inc.*, 319 F. Supp. 1031, 1033 (N.D. Ill. 1970). Nevertheless, the United States persisted in its attack on the re-

ther, the failure to justify a practice, even to a relatively hospitable court, does not establish that the practice in question is "anticompetitive" in any economically meaningful sense. A practice that is not procompetitive may simply be benign. At any rate, a firm may fully intend to harm competition by adopting overbroad restraints without any realistic chance of accomplishing its objective.¹³⁶

Proof that Microsoft's practices were "exclusionary" and did not constitute "competition on the merits" under the standards sought by the government and applied by the district court did not establish that these practices maintained the applications barrier to entry. The government proved that various aspects of Microsoft's conduct interfered with Netscape's access to customers that it might otherwise have claimed.¹³⁷ Moreover, Microsoft was not able to explain or justify to the court's satisfaction the "full extent" of the exclusionary impact of these practices.¹³⁸ Still, such proof does not by itself establish the magnitude or market-wide impact of such conduct.¹³⁹ Thus, the district court's conclusion that Micro-

straints, and the Supreme Court reversed the district court's ruling. See Meese, *supra* note 28, at 469-71, 484-86.

Judge Easterbrook has aptly critiqued the attitude toward business justifications adopted by current law.

The [Supreme] Court is not alone in thinking that the defendant should be asked to justify its conduct and pay the penalty if it fails. But why? This means that the plaintiff wins whenever the defendant does not know or cannot explain the true function of its conduct. In business the only thought may be to make as much money as possible, and entrepreneurs often flounder from one practice to another trying to find one that works. When they do, they may not know why it works, whether because of efficiency or exclusion. They know only *that* it works. If they know why it works, they may be unable to articulate the reason to their lawyers—because they are not skilled in the legal and economic jargon in which such "business justifications" must be presented in court, or perhaps because their lawyers cannot understand (or translate for a jury) what they have been told. . . . It takes economists years, sometimes decades, to understand why certain business practices work, to determine whether they work because of increased efficiency or exclusion. To award victory to the plaintiff because the defendant has failed to justify the conduct properly is to turn ignorance, of which we have regrettably much, into prohibition. That is a hard transmutation to justify.

Frank H. Easterbrook, *On Identifying Exclusionary Conduct*, 61 NOTRE DAME L. REV. 972, 975 (1986).

¹³⁶ Indeed, the structure of the law of attempted monopolization depends upon the assumption that firms that intend to acquire or maintain monopoly power may sometimes fall far short of their objective. Hence, it is not enough for a plaintiff to show that a defendant specifically intends to monopolize or maintain a monopoly and engages in predatory conduct toward that end. The plaintiff must also show that there is dangerous probability that the defendant will succeed in its attempt to obtain or maintain such power. *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 454-59 (1992); *Lorain Journal Co. v. United States*, 342 U.S. 143, 155 (1951) (claim for attempt to maintain existing monopoly requires proof of dangerous probability of success). The automatic condemnation of overbroad restraints adopted by a monopolist seems to rest on a contrary, and fallacious, assumption.

¹³⁷ *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30, 39-43 (D.D.C. 2000).

¹³⁸ *Id.* at 38-40 (concluding that various tying contracts were "exclusionary" because justifications proffered by Microsoft did not "fully explain" these arrangements).

¹³⁹ *Cf. supra* notes 119-22 and accompanying text (showing that standards applied by the district court merely required government to prove that challenged conduct excluded Netscape from a "significant" portion of the market place).

soft unlawfully “maintained” its monopoly in no way supports a conclusion that the firm’s unlawful conduct caused the demise of Netscape’s or Sun’s middleware strategy.¹⁴⁰

3. Attempted Monopolization

Unlike the tying and monopolization counts, the attempted monopolization count did require meaningful proof of anticompetitive effect, more precisely, a dangerous probability that Microsoft would in fact acquire a monopoly of the browser market.¹⁴¹ Moreover, there is a single paragraph in the district court’s opinion concluding that the government did, in fact, satisfy this element, because Microsoft’s share of the browser market rose to over fifty percent after it embarked on a series of acts deemed “exclusionary” under the standards discussed above.¹⁴² Still, neither this paragraph, nor the factual findings on which it rests, conclude that Microsoft’s “exclusionary” acts deprived Netscape of the market share necessary to support its nascent middleware strategy.

The government’s assertion that Microsoft maintained the applications barrier depended upon an assumption that, but for Microsoft’s “anticompetitive” conduct, Netscape would have remained a monopoly or near monopoly indefinitely, (lawfully) warding off any and all challenges to its preeminence.¹⁴³ Proof that Netscape’s market share fell after Microsoft’s unlawful acts did not establish that all, or even most, of that decline was due to Microsoft’s anticompetitive practices. *Post hoc non ergo propter*

¹⁴⁰ Some of the district court’s factual findings do seem to suggest that Microsoft’s anticompetitive acts themselves significantly disadvantaged Sun’s Java strategy. *Microsoft*, 87 F. Supp. 2d at 43-44. *Cf. supra* notes 88-89 and accompanying text (contending that drop in *Netscape*’s market share could be attributed to Microsoft’s procompetitive tactics). Nonetheless, the district court’s legal conclusion that Microsoft “monopolized” in violation of section 2 of the Sherman Act does not rest on such findings. At any rate, proof that Microsoft’s anticompetitive tactics deprived Java of the opportunity to be successful does not *ipso facto* establish that Java would have been successful absent such tactics. *See supra* notes 87-88 and accompanying text (discussing district court’s conclusion that there is insufficient evidence to support a finding that Sun or Netscape would have been successful in their middleware strategies absent Microsoft’s anticompetitive acts). Moreover, even if Java could have been successful, elimination of it as a competitive threat could only have a lasting, prospective competitive effect if Java were the only prospective middleware that could lower the applications barrier to entry. *See supra* notes 71-76 and accompanying text; *supra* notes 162-72 and accompanying text.

¹⁴¹ *Spectrum Sports*, 506 U.S. at 454-59; *Swift & Co. v. United States*, 196 U.S. 375, 390 (1905); *Microsoft*, 87 F. Supp. 2d at 45.

¹⁴² *Microsoft*, 87 F. Supp. 2d at 46, (citing *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9, ¶¶ 372-73 (D.D.C. 1999)).

¹⁴³ *See supra* notes 87-91 and accompanying text (describing government’s assertion that Netscape’s status as potential middleware depended upon possession of dominant market share). Moreover, the district court itself found that Netscape could only have evolved into middleware if it had remained the “standard” internet browser. *Microsoft*, 84 F. Supp. 2d at ¶ 378 (“[T]he API’s that Navigator exposes could only attract enough developer attention to threaten the applications barrier to entry if Navigator became—or appeared destined to become—the standard software used to browse the web.”).

hoc. It seems equally possible that Netscape's market share would have fallen significantly, though perhaps not as much, if Microsoft had stuck to lawful means of competition, such as giving its browser away, continually enhancing its quality, and entering less onerous primary dealing contracts.¹⁴⁴ Such procompetitive conduct may not have driven Microsoft's browser share to near-monopoly levels. It may, however, have reduced Netscape's share to the point that it would no longer have been "the" web browser of choice, and thus a viable candidate for evolution into middle-ware.¹⁴⁵ Indeed, the district court never defined what share of the browser market Netscape had to retain in order to remain the "standard" internet browser, and thus a viable candidate for evolution into middleware of the sort that could have undermined the applications barrier to entry. The district court did not, for instance, determine whether it would have been enough for Netscape to retain a plurality or bare majority share of the market.¹⁴⁶ Without such a finding, it is simply not possible to assert with any degree of confidence that Microsoft's exclusionary conduct *by itself* deprived Netscape of its potential to evolve into middleware, or deprived Sun

¹⁴⁴ The government argued at one point that Microsoft's practice of giving its browser away for free was exclusionary. See Plaintiffs' Joint Response To Microsoft's Motion for Summary Judgment and Reply in Support of Motions for Preliminary Injunction at 7-8, *Microsoft* (No. 98-1232). The district court rejected this argument, and expressly found that the introduction of Internet Explorer, continuing improvements in its quality, as well as the practice of giving it away for free were procompetitive. *Microsoft*, 84 F. Supp. 2d at ¶ 408 ("The debut of Internet Explorer and its rapid improvement gave Netscape an incentive to improve Navigator's quality at a competitive rate. The inclusion of Internet Explorer with Windows at no separate charge increased general familiarity with the Internet and reduced the cost to the public of gaining access to it, at least in part because it compelled Netscape to stop charging for Navigator. These actions contributed to improving the quality of Web browsing software, lowering its cost, and increasing its availability, thereby benefiting consumers."). Cf. *Jack Walters & Sons Corp. v. Morton Bldg., Inc.*, 737 F.2d 698, 710 (7th Cir. 1984) ("The option of vertical integration places pressure on the firm's suppliers and buyers, who know that if they charge too much for their services the firm may try to perform them itself. It thus increases competition in the market for those services."); *United States v. Ford Motor Co.*, 405 U.S. 562, 567-69 (1972) (holding that the threat of backward integration by customer enhanced competition among various suppliers).

¹⁴⁵ Indeed, the district court found that, by late 1996, "the average user could not discern a significant difference in quality and features between the latest versions of Internet Explorer and Navigator," *Microsoft*, 84 F. Supp. 2d at ¶ 375, and that such quality enhancements were a necessary condition for the improvements in IE's marketshare. *Id.* (noting additionally that IE 4.0 won "a significant number of head-to-head product reviews against Navigator"); *id.* at ¶ 135 ("When Microsoft released Internet Explorer 3.0 in late 1996, reviewers praised its vastly improved quality, and some even rated it as favorably as they did Navigator. After the arrival of Internet Explorer 4.0 in late 1997, the number of reviewers who regarded it as the superior product was roughly equal to those who preferred Navigator.").

¹⁴⁶ It should be noted that, as the share of the market required for potential middleware status falls, the number of applications with such potential necessarily increases. So, for instance, a determination that an application with a thirty percent share of the market can evolve into middleware would expand greatly the number of potential middleware competitors and thus lessen the competitive impact of the AppCo's potential production of middleware. Had the district court made findings on this point, it presumably would have been bound by those findings when determining whether AppCo's entry into the middleware business could in fact have a procompetitive effect. See *infra* notes 162-71 and accompanying text.

of an adequate vehicle for distribution of the Java Class Libraries and the Java Virtual Machine. If so, it seems difficult to argue that Microsoft's anticompetitive conduct prevented the application barrier from falling, since the barrier would exist even if Microsoft had played the competitive game according to the Marquis of Queensberry rules.¹⁴⁷

B. *Would Netscape or Java have Evolved into Middleware?*

Even if the district court had found that Microsoft's exclusionary acts deprived Netscape of its status as the browser of choice or prevented Sun from successfully pursuing its Java strategy, the court nonetheless should have rejected the claim that Microsoft maintained the applications barrier. Simply put, the government never proved that Netscape or Java would have evolved into middleware of the sort that could have undermined the applications barrier to entry. After all, the gravamen of the attempted monopolization count was *not* that Microsoft attempted to maintain its monopoly power in the operating system market by maintaining the applications barrier, although the government could have characterized its claim in this way.¹⁴⁸ Such a claim would have required the government actually to prove that Netscape or Java was a middleware threat, and that Microsoft's exclusionary conduct eliminated the threat, either directly, by eliminating Netscape "as middleware," or indirectly, by eliminating Netscape as a viable vehicle for distributing the Java Class Libraries or the Java Virtual Machine.¹⁴⁹ Instead, the government claimed that Microsoft engaged in exclusionary tactics specifically designed to monopolize the browser market, and that there was a dangerous probability of achieving that end.¹⁵⁰ The district

¹⁴⁷ The district court did conclude that "Internet Explorer's quality and features have never surpassed Navigator's to such a degree as to compel a significant part of Navigator's *installed base* to switch to Internet Explorer." *Microsoft*, 84 F. Supp. 2d at ¶ 375 (emphasis added). The court also concluded that "if Microsoft had taken no action other than improving the quality and features of its browser, Internet Explorer's share of usage would have risen far less and far more slowly than it actually did." *Id.* One could conclude from these findings that Netscape would have retained its dominant position, but for Microsoft's anticompetitive tactics. Such a conclusion would not be warranted, however, for two reasons. First, undermining Navigator's installed base was not the only method of reducing its market share. Second, these findings do not consider the effect of Microsoft's policy of giving its browser away for free, a policy which the district court found to be procompetitive. After considering the effect of this policy, the district court was only able to conclude that, on their own, the combination of higher quality and lower price "would not have weaned such a large amount of usage share from Navigator, much less overtaken Navigator in three years." *Id.* at ¶ 376. This latter finding falls significantly short of a conclusion that, but for Microsoft's anticompetitive conduct, Navigator would have retained its status as the "dominant browser of choice" indefinitely.

¹⁴⁸ Cf. *Lorain Journal Co. v. United States*, 342 U.S. 143, 150-55 (1951) (sustaining finding that monopolist had "attempted to monopolize" by "us[ing] its monopoly to destroy threatened competition").

¹⁴⁹ *Id.* at 153-54 (finding attempt to monopolize where defendant had launched predatory attack against firm that had already entered defendant's market).

¹⁵⁰ *Microsoft*, 87 F. Supp. 2d at 46. See also *supra* notes 99-103 and accompanying text.

court expressly found that there was insufficient evidence in the record to support a finding that Netscape or Java would have evolved into the sort of middleware that could undermine the applications barrier absent Microsoft's campaign against them.¹⁵¹ This finding would seem to undermine entirely the government's argument for disintegration.¹⁵²

The assertion that the government failed to prove that Microsoft actually maintained the applications barrier may appear startling at first. After all, the "applications barrier to entry" was central to the "story" animating the government's case. The existence of the barrier explained why Microsoft's monopoly was relatively impervious to new entry, and a desire to maintain that barrier explained why the firm reacted so vigorously to Netscape's potential entry into the middleware business. Still, while it told a compelling story, the government chose to rely upon outmoded rules of liability that did not require proof of certain key elements of the story. These elements, it turns out, are essential to the government's prayer for disintegration. By lightening its burden at the trial stage, the government undermined its case at the remedy stage.¹⁵³

The careful reader may think that this Article is simply trying to relitigate the liability phase of the case, much as a capital defendant might try to cast doubt on his guilt during a sentencing hearing in an attempt to convince the jury to choose a conduct remedy—life in prison without parole.¹⁵⁴ That is not my intent. I am convinced that Microsoft did offend the per se

¹⁵¹ *Microsoft*, 84 F. Supp. 2d at ¶ 411 ("There is insufficient evidence to find that, absent Microsoft's actions, Navigator and Java already would have ignited genuine competition in the market for Intel-compatible PC operating systems."); *id.* at ¶ 407 ("It is not clear whether, absent Microsoft's interference, Sun's Java efforts would by now have facilitated porting between Windows and other platforms enough to weaken the applications barrier to entry."); *id.* at ¶ 29 ("It remains to be seen, though, whether there will ever be a sustained stream of full-featured applications written solely to middleware APIs. In any event, it would take several years for middleware and the applications it supports to evolve from the status quo to a point at which the cost to the average consumer of choosing a non-Intel compatible PC operating system over an Intel-compatible one falls so low as to constrain the pricing of the latter systems."); *id.* at ¶ 77 ("[M]iddleware technologies have a long way to go before they might imperil the applications barrier to entry. Windows 98 exposes nearly ten thousand APIs, whereas the combined APIs of Navigator and the Java Class Libraries, together representing the greatest hope for proponents of middleware, total less than a thousand.").

¹⁵² One could argue that, by definition, Microsoft's own actions deprived the tribunal of the sort of evidence necessary to determine whether Netscape and/or Java would have developed into middleware absent Microsoft's anticompetitive acts. Thus, it could be said, Microsoft should not benefit from the absence of such information. Perhaps it is appropriate to adopt a presumption that Netscape and Java would have evolved into middleware but for Microsoft's anticompetitive acts. Even so, Microsoft should be afforded an opportunity to rebut such a presumption, an opportunity that Judge Jackson did not allow.

¹⁵³ Cf. William E. Kovacic, *Designing Antitrust Remedies For Dominant Firm Misconduct*, 31 CONN. L. REV. 1285, 1311-12 (1999) (arguing persuasively that "the elaboration of remedies should proceed side by side with formulation of a theory of liability and collection of evidence").

¹⁵⁴ Scott E. Sundby, *The Capital Jury And Absolution: The Intersection Of Trial Strategy, Remorse, And The Death Penalty*, 83 CORNELL L. REV. 1557, 1577-85 (1998) (marshalling empirical evidence that this strategy rarely works).

rule against tying contracts when it required OEMs to take IE.¹⁵⁵ I also think the firm “monopolized” the operating system market and “attempted to monopolize” the market for internet browsers under current law. Of course, I do not think the per se rule against tying is consistent with existing economic theory.¹⁵⁶ Moreover, I would not require monopolists to justify any and all tying or exclusive dealing contracts simply because these arrangements depart from some obsolete notion of “competition on the merits.” In the real world, where bargaining costs, information costs, and opportunism abound, contracts are as much a part of “competition” as price-cutting and quality improvement.¹⁵⁷

Still, the precedents supporting the per se rule and the overinclusive rules defining monopolization are “on the books.” Once the government decided to invoke these rules, the district court had no choice but to enforce them.¹⁵⁸ Moreover, even if the rules governing tying and monopolization better reflected sound economic theory, it seems possible that the government could have prevailed. On the tying count, for instance, the government proved that Microsoft was selling two products. It also proved that the practice of bundling Windows and IE significantly raised Netscape’s cost of distribution, thus depriving ISVs (and Sun) of a particular input—Netscape on most desktops—that could have enhanced the demand for their products, thus increasing the number of compliments available for new

¹⁵⁵ As I have written elsewhere, I do not believe that current law warrants a different result simply because the Windows/IE bundle can plausibly be characterized as “innovation.” See Meese, *Monopoly Bundling*, *supra* note 105, at 103-07. The whole point of the law of tying is to allow purchasers to choose which bundle of goods and services—which innovation—they wish to purchase. Absent a showing that such purchasing decisions are distorted by some market failure, there is no reason to allow a monopolist to override that choice. *Id.* at 112-15.

¹⁵⁶ Meese, *Forcing*, *supra* note 27, at 61-96.

¹⁵⁷ *Standard Oil Co. v. United States*, 221 U.S. 1, 62 (1911); Easterbrook, *supra* note 7, at 1-3.

¹⁵⁸ *State Oil v. Khan*, 522 U.S. 3, 20 (1997) (holding that lower courts are not free to ignore Supreme Court precedents, even if such precedents are destined to be overruled). One could imagine the United States asserting that it had no choice but to invoke decisions such as *Jefferson Parish* which, after all, is still “good law.” Unlike lower federal courts, however, the Executive Branch is a *coordinate* branch of government. The Attorney General and, ultimately, the President, have a duty to faithfully execute the law as they see it; they are not minions of the Supreme Court. Just as the Supreme Court may abandon precedents whose premises have proved false, so too may the enforcement agencies refuse to pursue theories of liability that fly in the face of modern economic theory. *Bus. Elecs. Corp. v. Sharp Elecs. Corp.*, 485 U.S. 717, 732 (1988) (“The Sherman Act adopted the term ‘restraint of trade’ along with its dynamic potential. It invokes the common law itself and not merely the static content that the common law had assigned to the term in 1890.”); Easterbrook, *supra* note 19, at 711-12 (describing instances in which the Department of Justice and Federal Trade Commission properly refused to follow precedents “on the books”); William Baxter, *Separation of Powers, Prosecutorial Discretion and the ‘Common Law’ Nature of Antitrust Law*, 60 TEX. L. REV. 661 (1982). See also Meese, *supra* note 28, at 487-88 n.110. Hence, the United States was within its rights to refuse to pursue a “per se” theory of tying liability, for instance. At the very least, the government could have asked the court to make separate findings under the rule of reason. See *supra* note 113 (noting that the court’s own Amicus suggested that it make such findings). Cf. Kovacic, *supra* note 153, at 1311-12.

operating systems.¹⁵⁹ Further proof, namely, that Netscape was the only source of this input, could have sufficed to establish a *prima facie* case under the Rule of Reason.¹⁶⁰ Still, the government chose not to pursue such a case, thus guaranteeing the absence of Findings necessary to show that Microsoft actually raised the applications barrier to entry.

C. *Will the AppCo Really Introduce Middleware Competition?*

This is not to say that proof that Microsoft in fact maintained the applications barrier to entry would in and of itself justify the firm's disintegration. There is still the entirely separate question of whether dismembering Microsoft will introduce middleware competition that would not otherwise exist, and whether the prospect of that competition is sufficiently real to justify the destruction of presumptively beneficial integration. The district court made no factual findings whatsoever touching on either of these questions. At the very least, it seems there should be a hearing to resolve both of them. Moreover, while predictions in this context are of dubious value, it would seem that the government would face an uphill battle on each question.

Consider first the assertion that an independent AppCo might decide to convert the Microsoft Office Suite into middleware, thus creating an alternative platform to Windows. The government's line of argument boils down to a claim that Microsoft's failure to divest the Office Suite thwarts the actual potential competition that would take place but for Microsoft's intransigent insistence on retaining its own property. There is a strong analogy between this argument and the assertion that integration via a merger eliminates "actual potential competition," that is, the possibility that one of the merging firms will enter the market *de novo*.¹⁶¹ The government has not, however, made the sort of showing courts have required in the merger context to undo voluntary integration based on that integration's supposed failure to increase competition.¹⁶² In particular, the government has not and cannot show that the AppCo "plans" or "intends" to transform the Office

¹⁵⁹ *Microsoft*, 87 F. Supp. 2d 30, 53-54 (D.D.C. 2000).

¹⁶⁰ Meese, *Monopoly Bundling*, *supra* note 105, at 109-10 n.150 (describing elements of a "raising rivals' costs" rule of reason case against Microsoft); Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals Costs to Achieve Power Over Price*, 96 YALE L.J. 209, 225-26 (1986) (concluding that a strategy designed to protect or obtain market power by depriving competitors of distribution opportunities cannot be successful if alternative efficient channels of distribution are available).

¹⁶¹ *Cf.* *United States v. Falstaff Brewing Corp.*, 410 U.S. 526, 537 (1973) (reserving question whether integration through merger that forestalls future increase in competition violates section 7 of the Clayton Act).

¹⁶² *BOC Int'l v. FTC*, 557 F.2d 24, 26-27 (2d Cir. 1977) (articulating elements of so-called "actual potential competition" doctrine). *See also Falstaff Brewing*, 410 U.S. at 560 (Marshall, J. concurring) (describing elements necessary to support such a claim).

Suite into middleware any time soon.¹⁶³ Nor has the government shown with any degree of certainty that such an attempt would be sufficiently successful to justify the significant sunk investment that such entry would require.¹⁶⁴ Indeed, a free-standing Appco would be far behind Netscape, at least in a technological sense, because, as the government emphasizes, Microsoft has not to this date pursued a middleware strategy with respect to its Office Suite.¹⁶⁵

Even if the government could show that an independent AppCo would transform its Office Suite into middleware, such proof would not establish that this transformation would materially enhance competition. Instead, such proof would simply beg the question whether AppCo was the only potential entrant into the middleware business. There are, as the government repeatedly reminded the district court, 70,000 applications; presumably Netscape is not the only one capable of exposing APIs and thus capable of running other applications "cross platform."¹⁶⁶ Removing two potential authors of middleware—even the most promising authors—from the marketplace does not by itself render the applications barrier insurmountable; some other application or applications might take Netscape's place. Nowhere did the government show that Netscape and Java were the only potential middleware, or that removal of these two participants from the marketplace would permanently deprive consumers of middleware.

If there were other potential authors of middleware, then removal of one—AppCo—could not be said to reduce middleware competition and maintain the application barrier to entry.¹⁶⁷ Indeed, proof that one other firm would develop successful middleware would itself suffice to render AppCo's refusal to develop middleware competitively insignificant. For,

¹⁶³ Cf. *Tenneco, Inc. v. FTC*, 689 F.2d 346, 353-55 (2d Cir. 1982) (reversing FTC finding that acquiring firm would have otherwise entered new market de novo because such a ruling rested on unwarranted "speculation"); *BOC Int'l*, 557 F.2d at 28-30 (holding proof that acquiring firm would have entered eventually not sufficient to establish that integration thwarts "actual potential competition").

¹⁶⁴ *Tenneco*, 689 F.2d at 354-55 (rejecting findings that firm would have entered the market where such entry apparently would have been unprofitable); Dep't of Justice & FTC Joint Merger Guidelines § 3.2 (entry is not likely if it would not be profitable at premerger prices, given sunk costs).

¹⁶⁵ It is not clear from the parties' submissions, for instance, how many APIs Microsoft's Office Suite currently exposes.

¹⁶⁶ Indeed, the District Court expressly found that there are other software applications with the potential to evolve into middleware. *Microsoft*, 84 F. Supp. 2d at ¶ 78.

¹⁶⁷ As Judge Easterbrook once noted when critiquing the "actual potential competition" doctrine applied under section 7 of the Clayton Act, proof that an acquiring firm would otherwise have entered a concentrated market de novo does not establish that the integration through acquisition in fact reduces future competition. There may well be other firms equally capable of entering the relevant market, with the result that elimination of one possible entrant will have no discernible effect on competition. "If there are many potential competitors . . . the removal of one of them cannot be important, since the continued presence of the remaining firms will discipline the market to the same extent. The removed firm must have had, then, some unique qualities for its potential competition to have been effective." Frank H. Easterbrook, Comment, *Toehold Acquisitions and the Potential Competition Doctrine*, 40 U. CHI. L. REV. 156, 169 (1972).

according to the government the existence of one successful middleware firm would bring down the applications barrier.¹⁶⁸

Ironically, the government supplied an argument and supporting evidence that undermines its assertion that Microsoft's failure to transform its Office Suite into middleware materially affects the nature and extent of the applications barrier. In particular, the government argues that "there are several new desktop applications that could become important middleware technologies."¹⁶⁹ The existence of these various technologies counsels in favor of a behavioral remedy banning Microsoft from tying or binding its own version of these technologies to Windows 98 or successor operating systems.¹⁷⁰ The district court apparently agreed and enjoined Microsoft from tying or binding its operating system to such applications.¹⁷¹

The ban on contractually tying or technologically "binding" middleware to Windows or other operating systems may well be justified under current law as a prophylactic attempt to prevent Microsoft from "forcing" consumers to purchase a software application that they may not otherwise prefer.¹⁷² Regardless, the government's case for such behavioral relief depends upon an assertion that Office Suite is by no means the only software application that is capable of evolving into middleware. If the government is correct on this score, then Microsoft's refusal to divest its Office Suite application cannot be said to materially impact competition.

D. *Does the Possibility that Disintegration Will Lower the Application Barrier Justify Relief?*

I do not mean to suggest that the government's case for disintegrating Microsoft is entirely baseless. It is certainly *possible* that Microsoft's anti-

¹⁶⁸ Plaintiffs' Memorandum in Support of Proposed Final Judgment at 34, *United States v. Microsoft Corp.*, 97 F. Supp. 2d 59 (D.D.C. 2000) (No 98-1232).

¹⁶⁹ *Id.* at 28. Indeed, the government cites favorably an internal Microsoft document stating that one of these applications, Real Networks "is just like Netscape[]" in its capacity to evolve into middleware. *Id.*

¹⁷⁰ *Id.* at 42.

¹⁷¹ *Microsoft*, 97 F. Supp. 2d at 68.

¹⁷² It should be noted that, even under current tying law, the prohibition of contractual tying and technological binding is overbroad in one respect, as it treats as a separate product any middleware that Microsoft has "distributed separately from an Operating System Product in the retail channel or through Internet access providers, Internet content providers, ISVs or OEMs. . . ." *Microsoft*, 97 F. Supp. 2d at 72 (defining "Middleware Product" for purposes of final judgment). As I have argued elsewhere, the mere fact that a firm distributes an item in separate channels does not *ipso facto* establish the existence of a "separate demand" as *Jefferson Parish* employs that concept. Ford may well sell automobile engines in channels separate from its automotive dealerships. This does not establish the existence of a "separate demand" for automobiles and the engines they contain, however. Meese, *Monopoly Bundling*, *supra* note 105, at 96 n.102 (refuting government's assertion that separate marketing of tied product establishes separate demand). The question under the separate demand test is not whether the purported tied item is ever sold without the purported tying item. Instead, the question is whether the purportedly tying product is sold separately.

competitive actions prevented Netscape from remaining the “standard” internet browser. It is also *possible* that, as such, Netscape or Java would have evolved into the sort of middleware that could lower the applications barrier to entry. Finally, it is *possible* that an independent AppCo would successfully transform the Microsoft Office Suite into middleware, that such middleware would lower the application barrier to entry, and that no other software application would evolve into middleware. Antitrust law, however, is generally concerned with *probabilities*, and there has been no showing or finding that the overall scenario suggested by the government is *probable*. Mere “ephemeral possibilities” are generally not sufficient to justify the undoing of voluntary integration.¹⁷³

Why is it, though, that mere possibility is not enough? After all, the government did prove that Microsoft possesses monopoly power, power that presumably reduces consumer welfare each day that it is exercised. If there is *any* possibility that disintegration is necessary and sufficient to ameliorate that power, one might argue, the district court should order a break up. There is, it seems, no harm in trying.

This, in fact, seems to be the government’s attitude toward the remedy question. For, according to the government, the vertical disintegration of Microsoft will not harm the firm in the least and may even produce benefits for its shareholders in the long run.¹⁷⁴ Thus, the government apparently believes that the current structure of Microsoft, entailing as it does common ownership of Windows 98 and various applications, reflects a random assignment of related economic tasks to a single firm—Microsoft—tasks that

¹⁷³ See, e.g., *Brown Shoe Co. v. United States*, 370 U.S. 294, 323 (1962) (finding section 7 concerned with “probabilities,” not mere “ephemeral possibilities”); *Tenneco, Inc. v. FTC*, 689 F.2d 346, 354 (2d Cir. 1982) (mere “ephemeral possibility” that acquiring firm would otherwise have entered the market *de novo* would not support a case under the actual potential competition doctrine).

¹⁷⁴ Plaintiffs’ Memorandum in Support of Proposed Final Judgment at 37, *Microsoft* (No. 98-1232). The government’s assertion that the coerced disintegration of Microsoft will actually enhance shareholder value is difficult to credit in light of the fierce resistance that the firm has offered to the plan. The government’s entire case on the merits is premised upon a characterization of Microsoft as a far-sighted profit-maximizing firm which intentionally set out to protect and even enhance its profits by thwarting competitive challenges well before they emerged. Presumably a firm this rational is able to determine for itself whether divestiture of the applications business as defined by the government would in fact enhance shareholder value.

Relying upon one unsupported paragraph in an expert affidavit, the government asserts that coerced disintegrations, such as the breakup of Standard Oil, have produced net benefits for the shareholders of the disintegrated firms. *Id.* at 37. The paragraph on which the government relies is hedged somewhat, stating, as it does, that “court ordered separations such as the Standard Oil and the 1984 AT&T break-ups *are perceived* as having produced sizable positive returns to shareholders, assuming they held on to their original shareholdings.” Affidavit of Robert F. Greenhill & Jeffrey P. Williams at ¶ 55, *Microsoft* (No. 98-1232), available at <http://www.naag.org/features/microsoft/remedies/greenhill.pdf> (emphasis added). The affidavit does not explain just how one could determine how much shares in Standard Oil would have been worth had the firm remained intact after 1911. Without such (unknownable) information, it would seem difficult to support the affidavit’s assertion. At any rate, any affidavit that assumes that John D. Rockefeller did not know how to maximize his own income should be viewed with suspicion.

could just as readily be divided among any number of other firms.¹⁷⁵ Indeed, taken to its logical conclusion, the government's position would support division of Microsoft into several application companies, each of which, presumably could be a potential author of middleware.¹⁷⁶

We are thus brought back to where this Article started: the presumption that ownership integration—like other forms of integration—is procompetitive and beneficial. In free societies, such integration reflects a voluntary decision about how to organize assets, a decision that normally rests upon actors' assessments of the relative costs of alternative forms of organization. Microsoft must believe that common ownership of Windows and the Office Suite, for instance is procompetitive. Indeed, the government's case for disintegration is premised upon Office Suite's "dominance."¹⁷⁷ Is it really a coincidence that the same firm that produced the most popular operating system has also produced the most popular bundle of word processing software?¹⁷⁸ The government seems to think so.

The government's assumption that the common ownership of Windows and related applications produces no benefits is just one more manifestation of the inhospitality tradition that the government embraced with so much fervor at trial.¹⁷⁹ Indeed, once one assumes that there is no distinction from an efficiency perspective between cooperation through ownership and cooperation by contract "on the open market," there is no reason *not* to disintegrate Microsoft or, for that matter, the Rolling Stones, Skadden Arps

¹⁷⁵ It may be that the extent of integration varies greatly among firms. Some firms make only operating systems, some make only word processing software, some make only browsers, at least one (IBM) makes an operating system and word processing software and at least one (Microsoft) makes all three. To some, this great variation may suggest that any firm can be "successful" with less (or more) integration. In fact, however, the varying degrees of integration exhibited by different firms likely reflect characteristics that are unique to each firm, characteristics that have led each firm to a unique amount and type of integration. F. A. HAYEK, *The Meaning of Competition*, in *INDIVIDUALISM AND ECONOMIC ORDER* 101-02 (1948) ("[I]n conditions of real life the position even of any two producers is hardly ever the same. . . . At any given moment the equipment of a particular firm is always largely determined by historical accident, and the problem is that it should make the best use of the given equipment (including the acquired capacities of the members of its staff) and not what it should do if it were given unlimited time to adjust itself to constant conditions.").

¹⁷⁶ Both Internet Explorer and Microsoft Office, for instance, are presumably potential authors of middleware. As such, there is no apparent reason, again under the logic invoked by the government, to allow these two applications to remain under common ownership.

¹⁷⁷ See *supra* notes 96-98 and accompanying text.

¹⁷⁸ The government may believe that the success of Word and the Office Suite is somehow due to Microsoft's power in the operating system market, and not a reflection of a superior word processing application. It has not, however, mentioned this possibility in its argument in favor of disintegration. Indeed, proof that the Office Suite's large market share is the result of Microsoft's anticompetitive tactics would itself undermine the case for disintegration, as it would undermine the government's assumption that an independent AppCo's Office Suite will retain its dominance indefinitely, without the assistance of the OpCo. Absent such proof, one is compelled to assume that the current success of Word and the Office Suite is in part due to the legitimate fruits of ownership integration.

¹⁷⁹ See *supra* notes 175-76.

or Exxon-Mobil.¹⁸⁰

The inhospitality tradition holds little sway, except in Washington, D.C. This does not mean that the ownership integration of Windows and Office Suite, for instance, was beneficial; it could, conceivably, be benign or even harmful. Presumptions can be rebutted, and the government was free to rebut the presumption that the current structure of Microsoft is economically superior to that which the government is attempting to engineer. The government chose not to, however, relying instead upon generalized assertions that contractual integration was economically equivalent or even superior to the continued existence of a unified Microsoft.¹⁸¹ For instance, the government did not address in any meaningful fashion Microsoft's assertion that ownership integration would reduce the cost associated with generating and acquiring information about the interaction between the operating system and various applications.¹⁸² Instead, the government's expert simply stated—in a couple of sentences—that Microsoft did and could communicate with ISVs, such as the future AppCo, across corporate boundaries.¹⁸³ Neither the government nor its expert considered the possibility, recognized in literature regarding the theory of the firm, that intra-firm communication is superior to that which takes place “across corporate boundaries.”¹⁸⁴ This failure to recognize, or even consider, the efficiency advantages of alternative forms of integration is, of course, yet another manifestation of the inhospitality tradition, which rested upon an assumption that a firm can costlessly produce, gather, and transmit information to other firms.¹⁸⁵ Without some real showing that these and other efficiencies

¹⁸⁰ Judge Easterbrook summarized a similar attitude taken by courts influenced by the inhospitality tradition. Easterbrook, *supra* note 7, at 6 (“When the defendant lacks a powerful explanation for its conduct, and the evidence points to ‘exclusion,’ a judge is likely to conclude: ‘why not prohibit this practice? If it is anticompetitive, the prohibition will be beneficial. If it is not anticompetitive, the prohibition will be harmless; the defendant cannot tell me why the practice is essential to efficiency.’”).

¹⁸¹ See Declaration of Carl Shapiro at 11-13, *United States v. Microsoft Corp.*, 97 F. Supp. 2d 59 (D.D.C. 2000) (No. 98-1232), available at <http://www.naag.org/features/microsoft/remedies/afidavits.htm>.

¹⁸² See Declaration of Stanley Liebowitz, at ¶¶ 20-22, *Microsoft* (No. 98-1232), available at http://www.neramicrosoft.com/level_1/nera_tt.htm.

¹⁸³ See Declaration of Carl Shapiro at 13.

¹⁸⁴ See, e.g., Scott Masten, *A Legal Basis for the Firm*, 4 J.L. ECON. & ORG. 181 (1988) (arguing that the institution of a firm allows for greater control over employees and the information they possess or might obtain during their employment).

¹⁸⁵ Professor Richard Langlois colorfully describes the unrealistic epistemological assumptions of price theory, the economic paradigm that informed the inhospitality tradition:

Standard price theory partakes of the epistemology of old spy movies, in which complete knowledge of how to build and launch an ICBM could somehow be transcribed onto a microdot and hidden under a postage stamp In the world of tacit knowledge, [however,] having the same blueprints as one's competitors is unlikely to translate into having the same costs of production.

RICHARD LANGLOIS, TRANSACTION COSTS, PRODUCTION COSTS, AND THE PASSAGE OF TIME, in COASEAN ECONOMICS: LAW AND ECONOMICS AND THE NEW INSTITUTIONAL ECONOMICS 11 (Steven G. Medema ed., 1998). See also WILLIAMSON, *supra* note 20, at 370-73 (describing link between price

of integration are illusory, there is no cause for disintegrating Microsoft based simply on the "off chance" that such integration could ultimately introduce competition in middleware.¹⁸⁶

CONCLUSION

Voluntary integration in a free market is presumptively beneficial, and the United States has not asserted that this presumption is inapplicable where Microsoft is concerned. Nonetheless, the government has sought to disintegrate Microsoft, claiming that fission of this successful firm may lead to the emergence of middleware and the ultimate demise of the so-called applications barrier to entry. Given the presumptive benefits of voluntary integration, such extraordinary relief should only issue after a finding that: 1) Microsoft's unlawful tactics actually raised or maintained the applications barrier to entry and 2) an independent AppCo would be the only firm that would probably introduce middleware in the foreseeable future.

The district court made neither such finding at the trial or remedy stage. Ironically, the government's own trial strategy is largely responsible for the lack of factual support for the remedy it seeks. By relying upon outmoded doctrines associated with the inhospitality tradition of antitrust, the government relieved itself of any burden of showing that Microsoft's tactics actually harmed competition in the manner asserted. Absent additional proceedings and further findings, Microsoft should remain intact.

theory and the inhospitality tradition of antitrust).

¹⁸⁶ Nor did the government (or Microsoft) consider a second possibility, namely, that ownership integration could obviate the transaction costs that might accompany the design of complementary operating systems. For instance, the OpCo could make sunk investments in software designs that are specific to expected designs by the AppCo. Once the OpCo makes these investments, it could be vulnerable to opportunistic behavior by the AppCo, which could exploit the OpCo's investments by seeking to alter the terms of the relationship when it has the OpCo over a barrel. Complete vertical integration could reduce the prospect of such opportunistic behavior. *Cf.* WILLIAMSON, *supra* note 20, at 114-115 (arguing that complete integration can obviate the transaction costs produced when exchange requires investment in specialized assets).