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COMMENTS

tfosorciM and croMiftos: Why High-Technology Antitrust Inquiry Is Backwards and Inside-Out

When Robin Hood undertook to rob his fellow-citizens he took his life in his hand, and with at least some sort of courage took the consequences of his crimes, but these modern footpads have not the grace of his courage, but commit their robberies by stealth.¹

I. INTRODUCTION

The recent government prosecution of Microsoft under section 2 of the Sherman Act is the most controversial antitrust case in a generation. Indeed, there was extensive criticism of the Clinton administration from the political right for pursuing the case at all. Similarly, the political left criticized the Bush administration for its leniency in the Microsoft prosecution. The controversy stemmed from the debate over two antitrust issues: 1) when it is appropriate to prosecute under section 2 of the Sherman Act, and 2) what is the appropriate role of antitrust in complex, fast-changing, high-technology markets?

Notably, there are additional considerations that did not play a significant part in the public debate. For instance, some corporations accused of being in violation of antitrust laws make enormous contributions to charity. Should these social benefits be part of the antitrust calculus? If there is a place for consideration of these social benefits, should the Federal Trade Commission or other governmental agency consider them in deciding whether to prosecute the alleged antitrust violator? Perhaps the judiciary, instead, should factor in societal benefits when determining liability.

An important subtext to consider is that while many things change in the economy and society, others remain the same. Commentators suggest that high technology poses numerous challenges to antitrust analysis.² While this is true, different challenges to antitrust analysis

1. 20 CONG. REC. S3445 at 1457 (1889), *reprinted in* 3 American Landmark Legislation 1976, 34 (statement of Sen. Jones).

2. *See generally* STAN J. LEIBOWITZ & STEPHEN E. MARGOLIS, WINNERS, LOSERS & MICROSOFT COMPETITION AND ANTITRUST IN HIGH TECHNOLOGY 54 (1999).

have occurred repeatedly throughout history.³ Yet, the reality is that anticompetitive behavior continues, but companies hide such disfavored activity from the public.

This Comment will explore these issues, focusing particularly on whether antitrust doctrines are relevant to high-technology markets. Part II begins with an explanation of fundamental economic principles as a foundation for antitrust analysis. That section describes the analysis used in antitrust review as it pertains to the dominant firms in high technology markets. Moreover, in subpart A of Part II, this Comment discusses the economic analysis, which happens to be difficult to conduct because the measurements of market definition, relevant market, and market power are particularly unclear for high-tech companies.⁴ Using these popular economic analyses, the next question is: How do these economic principles fit within the various antitrust doctrines?

Using those fundamental economic principles, Part II B describes tie-in arrangements. The primary concern with tie-ins is the ease with which a high-tech company can incorporate many products to appear as one. Under such a scenario, anticompetitive activity may create many problems for the market, as well as for consumers. Section II C, looks at the positive and negative aspects of network effects. Following the network effects line of reasoning, Part II C continues by describing barriers to entry. The barrier to entry concept indicates either an attempt to exclude competitors or the ability of competitors to enter the market freely.

One negative consequence of these network effects and barriers to entry is the development of monopoly and predatory practices. Part II D discusses how these activities relate to the high-technology industry. In Part II E the Comment describes the pro-high-technology antitrust commentators' assertions that speed of change and slowness of the judiciary make antitrust law irrelevant. Part II closes in subpart F with a short discussion of whether the Sherman Act is the right tool for the high-technology market.

In the high-technology industry, perhaps the judicial inquiry should follow a traditional approach — the more predictable path. That is, the antitrust analysis would take into consideration economic efficiencies and give little importance to consumer welfare⁵ in validating the avoid-

3. One need only look to the debates surrounding the railroad industry at its birth as an example of the notion that monopoly seemed palatable because of the perceived benefits.

4. Considering the difficulty of economic analysis and the various opinions concerning these analyses, this is considerably more challenging than one might believe it to be at first glance.

5. Consumer welfare is a concept that this Comment uses throughout its analysis to refer to the totality of benefits consumers receive, excluding matters concerning health and safety. See Robert A. Skitol, *The Shifting Sands of Antitrust Policy: Where it has Been, Where Now, Where it*

ance of an antitrust prosecution. Part III of this Comment suggests that the discretionary aspects of enforcing antitrust regulations through evaluating consumer welfare would give the government an opportunity to refrain from pursuing companies that voluntarily disgorge monopoly profits.⁶ Indeed, the government could balance the social benefit created by an organization against the anticompetitive activity to establish a guideline for determining whether to prosecute.⁷

Social benefits analysis could be used to differentiate between companies that ought to be subject to prosecution and those that add ample public benefit and, thus, should not. Such an analysis parallels the tax-exempt organization inquiry performed by the Internal Revenue Service (IRS). Part III A discusses this public-versus-private concept using the tax-exempt organization test as an analogy. Exempt-organization analysis seems particularly well-suited to the antitrust inquiry because arguably the courts demonstrate similar reasoning within contemporary antitrust inquiry. Ultimately, by keeping this prosecutorial balancing test outside of the antitrust test, the judicial inquiry can focus exclusively on the anticompetitive behavior.

An important backdrop and underlying principle to this Comment is the Sherman Act's primary concern: protecting competition and not competitors. This seems contrary to the common conception of the antitrust goal, namely, protecting competitors.⁸ Consider, for example, the

will be in its Third Century, 9 CORNELL J.L. & PUB. POL'Y 248-49 (1999) (discussing Robert Bork's analysis of the "Chicago School philosophy in a broadly influential 1978 book entitled, *The Antitrust Paradox: A Policy at War with Itself*. An understanding of the thrust of this philosophy is critical to an appreciation of what has happened to antitrust policy from the end of the 1970s to our day.").

6. As this Comment states, there exists the inference that discretionary government prosecution of anything, particularly antitrust regulations, stems from the political environment within which the government operates. See, e.g., Holman W. Jenkins Jr., *All Wires Lead to Washington*, WALL ST. J., Jul 5, 2000, at A23. Jenkins argues, "Those who gurgled about the 'rule of law' in antitrust don't know, or have forgotten, that antitrust enforcement has always been an area of untrammelled policy initiative masquerading as law enforcement." Thus, an alternate method of effectively discriminating between warranted and unwarranted prosecutions is necessary.

7. This position is contrary to the stated analysis involved in many antitrust situations. Despite the palpable aversion to weighing social benefits, the mere fact that economic benefits are considered somewhat belies that aversion. Indeed economic goals are arguably societal benefits.

This Comment uses "social benefits" to refer to the benefits received by society in general. Those benefits may relate to health and safety.

8. Milton A. Marquise, Remarks at *The Eighteenth Annual National Regulatory Conference, Safe Harbor or Uncharted Waters? Antitrust, Market Power, and Regulatory Oversight* Panelists, *Antitrust and Market Power*, in 7 RICH. J.L. & TECH. 2 (2000). As an example of the perception that antitrust protects the competitor, it is useful to consider reports on the manner in which a competitor was harmed by the predatory behavior of an alleged Sherman Act violator. See, e.g., Thomas Sowell, *Predatory Prosecution*, FORBES, May 3, 1999, at 89.

skeptical view at least one writer expressed about the legal analysis in antitrust litigation:

The courts have long paid lip service to the distinction that economists make between competition — a set of economic conditions — and existing competitors, though it is hard to see how much difference that has made in judicial decisions. Too often, it seems, if you have hurt competitors, then you have hurt competition, as far as the judges are concerned.⁹

Perhaps the above idea stresses only a semantic difference.¹⁰ Nevertheless, this Comment discusses the antitrust analysis applied to high-tech markets with an eye toward protecting competition and the associated benefits.

Clearly, the idea that Robin Hood¹¹ took from the rich and gave to the poor does not change the fact that Robin Hood was a thief. Yet, does the metaphor suggest that those who are involved in a theft, done for a greater good, may attain forgiveness? Extending that idea even further, it seems that the altruistic activity of an organization helps that organization better align itself with the positive concept associated with the Robin Hood ideal, thereby avoiding the negative connotations described as “these modern footpads have not the grace of his courage. . .”¹² *Is Microsoft Robin Hood?*

9. See Sowell, *supra* note 8.

10. If it is true that competition, rather than the competitors, is protected, the civil remedy is ironic as only a competitor is able to seek relief. *Id.* See also *Brunswick Corp. v. Riegel Textile Corp.*, 752 F.2d 261, 266 (7th Cir. 1984). On the other hand, entities within the market are the best candidates to bring an action because they have the business experience to know the manner in which the anticompetitive activity is harming the market. See, e.g., W. KIP VISCUSI ET AL., *ECONOMICS OF REGULATION AND ANTITRUST* 73 (2d ed. 1995) (1992).

The concepts discussed thus far and those to be discussed later in this Comment depend on certain assumptions. One major assumption here is perfect competition:

[T]he theoretical world of perfect competition. Every microeconomics text devotes much attention to the perfectly competitive model. The key assumptions are:

1. Consumers are perfectly informed about all goods, all of which are private goods.
2. Producers have production functions that rule out increasing returns to scale and technological change.
3. Consumers maximize their preferences given budget constraints; producers maximize profits given their production functions.
4. All agents are price takers, and externalities among agents are ruled out.
5. A competitive equilibrium, that is, a set of prices such that all markets clear, is then determined.

Id.

11. See CONG. REC., *supra* note 1.

12. *Id.*

II. ECONOMIC BASICS: DOES ANTITRUST APPLY TO HIGH-TECHNOLOGY MARKETS?

Some commentators argue that the antitrust laws, which seek to remedy an aggregation of market power under one firm, should not apply to the high-tech industry.¹³ Others argue just the opposite.¹⁴

As a demonstration of some of the points on both sides of this argument, consider first that the fast-changing nature of the high-tech industry mitigates the harm because continuous improvements and innovation lessen the likelihood of sustained monopoly.¹⁵ Conversely, the existence of a monopoly may suffocate innovation because the monopolist has less incentive to innovate, and the monopolist's exclusionary actions, intended to secure monopoly profits, may push the monopolist to exclude new entrants from the market despite the innovative technologies they bring. Second, some suggest that network effects¹⁶ are value-adding and provide helpful benefits for the consumer of high-technology products and services.¹⁷ Moreover, there could be a net gain to economic efficiencies when considering the positive effects of productive efficiency gains due to suggested short-term monopoly versus the allocative efficiency losses arising from monopoly. On the other hand, network effects are also associated with barriers to entry,¹⁸ which suggests that strong affinities to the benefits reaped deter innovation.

Using this debate as a backdrop, to determine whether Microsoft — or, for that matter, any other high-technology marketer — is Robin Hood, some initial standards must be established. Those standards build on economic principles. The primary, and perhaps most important, economic principle for the purposes of this Comment is market power.

Before discussing market power, it is important to note that there have been opposing views of the standard. These views depend upon which side of the high-tech antitrust argument you support. One side

13. See generally LEIBOWITZ & MARGOLIS, *supra* note 2.

14. See generally Robert Pitofsky, Remarks at the F.T.C. Antitrust, Technology and Intellectual Property Conference (Mar. 2, 2001) at 2001 WL 206413. (Robert Pitofsky is the chairman of the F.T.C.). Notably, this Comment deals with issues such as monopoly, tying and predation as those concepts relate to high-tech markets but does not address price fixing laws.

15. See *infra* text Part II E. Consider the money spent by the government in pursuit of eliminating a monopoly that is self-defeated before the court remedy could be exacted. See, e.g., *infra* text accompanying note 165. The "moving target" concept, as defined for the purposes of this Comment, refers to the likelihood that anticompetitive activity concerns a product or service that will likely change or become obsolete before a court could resolve the underlying dispute.

16. See *infra* text Part II C & D.

17. See Daniel L. Rubinfeld, *Competition, Innovation, and Antitrust Enforcement in Dynamic Network Industries*, Address Before Software Publishers Association (Mar. 24, 1998), at 1998 WL 1769814 at *14.

18. See *infra* text Part II C.

argues that antitrust law is an inappropriate way to govern competition in the high-technology market. Predictably, these commentators' market power analyses stress those factors that deal with efficiency.¹⁹ Alternatively, the opposition proposes a market power standard that focuses on the virtues of competitiveness.²⁰

Nevertheless, both sides of the high-tech antitrust argument disagree on the extent to which large participants in high-tech markets have market power and its dangers.²¹ Relying on this principle, consider the initial economic analysis of a simple monopoly where price is set when marginal cost (MC) equals marginal revenue (MR).²² The effect of setting the price according to $MC = MR$ is that some consumers, not prepared to pay the monopoly price, are likely to switch to another product they desire less. The net effect of this behavior on the economy is a loss of efficiency.²³

19. See *infra* text this Part.

20. See *infra* Parts II B & E.

21. ECONOMICS & ANTITRUST POLICY 2 (Robert J. Lerner & James W. Meehan, Jr. eds., 1989).

The intellectual foundation for the structural approach to antitrust policy is contained in the structure-conduct-performance paradigm. The paradigm states that market power (that is, the ability to restrict output and raise price) is determined by a few key elements of market structure, in particular, market share, concentration, and barriers to entry.

22. See Richard A. Posner, *The Theory of Monopoly*, in ECONOMIC ANALYSIS AND ANTITRUST LAW 22 (Terry Calvani & John Siegfried eds., 2d.ed. 1979). Marginal cost is the additional cost associated with an additional unit produced and marginal revenue is the revenue associated with one additional unit sold. Accordingly, "[t]he monopoly price . . . is the price that a company having no competition or fear thereof would charge." *Id.*

23. *Id.* at 17. Consider the following discussion of efficiency:

There are four fundamental aspects of efficiency, distinguished as follows:

1) "Technical efficiency": a company produces a certain level of output by using the minimum level of physical inputs; an example of technical inefficiency is when more people than necessary are used to carry out a certain task.

2) "Allocative efficiency": a company uses inputs in the right proportion (for given input prices) to produce a certain level of output; an example of allocative inefficiency is when the wrong people carry out the wrong tasks (i.e. wrong input mix), for instance when company managers dedicate time to secretarial tasks such as typing instead of thinking how best to run the company.

3) "Economic efficiency": a company produces a certain level of output at the lowest feasible costs; costs may rise above the lowest possible level due to lack of either technical or allocative efficiency.

It should be clear from the above that economic efficiency is a more stringent requirement than technical or allocative efficiency. Both technical and allocative efficiency are required to achieve economic efficiency.

Finally when time is taken into account the relevant concept is:

4) "Dynamic efficiency": a company's output is economically-efficient (i.e. a certain level of output at minimum costs) over time.

John Cubbin & George Tzanidakis, *Techniques for Analysing Company Performance*, BUS. STRATEGY REV. (Winter 1998), at 39 (first emphasis added).

The loss of economic efficiency in a high-tech market could include a decrease in innovation²⁴ because “a monopolist has less of an incentive to innovate . . . [in fact, the predacious company] gains less than a new entrant to the market.”²⁵ As a result, innovation would cause a monopolist to switch existing profits for the newly created product, whereas a market entrant realizes profits earlier in production.²⁶ Somewhat counterintuitive is the fact that “the net gain to the entrant will be greater than to the monopolist . . .”²⁷ Furthermore, exclusionary behavior tends to reduce the benefits of innovation because there is a chilling effect on the incentive to develop new high-tech products. Unfortunately, it is not easy to understand the impact of today’s competition restrictions on the innovations of the future. Nevertheless, there is an immeasurable loss of future efficiency.

Another ramification of inefficiency is the likely market selection by consumers of inferior products for the sake of compatibility.²⁸ These market reactions hinder economic adjustments for consumer tastes, changes in income, and changes in technology, because the consumers’ market response reflects inefficient decision-making.²⁹

Conversely, the economic model of a competitive market allows supply and demand (the measure of producer and consumer behavior) to determine the market price.³⁰ Price inflexibility and rigidity, hallmarks of monopoly, are exclusively manifestations of the producers’ behavior.³¹ Any downward price movements occur because the monopolist adjusts output and the employment of the factors of production,³²

24. U.S. v. Microsoft Corp., 253 F.3d 34, 99 (D.C. Cir. 2001)

Testimony from Dean Richard Schmalensee, Dean of MIT’s Sloan School of Management, that dividing Microsoft likely would “harm consumers through higher prices, lower output, reduced efficiency, and less innovation” and would “produce immediate, substantial increases in the prices of both Windows and Office” (internal citation omitted).

25. The Institute for Fiscal Studies, *Innovations and market structure*, at <http://www.ifs.org.uk/innovation/innovations.shtml> (last modified Jan. 22, 2001).

For the purposes of this Comment, “new entrant” means a person or company that has not been selling goods, providing services or both in or through the subject market.

26. *Id.*

27. *Id.*

28. LEIBOWITZ & MARGOLIS, *supra* note 2. Economic inefficiency denotes that there is a viable alternative available, which Leibowitz and Margolis refer to as third-degree path dependence.

29. David R. Kamerschen, *The Economic Effects of Monopoly: A Lawyers Guide to Antitrust Economics*, in *ECONOMIC ANALYSIS AND ANTITRUST LAW* 33 (Terry Calvani & John Siegfried eds., 1979).

30. *Id.*

31. *See id.*

32. According to standard economic theory, there are three factors of production—land, labour and capital. In practice, in modern expositions, land is often amalgamated with capital, and we are left with only two factors—labour and

instead of allowing the market forces of supply and demand to control price.³³

This economic analysis may be pedagogically interesting for some, but it also affects the high-tech industry by showing how anticompetitive behavior affects the market. One of the anticompetitive influences is network effects (i.e., increased product value through expansive use effectively excluding rivals).³⁴ Network effects is the power associated with incumbent technology causing people to be reluctant to use different products. This exists in many familiar situations — for example, the pervasive use of VHS videotapes over Beta videotapes although it was widely argued that the Beta format was superior. Another example is the rise to dominance by Microsoft's Windows software.

In each of these cases, the power of interchangeability adds to the product's value. Consider that few individuals use the Beta format or any computer operating platform other than Windows. The reason for such limited use of these other formats is that each person benefits from the widespread use of the standardized product. This is similar to network externalities³⁵ (i.e., the negative or positive effects of networks in a market).

One danger of network externalities is the potential for waste of economic resources because of the restrictions on the employment of those resources.³⁶ At least one commentator described the waste of economic resources associated with concentrated market power—one of the possible byproducts of network externalities:

capital. This may be useful for some broad-brush analyses of economic growth and distribution. But for many crucial problems this simplification is unsatisfactory. For the simplification omits an essential factor of production, without which growth and technical progress would be impossible. That factor is entrepreneurship.

Harold Lydall, *Enterprise: The Missing Factor*, *ECON. AFF.*, Feb. 1991, at 27.

33. See Kamerschen, *supra* note 29, at 33.

34. See generally LEIBOWITZ & MARGOLIS, *supra* note 2, at 18, 143.

35. Melissa A. Schilling, *Technology Success and Failure in Winner-Take-All Markets: The Impact of Learning Orientation, Timing, and Network Externalities*, 45 *ACAD. MGMT. J.*, 387, 388-89 (2002)

Network externalities arise when a user's benefit from using a technology increases with the number of other users employing the same technology. . . . The classic examples occur in markets involving physical networks, such as railroads or telecommunications; however, network externalities can also arise in markets that do not have physical networks. For example, a user's benefit may increase with the number of users of the same good when compatibility is important. . . . When an industry is characterized by network externalities, a technology's installed base and the availability of complementary goods will play major roles in user adoption — an insufficient installed base or lack of complementary goods may result in technological lockout (internal citations omitted).

36. Charles A. Holt & David T. Scheffman, *Strategic Business Behavior and Antitrust*, in *ECONOMICS & ANTITRUST POLICY 55* (Robert J. Lerner & James W. Meehan, Jr. eds., 1989).

Concentrated economic power . . . ma[kes] it possible to hold up prices in the face of technological advances and increased productivity; and this, in turn, . . . [leads] to maldistribution, the accumulation of excess savings, the failure of mass purchasing power, and a decline in private investment opportunities. It mean[s], first, that a disproportionate share of the national income [is] . . . withheld as savings. . . . [S]econdly, that real purchasing power [is] . . . diverted from consumers, farmers, and laborers, the classes that created the mass market, upon which the profitable investment of these accumulated savings depend[.] And thirdly, . . . the natural forces of adjustment c[an] no longer bring about economic recovery. In the face of falling demand, the normal choice of the businessman . . . to cut production in preference to lowering prices, a choice that thr[o]w[s] laborers out of work, reduce[s] their income, and thus cut[s] purchasing power that much more.³⁷

In addition, anticipated disincentive toward inventiveness when facing significant network effects creates a barrier to entry.³⁸ For example, any competing operating system to Windows would arise only when the competitor had a sufficient selection of compatible applications, in order to ensure consumers that the assortment to choose from would equal that of Windows.³⁹

On the other hand, assuming the new entrant accumulated many different computer programs suitable for the operating system, the consumer may still resist the change because of the varied and expansive inventory compatible with Windows.⁴⁰ As such, the investment required to develop an attractive network deters new entrants.⁴¹ Not to mention the fact that the new entrant would need to persuade software creators to develop programs for it.⁴²

In light of this economic analysis, this Comment suggests that anti-

37. ELLIS WAYNE HAWLEY, *THE NEW DEAL AND THE PROBLEM OF MONOPOLY: A STUDY IN ECONOMIC AMBIVALENCE* 174-75 (1995) (1966).

38. See, e.g., Lawrence J. White, *The Revolution in Antitrust Analysis of Vertical Relationships: How Did We Get from There to Here?*, in *ECONOMICS & ANTITRUST POLICY* 113 (Robert J. Lerner & James W. Meehan, Jr. eds., 1989).

Vertical relationships represent those interactions between companies involved in the same distribution channel. Consider Microsoft: as a software manufacturer, its vertical components include wholesalers, distributors, and retailers. Most of the interesting antitrust analysis rests in these business arrangements because such associations create a difficult choice between the benefits produced by the combination of products and services with the negative effect on competition.

39. Gregory J. Werden, *Network Effects and Conditions of Entry: Lessons from The Microsoft Case*, 69 *ANTITRUST L.J.* 87, 95 (2001) (citing *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9, 20 (D.D.C. 1999)).

40. *Id.*

41. *Id.*

42. *Id.*

trust implications are visibly meaningful as a system to ensure a competitive marketplace, even in cases of high-tech markets. Yet, in an attempt to diminish antitrust effectiveness, the high-technology marketers may seek to introduce new or altered analyses, thereby weakening the checks on trade restraint.⁴³ Despite this reality, judicial analysis nevertheless delves into complex concepts such as market power, tie-in, market structure, and entry barriers. Each of these doctrines should remain applicable under the Sherman Act regardless of the high-tech market counterarguments.⁴⁴

A. *Market Power:*

Heavily manipulated, market power is a tool needed to understand antitrust litigation. Demonstrating this manipulation is the varied meaning assigned to market power: (1) a firm's ability to control price through the manipulation of output,⁴⁵ (2) a company's ability to vary profitably from competitive pricing,⁴⁶ and (3) an inference of market

43. See, e.g., Appellant's Opening Brief at 68-83, *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (No. 00-5212) available at 2000 WL 33174760, at *40-53 [hereinafter Appellant's Brief].

44. Although there may not be actual organizations that manifest the pure form of monopoly, the application of the analysis is proper as a way to better understand the dynamics of the market within which the firm competes.

45. HERBERT HOVENKAMP, *ECONOMICS AND FEDERAL ANTITRUST LAW* § 3.1, 55 (Students ed. 1985). An important distinction is that market power is not exclusionary (as compared to monopoly) although exclusion of competitors is a tool to increase market power, but it attracts competition because of the supracompetitive price.

46. *Id.* at 57. See also Notices: Federal Trade Commission Request for Views on Draft Antitrust Guidelines for Collaborations Among Competitors, 64 Fed. Reg. 54484, 54488 (Oct. 6, 1999).

If the nature of the agreement and the absence of market power together demonstrate the absence of anticompetitive harm, the Agencies do not challenge the agreement. Alternatively, where the likelihood of anticompetitive harm is evident from the nature of the agreement, or anticompetitive harm has resulted from an agreement already in operation, then, absent overriding benefits that could offset the anticompetitive harm, the Agencies challenge such agreements without a detailed market analysis.

(citing *Bd. of Trade of the City of Chicago v. United States*, 246 U.S. 231, 238 (1918); *Cal. Dental Ass'n v. F.T.C.*, 526 U.S. 756, 768, 778-79 (1999); *F.T.C. v. Ind. Fed'n of Dentists*, 476 U.S. 447, 459 (1986); *Nat'l Collegiate Athletic Ass'n v. Univ. of Okla.*, 468 U.S. 85, 104, 106-10 (1984))

Since the purpose of the inquiries into market definition and market power is to determine whether an arrangement has the potential for genuine adverse effects on competition, "proof of actual detrimental effects, such as a reduction of output," can obviate the need for an inquiry into market power, which is but a "surrogate for detrimental effects."

Ind. Fed'n of Dentists, 476 U.S. at 459-60 (quoting Phillip E. Areeda, VII ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION 1511 (1986)).

Note that "[the absence of] market power . . . may be determined without defining a relevant market. For example, if no market power is likely under any plausible market definition, it does not matter which one is correct." Notices: Federal Trade Commission Request for Views on Draft

power drawn from the relative market share held by a company.⁴⁷ Nearly all antitrust litigation requires a showing of market power;⁴⁸ the degree of control varying depending on the claim.⁴⁹

Since the preceding economic analysis is difficult, the courts may rely on market share as well as barriers to entry⁵⁰ as substitutes for market power.⁵¹ However, the problem is that “[m]arket share is only an imperfect proxy for market power. . . . The . . . relevant variables [are]: market share, market demand elasticity, . . . the elasticity of supply of competing and fringe firms[.]”⁵² and barriers to entry. Whether looking at market power or market share, the court must first determine the relevant market.⁵³

In defining the relevant market, the court could simply, or maybe not so simply,⁵⁴ group all companies by geographic market boundaries or group those companies that produce the same good or service.⁵⁵ The more scientific method for defining a market is using cross-elasticity

Antitrust Guidelines for Collaborations among Competitors, 64 Fed. Reg. 54484, 54488 n.27 (Oct. 6, 1999).

47. *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966); *see also* *United States v. E. I. du Pont De Nemours & Co.*, 351 U.S. 377, 391 (1956).

48. One exception to the rule is price fixing. *See, e.g.*, *Nat’l Collegiate Athletic Ass’n*, 468 U.S. at 100.

[P]rice fixing and output limitation are ordinarily condemned as a matter of law under an “illegal *per se*” approach because the probability that these practices are anticompetitive is so high; a *per se* rule is applied when “the practice facially appears to be one that would always or almost always tend to restrict competition and decrease output.”

(quoting *Broad. Music, Inc. v. Columbia Broad. Sys., Inc.*, 441 U.S. 1, 19-20 (1979)). Price fixing is not fully analyzed in this Comment, in part because price fixing was not a major issue in the Microsoft case.

49. *See generally* HOVENKAMP, *supra* note 45, at 56.

50. *See infra* Part II C.

51. HOVENKAMP, *supra* note 45, at 58 (there is a “positive correlation between market share and market power.”).

52. *Id.* If the two elasticity variables remain constant, then market share and market power vary proportionately.

53. *Id.* at 59.

54. To see the complications of market definition, which upon first glance seems to be a simple matter, *see* *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 423-24 (2d Cir. 1945).

55. Douglas Needham, *Substitutability Criteria for Market Definition*, in *ECONOMIC ANALYSIS AND ANTITRUST LAW* 78 (Terry Calvani & John Siegfried eds., 1979). One major challenge is determining what products and services belong with others. Arguing narrowly, every product and service is different making the definition unworkable. Conversely, all goods and services compete for the same consumer; therefore, they are all in the same market. This is, however, just as unworkable as the more narrow view. *See also*, Kenneth D. Boyer, *Industry boundaries*, in *ECONOMIC ANALYSIS AND ANTITRUST LAW* 96 (Terry Calvani & John Siegfried eds., 1979).

analysis⁵⁶ (but the data relating to the elasticity may not be available).⁵⁷ Despite the challenges with understanding, applying and formulating elasticity measurements, the analysis, nevertheless, gives insight to the concept of relevant market. In practice, cross-elasticity measures the tendency to substitute either goods and services on the consumer's side, or resources on the supply side.⁵⁸ "The degree of substitutability, as measured by the cross-elasticity of demand, [or supply], is used both to define the boundaries of an industry, as well as to measure the degree of product differentiation and thus classify market structures."⁵⁹

Thus far, the market definition analysis limitation, consistent in nearly all economic analysis, is a result of the difficulty in measuring elasticity.⁶⁰ For instance, identifying the level at which there is sufficient substitutability to enable a court to define the appropriate grouping of producers is difficult; economic elasticity theories do not effectively help the courts with the market definition.⁶¹ Alternatively, and perhaps more appropriately, the Department of Justice implements the following guideline for determining market definition:

The first task in market definition is to determine what products to include in the market for the product of the merging firm. In general,

56. See generally Needham, *supra* note 55; Boyer, *supra* note 55.

57. The courts take into account a variety of considerations when defining the relevant market. See, e.g., *Brown Shoe Co. v. United States*, 370 U.S. 294, 320-21, n.36 (1962).

[F]or example, that a whole or material part of the competitive activity of an enterprise, which had been a substantial factor in competition, had been eliminated; that the relative size of the acquiring corporation had increased to such a point that its advantage over competitors threatened to be "decisive"; that an "undue" number of competing enterprises had been eliminated; or that buyers and sellers in the relevant market had established relationships depriving their rivals of a fair opportunity to compete.

Id. (citing H.R. REP. NO. 81-1191, at 8 (1949)).

58. See Needham, *supra* note 55 at 79.

Cross elasticity of demand = $\frac{\% \text{ change in quantity of a good or service demanded}}{\% \text{ change in the price of a different good or service}}$

Cross elasticity of supply = $\frac{\% \text{ change in quantity of a good or service supplied}}{\% \text{ change in the price of a different good or service}}$

59. Boyer, *supra* note 55, at 90. See also *Aluminum Co. of Am.*, 148 F.2d at 423-24. For an alternative view on market definitions, see *Eastman Kodak Co. v. Image Technical Serv's, Inc.*, 504 U.S. 451, 470 n.15 (1992) (finding "the ultimate inquiry is . . . whether competition in the equipment market will significantly restrain power in the service and parts markets."). Market definition has its critics. See, e.g., David A Huettnner, *Product Market Definition in Antitrust Cases When Products are Close Substitutes or Close Complements*, 47 ANTITRUST BULL. 133 (2002) ("judicial acceptance of the Department of Justice (DOJ) Merger Guidelines over the past decade has standardized the methodology economists use to define markets in antitrust cases. This conceptual success, however, masks the fact that economic practitioners continue to reach divergent market definitions using identical methodology.") (footnote omitted).

60. Needham, *supra* note 55, at 80.

61. *Id.* at 81.

the Department seeks to identify a group of products such that a hypothetical firm that was the only present and future seller of those products could raise price profitably. That is, assuming that buyers could respond to an increase in price for a tentatively identified product group only by shifting to other products, what would happen? If readily available alternatives were, in the aggregate, sufficiently attractive to enough buyers, an attempt to raise price would not prove profitable, and the "market" would prove to have been too narrowly defined.⁶²

The cross-elasticity determination, however, does help the court understand the impact of any firm's actions on other organizations' pricing behavior and, thus, hints at the scope of the relevant market.⁶³ In fact, a close reading of the Department of Justice guidelines indicates that the factors considered constitute an elasticity-type inquiry. In particular, the Department of Justice delineated specific factors that should be considered when defining the relevant market:

In constructing and expanding the provisional market, the Department will not exclude any product that is at least as good a substitute as any product included. The Department will refer to the products included in the market collectively as the "relevant product."

- (1) Evidence of buyers' perceptions that the products are or are not substitutes, particularly if those buyers have shifted purchases between the products in response to changes in relative price or other competitive variables;
- (2) Similarities or differences between the products in customary usage, design, physical composition and other technical characteristics;
- (3) Similarities or differences in the price movements of the products over a period of years; and
- (4) Evidence of sellers' perceptions that the products are or are not substitutes, particularly if business decisions have been based on those perceptions.⁶⁴

A shortcoming of confining market definition to elasticity analysis is a possible failure to consider potential competitors.⁶⁵ In other words, action may constitute anticompetitive behavior possibly directed at firms

62. Notices: Department of Justice Antitrust Division Merger Guidelines, 47 Fed. Reg. 28493, 28494 (June 30, 1982) (internal citations omitted).

63. Needham, *supra* note 55, at 82. Cross-elasticity analysis does not include allowances for competitive responses. As such, these measurements do indicate whether there will be a response, although it fails to provide a description of the type of response.

64. Notices: Department of Justice Antitrust Division Merger Guidelines, 47 Fed. Reg. 28493 at, n. 12 (June 30, 1982).

65. Terry Calvani & John Siegfried, *Introduction in ECONOMIC ANALYSIS AND ANTITRUST LAW* 272 (Terry Calvani & John Siegfried eds., 1979).

not yet in the market.⁶⁶ However, there is a possibility that the scope of the defined market, with the intent to protect new entrants, may become too broad so that regulations defeat the pursuit of economic efficiencies (i.e., economies of scale).⁶⁷ Understanding not only that there will be a competitor response to a firm's activity, but also where the response will come from, generally helps the court understand the antitrust implications.⁶⁸

In the high-technology market, there exists an especially cloudy market definition.⁶⁹ For example, common to all those who use computers, the way in which the different companies connect their products or services (i.e., between the hard drive manufacturer, operating system developer, and the Internet provider) is unimportant to the user. Arguably, most people simply know that they have Microsoft Windows. Considering all the interdependence between hardware, software and Internet organizations, drawing the line defining the relevant market becomes even more complicated.⁷⁰ Arguably, it could be that under the market definition guidelines as set out by the Department of Justice, all successful high-tech companies are monopolists.

The reason for believing that all successful high-tech companies are monopolist under the Department of Justice analysis is that product differentiation is thinning as technology developers look for more ways to create transparency and compatibility for the user. Eventually, perhaps, there will be one master to which all other developers answer. This is precisely the situation Microsoft detractors argue exists in the computer market. *Is this situation the same as Robin Hood and his band of merry men?*

On the other hand, does that argument defeat overall consumer welfare? Assuming there is a "crackdown" on antitrust violators, would the consequences for successful prosecution cause greater harm than good? For instance, these market definition tools might create a situation where market power is easily established. If market power accumulation were to occur, would the consumer no longer be able to fulfill his ever-increasing desire for more technology because the companies that could develop this technology no longer desire to do so, assuming the return on capital decreases? This Comment suggests that the broader the mar-

66. Situations could occur where a firm with market power in software acquires developing companies that may create competitive products to avoid any competitive interference.

67. Calvani & Siegfried, *supra* note 65.

68. *Id.*

69. See generally LEIBOWITZ & MARGOLIS, *supra* note 2.

70. See generally Skitol, *supra* note 5. Reviewing the changes, over time, the author expresses some of the increasing difficulties with antitrust law as it relates to high-technology markets.

ket, the more likely greater returns, but at the risk of tolerating greater perceived market power with which to abuse competition.

B. *Tie-Ins*⁷¹ Generally:

Many of the worries concerning antitrust law in the high-technology realm deal with tie-in arrangements.⁷² Tying is, generally, the sale or lease of one product made dependent on the sale or lease of another.⁷³ Consider, for example, the economic incentive to engage in tying arrangements:

When the seller's power is just used to maximize its return in the tying product market, where presumably its product enjoys some justifiable advantage over its competitors, the competitive ideal of the Sherman Act is not necessarily compromised. But if that power is used to impair competition on the merits in another market, a potentially inferior product may be insulated from competitive pressures.⁷⁴

71. Tie-ins traditionally have been found to be a *per se* violation of the Sherman Act. See *Int'l Salt Co. v. United States*, 332 U.S. 392 (1947).

72. "Tying is a form of marketing in which a seller insists on selling two distinct products or services as a package." *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 33 (1984) (O'Connor, J., concurring).

See LEIBOWITZ & MARGOLIS, *supra* note 2, at 249-52. The authors, in this section, suggest that tie-ins are a manifestation of monopoly power from within one market to another. In so doing, the authors explain the harm is not as apparent as in traditional notions of tying. On the other hand, tying is a business strategy that not only adds to the businesses performance but also benefits consumers.

For instance, the consumer is able to gain cost and quality benefits from the value added to the product through the tying arrangement. See, e.g., *Jefferson Parish*, 466 U.S. at 18 (stating that the tying could result in "merely providing a functionally integrated package of services" that arguably benefit the consumer). In addition, the competitive advantage could induce new entrants to become competitors because of the marketing advantage arising from the tie-in. See *id.* at 24.

Justice O'Connor argued in *Jefferson Parish* that "[w]hen the economic advantages of joint packaging are substantial the package is not appropriately viewed as two products, and that should be the end of the tying inquiry." *Jefferson Parish*, 466 U.S. at 40 (O'Connor, J., concurring).

One need only look as far as the Microsoft antitrust arguments for the application of the *Jefferson Parish* opinion and concurrence. See, e.g., Appellant's Brief at 68-83. Much of Microsoft's argument stressed that there was not a tied product and in the alternative maintained that there was no negative effect on competition. But see *Microsoft Corp.*, 253 F.3d at 68-86 (holding that the traditional *per se* rule is inappropriate, as was the case in *Jefferson Parish*).

We hold that the rule of reason, rather than *per se* analysis, should govern the legality of tying arrangements involving platform software products. . . . While every "business relationship" will in some sense have unique features, some represent entire, novel categories of dealings. As we shall explain, the arrangement before us is an example of the latter, offering the first up-close look at the technological integration of added functionality into software that serves as a platform for third-party applications. There being no close parallel in prior antitrust cases, simplistic application of *per se* tying rules carries a serious risk of harm.

Id. at 84.

73. See HOVENKAMP, *supra* note 45, at 214.

74. *Jefferson Parish*, 466 U.S. at 15.

Accordingly, the courts must test for the existence of tying arrangements, but there is little consistency in the application of the test.⁷⁵ Despite the fact that courts pulled back from the *per se* rule, tied products today, nevertheless, remain a violation of the antitrust regulations.⁷⁶ However, the courts now blur what once was a brightline rule.⁷⁷ As such, the plaintiff must show: “(1) the tying and tied goods are two separate products; (2) the defendant has market power in the tying product market; (3) the defendant affords consumers no choice but to purchase the tied product from it; and (4) the tying arrangement forecloses a substantial volume of commerce.”⁷⁸ When these elements are not satisfied, the court will still apply the “rule of reason” if the plaintiff can demonstrate that the seller unreasonably restrained competition in the tied market.⁷⁹ The “rule of reason,” initially understood as a totality of the circumstances test,⁸⁰ is now defined as:

“The true test of legality is whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition.” . . . [T]he purpose of the analysis is to form a judgment about the competitive significance of the restraint; it is not to decide whether a policy favoring competition is in the public interest, or in the interest of the members of an industry. Subject to exceptions defined by statute, that policy decision has been made by the Congress.⁸¹

Considering limitations on the “faux”⁸² *per se* rule and the implication of the “rule of reason,” courts are unable to apply precisely any tying rule because the tests require difficult economic analysis and determinations.⁸³ Moreover, Microsoft argued that *Jefferson Parish* is inap-

75. *Id.*

76. *Id.* at 22. In a dispute between an anesthesiologist and a hospital, the court ruled that the exclusive contract for services between an anesthesiologist organization and the hospital did not violate the *per se* rule of tying. The court further held that there was insufficient evidence to find a negative impact on competition.

77. See generally *id.* (The *Jefferson Parish* court seems to limit the group of tie-in cases that retain the *per se* rule to those sellers that exhibit anticompetitive forcing). See, e.g., Stephan V. Bomse, *Tying 1994: Kodak begins to Develop*, 847 PLI/Corp 745, 752 (1994).

78. *Microsoft Corp.*, 253 F.3d at 85 (citing *Eastman Kodak Co. v. Image Tech. Serv., Inc.*, 504 U.S. 451, 461-62, (1992)), *Jefferson Parrish*, 466 U.S. at 12-18).

79. *Id.*

80. Compare *id.* (Justice O'Connor discussed the benefits of tying in upholding tying as a restraint on trade against four dissenting Justices' argument to eliminate the *per se* tying rule) with *Nat'l Soc. of Prof'l Engineers v. United States*, 435 U.S. 679, 691-92 (1978).

81. *Nat'l Soc. of Prof'l Engineers*, 435 U.S. at 691-92 (quoting *Bd. of Trade of City of Chicago*, 246 U.S. at 238).

82. Use of “faux” indicates that what was once a brightline rule against tying because of the presumption that such an arrangement was anticompetitive now seemingly is the threshold inquiry for the rule of reason analysis.

83. See generally Needham, *supra* note 55; Boyer, *supra* note 55. As an example of the difficulty of analysis, see *Eastman Kodak Co.*, 504 U.S. at 462 (“[Tying] violates § 1 of the

posite because the *Jefferson Parish* test takes into consideration economies arising out of bundling⁸⁴ products.⁸⁵

Bear in mind, however, “[t]he dangers to come from this exercise of power are in the future and may never come, while the wrongs which it is intended to remedy are here present and pressing”⁸⁶ Notwithstanding these comments made at the time of the Sherman Act’s creation, the inquiry today seemingly changed to a balancing test that weighs the harm to consumers against the anticompetitive behavior despite the fact that the test does not expressly provide for such a standard.⁸⁷ For an example of this balancing, one need only to look to the *Microsoft* court’s express avoidance of the *per se* rule⁸⁸ and, arguably, its torturing of the “rule of reason” analysis described in *Jefferson Parish*.⁸⁹

Given the standards expressed by the courts since *Jefferson Parish*, the inquiry first seeks to determine if there are two distinct products and then whether they are tied.⁹⁰ To confuse matters further, because there

Sherman Act if the seller has ‘appreciable economic power’ in the tying product market and . . . affects a substantial volume of commerce in the tied market.”).

84. See, e.g., *Eastman Kodak Co.*, 504 U.S. at 479; *Data Gen. Corp. v. Digidyne Corp.*, 473 U.S. 908, 909 (1985); *Andrx Pharm., Inc. v. Biovail Corp. Int’l*, 256 F.3d 799, 812 (D.C. Cir. 2001). Bundling is the connection of two products that yield benefits to the end user. The benefits could be the ease of licensing as found in software/hardware products or the connection between servicing and the product being serviced.

85. See, e.g., *Microsoft Corp.*, 253 F.3d at 46-50.

86. 20 CONG. REC. S3445 at 1457 (1899), reprinted in IRVING J. SLOAN, 3 AMERICAN LANDMARK LEGISLATION 33 (1976) (representing the statements of Sen. Jones) (discussing the purpose for enacting the Sherman Act provisions but seeming particularly applicable to the high-tech market).

87. *Microsoft Corp.*, 253 F.3d at 89. “[O]bviously, we do not find that Microsoft’s integration is welfare-enhancing or that it should be absolved of tying liability.” This Comment references the harm to consumers because it is arguably true that harm to competition is equally harmful to consumers. In addition, Microsoft seemingly relies upon the “welfare-enhancing” effects of what was traditionally a violation of antitrust.

88. The court states that the lack of judicial experience in these types of “bundling” gives an insufficient basis to determine that the “‘pernicious effect on competition and lack of any redeeming virtue’” require in-depth analysis to determine the nature of the harm or the reason for the bundle. *Id.* at 90 (quoting *N. Pac. Ry. v. United States*, 356 U.S. 1, 5 (1958)).

“Microsoft’s implicit argument—that in this case looking to a competitive fringe is inadequate to evaluate fully its potentially innovative technological integration, that such a comparison is between apples and oranges—poses a legitimate objection to the operation of *Jefferson Parish*’s separate-products test for the *per se* rule.” *Id.* at 89.

89. For instance, consider Justice O’Connor’s statement in her *Jefferson Parish* concurrence:

The examination of the economic advantages of tying may properly be conducted as part of the rule-of-reason analysis, rather than at the threshold of the tying inquiry. This approach is consistent with this Court’s occasional references to the problem. The Court has not heretofore had occasion to set forth any general criteria for determining when two apparently separate products are components of a single product for tying analysis.

466 U.S. 41, n.10 (O’Connor, J., concurring).

90. See *Eastman Kodak*, 504 U.S. at 462 (1992).

are two physical products, the judgment that the two are one depends on whether they are "officially" tied products.⁹¹ However, the need for determining whether there are two separate products may not be important.⁹² Thus, courts may deny the existence of a tie-in despite the fact that the products may very well involve a tying arrangement that could negatively affect competition. A more difficult, but telling, test is to determine independent demand for the product being tied (i.e., the test used in *Jefferson Parish*).⁹³

When products are tied, the court should determine whether the activity violates the Sherman Act.⁹⁴ Yet, it seems that courts are willing to excuse tying arrangements, that were presumptively anticompetitive in earlier years as efficiency-enhancing, unless the controlling firm exploits its market power.⁹⁵ The concern is that tying analysis will continue to trend toward including more aspects to the pro-competitive side of the calculus — favoring efficiency enhancements — rather than focusing on the negative effects of anticompetitive behavior. One dangerous result could be that the exploitation of market power becomes less important in determining whether competition is affected.

The exploitation of market power is difficult for a court to gauge because the court must measure the appreciable economic power.⁹⁶ Measuring that economic power requires inquiry into the relevant market, which produces the dilemma of defining the relevant market with the high-tech industries.⁹⁷ On the other hand, the inquiry found in *Jefferson Parish* asks whether there exists "forcing," such that consumers

91. See generally HOVENKAMP, *supra* note 45, at 234-36. The business economies may dictate tying of products. For instance, it would be inefficient to restrict a firm from selling right shoes if that firm produces left shoes, even if the firm maintains a monopoly on left shoes.

92. See, e.g., *Microsoft Corp.*, 253 F.3d at 87-95. The court explained that early antitrust cases used the term "separate products" as a "linguistic" requirement. Historically, the courts ignored the inquiry when the products were obviously separate, and in less obvious circumstances, courts quickly disposed of the issue.

93. *Id.* (rejecting the *Jefferson Parrish* test for high-technology markets); *contra Jefferson Parrish*, 466 U.S. at 23 (1982). "No tying arrangement can exist unless there is sufficient demand for the purchase of [the tied product] separate from the tying product to identify a distinct product market in which it is efficient to offer [the tied product] separately from [the tying product]."

94. *Jefferson Parrish*, 466 U.S. at 33; *accord Eastman Kodak Co.*, 504 U.S. at 462.

Notably, the usual doctrinal environment for tying analysis is the Clayton Act. 15 U.S.C. §§ 12-27.

95. James W. Meehan, Jr. & Robert J. Lerner, *The Structural School, its Critics, and its Progeny: An Assessment*, in *ECONOMICS & ANTITRUST POLICY* 195 (Robert J. Lerner & James W. Meehan, Jr. eds., 1989).

96. See, e.g., *Eastman Kodak*, 504 U.S. 464. The Court, citing varied cases, describes appreciable economic power as the power to compel a buyer to behave differently than a buyer in a competitive market, to increase price and restrict output, and demonstrated through control of a "predominant share of the market."

97. See *id.* at 465-466 (defining the derivative aftermarket as separate from the primary market); see also James J. Anton & Dennis A. Yao, *Standard-Setting Consortia, Antitrust, and*

make decisions they would not otherwise make.⁹⁸ If there is no forcing, there is no harm⁹⁹ — unless, as this Comment suggests the reality to be that when the court analyzes the markets, it determines that the forcing is less harmful than the efficiency gains.

The difficulty with the buyer's choice analysis is that by using the availability of substitutes to define the market, the result may be a market too broadly defined because the test does not differentiate why buyers make their decisions.¹⁰⁰ For instance, a buyer's choice does not include some of the factors considered in elasticity analysis.¹⁰¹ Other criticisms rest on the fact that products or services are fundamentally different in "appearance, quality, reliability, service, technical assistance, and ease of shipment, warranty, and many other factors that buyers consider important."¹⁰² Therefore, arguably, tying would only arise when the products or services are indistinguishable, which is likely never the case, unless the products or services are commodities.

Ultimately, Microsoft's argument that the benefits to consumers should control the tying inquiry is belied by the fact that these tests are unable to "reveal anything meaningful concerning resource allocation and [social] welfare."¹⁰³ Regardless of market definition and how it relates to tying, anticompetitive behavior is the ultimate concern of the drafters of the Sherman Act.¹⁰⁴ Furthermore, the relevant market inquiry, often difficult for courts to assess, is ultimately a determination for the fact-finder.¹⁰⁵

It follows that the threshold legal question should be whether the activity is anticompetitive — arguably, aligning better with the intent of

High-Technology Industries, 64 ANTITRUST L.J. 247, 258 (1995); *but see* Werden, *supra* note 39 (discussing the lack of judicial experience with the technology).

Economic power analysis is, perhaps, easier in tying analysis than in other antitrust analysis because the court will focus on what alternatives are available to consumers.

98. *See Jefferson Parrish*, 466 U.S. at 29.

99. *Id.*

100. Dominick T. Armentano, *Competition Theory and the Market Economy*, in A CENTURY OF THE SHERMAN ACT: AMERICAN ECONOMIC OPINION, 1890-1990 224 (Jack C. High & Wayne E. Gable, eds., 1992).

101. *See supra* text accompanying note 55.

102. *See* Armentano, *supra* note 100, at 224.

103. *Id.* at 225.

104. IRVING J. SLOAN, 3 AMERICAN LANDMARK LEGISLATION 8 (1976) ("President Cleveland, in his annual message to Congress at the end of 1887, said it was 'notorious' that the 'combinations quite prevalent at this time, and frequently called trusts,' strangled competition; he urged that action be taken against them . . .").

105. Courts will be presented with expert economic testimony that the finder of fact must interpret and decide. Such expert testimony will be subject to judicial gate keeping provided for by the rules of evidence. This inquiry is better suited for the courts than economic theory and is not fully addressed here.

the framers.¹⁰⁶ Instead of these tests, there could be a determination of the extent of the anticompetitiveness; thereby avoiding a fact-finder's attempt to use difficult economic analysis (either the jury or a judge). For example, although never actually a test, the courts' initial response to the Sherman Act was to look at the combination for a tendency toward monopoly and a loss of the benefits¹⁰⁷ that attach to a free market.¹⁰⁸

This Comment suggests that, at a minimum, the *Jefferson Parish* test, or perhaps earlier *per se* analyses, should prevail, whereby courts must look at the effect on competition as a way to protect the long-term losses of "innovations that improve quality of future products" arising from lost competition.¹⁰⁹ Otherwise, the current trend of tying analysis seems to be leading toward an inquiry as to whether the consumer welfare and societal gains are sufficient enough for the court to disregard companies' anticompetitive behavior. Rather, the inquiry into the balance between economic (or arguably societal) benefits and the negative impact of competition in high-technology markets does not belong in judicial antitrust analysis because there may always be benefits to justify such violations.

Indeed, Robin Hood is guilty of theft. Whether he is performing his theft under the guise of providing for the poor does not change the illegality of his acts. The illegality and serving-the-poor inquiries are separate and should stay that way. It seems that the antitrust analysis combined with the tying inquiry has become too inclusive.

106. 20 CONG. REC. 1167-69 at 1168 (1889), reprinted in SLOAN, *supra* note 1. (Senator Sherman states that sections subsequent to Article I aim to "protect a weak person from being compelled by surrounding circumstances . . ." This strongly suggests that the legislators wanted to ensure protections from what contemporarily sounds like tying arrangements.).

107. See *Aluminum Co. of Am.*, 148 F.2d at 427 ("[m]any people believe that possession of unchallenged economic power deadens initiative, discourages thrift and depresses energy; that immunity from competition is a narcotic, and rivalry is a stimulant, to industrial progress; that the spur of constant stress is necessary to counteract an inevitable disposition to let well enough alone.").

108. See *United States v. E.C. Knight Co.*, 156 U.S. 1, 16 (1895). The Court upheld the constitutionality of the Sherman Act but affirmed the lower court's decision denying relief to the plaintiff.

109. See Daniel L. Rubinfeld, *Competition, Innovation, and Antitrust Enforcement in Dynamic Network Industries*, Address Before Software Publishers Association (Mar. 24, 1998), at 1998 WL 1769814 at *14.

C. *Network Effects*¹¹⁰ and *Barriers to Entry*¹¹¹

Under the concept of tying, illegal arrangements can occur when a company with market power also has a product with strong network effects.¹¹² Simply put, network effects are the benefit to the consumer arising from the widespread use of the same product.¹¹³ The high-technology network effects arise “because the increased . . . development will enhance the value of the particular [product] and therefore increase its demand.”¹¹⁴ To take advantage of this consequence, firms could create barriers to entry for producers and increase “switching costs” to consumers.¹¹⁵ Overall, network effects are value-producing benefits that

110. In *Microsoft*, the court dealt with this principle, to which it stated:

We decide this case against a backdrop of significant debate amongst academics and practitioners over the extent to which “old economy” § 2 monopolization doctrines should apply to firms competing in dynamic technological markets characterized by network effects. In markets characterized by network effects, one product or standard tends towards dominance, because “the utility that a user derives from consumption of the good increases with the number of other agents consuming the good.”

United States v. Microsoft Corp., 253 F.3d 34, 49 (D.C. Cir 2001) (quoting Michael L. Katz & Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 AM. ECON. REV. 424, 424 (1985)).

111. “[M]onopoly power may be inferred from a firm’s possession of a dominant share of a relevant market that is protected by entry barriers.” *Id.* at 51.

112. See, e.g., *id.* at 83-87.

113. See generally LEIBOWITZ & MARGOLIS, *supra* note 2. The entire book seems to involve the value added by the combined use of a product. The authors do recognize that the value may be greater with other products. This is done through discussions about, *inter alia*, VHS videotapes inferiority versus Beta format videotapes.

114. See Rubinfeld, *supra* note 109, at 1.

For example, there are several providers of Instant Messaging service, including Microsoft, AOL, and Yahoo!. *Ceteris paribus*, interconnecting these systems would almost surely raise the value of each system to its customers, and this strongly suggests that these messaging systems are in the same market. . . . [C]ustomers of wireless telephones benefit greatly from being able to send and receive calls to and from customers of traditional wireline telephones, suggesting strong network effects.

Gerald R. Faulhaber, *ACCESS ? ACCESS₁ + ACCESS₂*, 2002 L. REV. MICH. ST. U. DET. C.L. 677, 691 (2002).

On the other hand, in the Microsoft situation, there are few developers that would be able to exist if not for the fact that those developers align their products with Windows. To accomplish that, obviously, they would need to know the Windows programming. Consequently, Microsoft can control the developers because of the strong network effects in that market. See, e.g., Werden, *supra* note 39, at 101 (to “challenge an incumbent benefiting from significant indirect network effects, an entrant would have to enlist and coordinate complementer support, a process to which Microsoft applies the term ‘evangelization.’”).

115. Cf. Victoria E. Briant & Paul S. Smitberger, *Information Costs, Lifecycle Costs, Switching Costs, and Lock-In*, SF37 ALI-ABA.L.I.-A.B.A. 7 (2000)) (discussing the implications of network effects arising from market power on the competitive forces).

“Switching costs” are perhaps the single most important factor in determining whether a customer is “locked-in,” or may migrate to another computer system to avoid the increased cost.

could lead to an abuse of market power that may develop into a restriction on competition.¹¹⁶

Of the many interpretations, three views on barriers to entry cover the spectrum.¹¹⁷ The first view concerns "whether (long-run) price exceeds (long-run) average cost after entry has ceased."¹¹⁸ Adding to this definition is the second notion, recognizing that the firm is able to "set prices above marginal cost,"¹¹⁹ which appears more like a recognition that monopoly power exists.¹²⁰ Both of these definitions conceive of economies of scale as a barrier to entry.¹²¹ Finally, a more simple understanding is the third view that the only barriers to entry are those costs new entrants face but incumbents avoid.¹²² Common to all of these interpretations is the inquiry into differences between what insiders and outsiders face.¹²³ Regardless of the meaning, significant barriers to entry clearly provide fertile ground for the incumbent to control pricing (i.e., monopoly power).¹²⁴

Each interpretation rightly suggests that there are serious considerations for a prospective producer to contemplate before entering the market.¹²⁵ Some commentators suggest that a firm commencing product

There are substantial costs associated with migration. Although many companies discuss migration, as a percentage, relatively few have actually completed a migration to another platform.

For example, for minicomputers, migration costs can include, without limitation, the following categories: fees for consultants to determine the appropriate replacement for the existing computer system; costs for conversion of existing applications software or a new applications software package; training of personnel on the new hardware; and risks of loss of data in conversions from the old system to the new system.

Id. at 16. See also LEIBOWITZ & MARGOLIS, *supra* note 2, at 132-33.

116. Cf. *Microsoft Corp.*, 253 F.3d at 50; earlier cases do not discuss network effects but the arguments are nonetheless consistent with the understanding of network effects. See *Eastman Kodak Co.*, 504 U.S. at 462; *Jefferson Parrish*, 466 U.S. at 23; *E.C. Knight Co.*, 156 U.S. at 16.

117. See generally Harold Demsetz, *Barriers to Entry*, in A CENTURY OF THE SHERMAN ACT 155 (Jack C. High & Wayne E. Gable eds., 1992).

118. *Id.* at 156 (a simplification of Joe Bain's definition).

119. *Id.* (James Fergusson's understanding of barriers to entry).

120. See *supra* text accompanying note 23.

121. See Demsetz, *supra* note 117.

122. *Id.* (George Stigler's definition of barrier to entry).

123. *Id.* at 156-57.

124. See *supra* text accompanying note 23. In fact, the court in *Microsoft* reiterated the predominance of Windows market share:

Having thus properly defined the relevant market, the District Court found that Windows accounts for a greater than 95% share. The court also found that even if Mac OS were included, Microsoft's share would exceed 80% Microsoft challenges neither finding, nor does it argue that such a market share is not predominant (internal citations omitted)

Microsoft Corp., 253 F.3d at 54.

125. See Werden, *supra* note 39, at 90. The Werden article discusses three broad approaches to defining "barriers to entry." The Stigler definition considers those costs a new entrant must

development faces the characteristic of the high-technology industry: high cost to initiate production, and only then, low-variable costs to produce the product.¹²⁶ This implies that the high-technology market has within it an already existing barrier to entry.¹²⁷ As a result of this dynamic, and whether one defines such circumstances as a barrier to entry, when there are sufficient network effects the increased financial pressure on new entrants as well as the higher switching costs to consumers create an enormous advantage to the incumbent.¹²⁸

For example, consider again the case of the VHS videotape format. Putting aside the circumstances surrounding the demise of the Beta format, digital video media have tried to supplant the VHS video. Even before the advent of the digital video disc ("DVD"), there was the video disc. That format failed partly because the consumer would have to purchase new equipment (e.g., network effects and switching costs) to enjoy the pre-DVD video disc's benefits. Now, however, perhaps due to the increase in personal computers or other compact disc ("CD") formats (i.e., CD, CD-ROM, CD-R), DVDs seem destined to overtake VHS video in much the same way that the CD replaced vinyl records.¹²⁹

The phenomenon of network effects is particularly applicable to the high-technology industry.¹³⁰ One such application is the corresponding connection between the primary product and the complementary product, understood as "indirect network effects," which in some cases gives rise to a tying arrangement.¹³¹ Although not recognized by the courts,

incur, which the incumbent can avoid; whereas the Bain description includes "absolute cost advantages," "product differentiation," and "economies of scale." In conjunction with these theories, the traditional economic writing contemplates the sunk costs (investment irretrievable to the incumbent upon exit) as a way to identify barriers to entry.

126. See Pitofsky, *supra* note 14. To begin production, a firm must invest enough funds to develop the product. After the initial investment, the continued production is sustained with low variable costs.

Simply stated, the cost to create a computer application is high but the reproduction is relatively inexpensive per unit.

127. See *supra* text accompanying note 117. See also *Microsoft Corp.*, 253 F.3d at 82 ("Because a firm cannot possess monopoly power in a market unless that market is also protected by significant barriers to entry, . . . it follows that a firm cannot threaten to achieve monopoly power in a market unless that market is, or will be, similarly protected.")

128. See generally Thomas A. Piraino Jr., *An Antitrust Remedy or Monopoly Leveraging by Electronic Networks*, 93 Nw. U. L. Rev. 1, 15-18 (1998); see also Richard J. Gilbert, *Networks, Standards, and the Use of Market Dominance*, in *THE AMERICAN ANTITRUST REVOLUTION* 411 (John E. Kwoka, Jr. and Lawrence J. White eds., 1999).

Switching costs are not only money, but also the perceived loss of benefits a consumer will realize if they were to change to a different product because of the decreased network.

129. Video Disc was an awkward format because of its size, yet it seemed to be approximately the same size and appearance as vinyl records.

130. Pitofsky, *supra* note 14.

131. "[T]he § 1 tying claim, plaintiffs will be precluded from arguing any theory of harm that depends on a precise definition of browsers or barriers to entry (for example, network effects from

indirect network effects

arise not directly from increases in the size of the network, but from the effect a larger network has on the production of complements. Increased sales of compact disc players stimulated the production of compact discs, which further increased demand for compact disc players. Economists have cited indirect network effects as a major factor in Microsoft's displacement of what had been the leading PC operating system.¹³²

The proponents of permitting such anticompetitive activity often frame the problem as beneficial to both consumers and producers. Standardization, the compatibility of products for the benefit of network effects, naturally selecting¹³³ the best technology, provides proponents of different antitrust standards with a justification for permitting anticompetitive behavior.¹³⁴

In many cases, these complementary products or services are necessarily produced by the primary product producer to facilitate the smooth interactions between the primary and secondary products and services.¹³⁵ Predictably, one conclusion is that the consumer's benefits

Internet protocols and extensions embedded in a browser) other than what may be implicit in Microsoft's tying arrangement." *Microsoft Corp.*, 253 F.3d at 95. The incorporation of tying also concerns the barriers to entry. *See id.* Furthermore, "to the extent that certain aspects of tying injury may depend on a careful definition of the tied good market and a showing of barriers to entry other than the tying arrangement itself, plaintiffs would have to establish these points." *Id.*; accord Werden, *supra* note 39, at 90. In discussing indirect network effects, the author described what actually appears to be a tying analysis.

132. Werden, *supra* note 39, at 90.

Fax machines are a market exhibiting direct network effects but not declining average costs. A fax machine is more valuable to me as I can exchange faxes with more people, but the supply function has never been considered a natural monopoly. Similarly, VCRs are a market exhibiting indirect network effects—the value of a machine depends in large part on the variety of prerecorded movies in a compatible format. But VCRs are also not natural monopoly goods.

James B. Speta, *Tying, Essential Facilities, and Network Externalities: A Comment on Piraino*, 93 NW. U. L. REV. 1277, 1279 n.11 (1999).

The utility of a particular make of car is enhanced by the number of people who own that make of car because that will sustain a larger service network, making it more likely that each owner will be able quickly and easily to obtain service as needed. It is the inability to maintain an adequate dealer and service network that has led some successful European automakers, such as Peugeot, to cease selling cars in the United States.

William J. Kolasky, *Network Effects: a Contrarian View*, 7 GEO. MASON L. REV. 577, 585-86 (1999).

133. *But see generally* LEIBOWITZ & MARGOLIS, *supra* note 2. The market problem of selecting VHS tapes over the superior Beta format and QWERTY-style keyboard over the superior DVORAK keyboard illustrates how the market manipulations create the selection of an inferior product.

134. James J. Anton & Dennis A. Yao, *Standard-Setting Consortia, Antitrust, and High-Technology Industries*, 64 ANTITRUST L.J. at 259 (1995).

135. *See* Piraino, *supra* note 128, at 15.

gained outweigh the market's loss of competition.¹³⁶ However, this leaves the long-term effect on innovation, borne from competition, a heavily debated topic.¹³⁷

On the other hand, it is widely believed that high-technology markets are easy to enter because innovative developments are quick to occur.¹³⁸ Under this view, the speed of innovation creates a monopoly that is not sustainable.¹³⁹ One assumption is that superior products will quickly develop and the inventors will market the innovations before competitors imitate the product. Innovation, thereby, creates successive product improvements that replace obsolescence, thus forming a "serial monopoly" for each subsequent producer.¹⁴⁰

Some authorities suggest that because of the speed of innovation, there is no need for antitrust laws; the important returns to entrepreneurs for innovation have a short duration, which gives rise to the concept of serial monopoly.¹⁴¹ Companies are able to secure additional profit protection for innovation through the use of the statutory monopoly power of patents and copyright laws.¹⁴² Alternatively, the length of protection for innovation through copyright and patent seems longer (lately, indefinite since Congress easily extends the limitation period, suggesting that there might be less concern over monopoly)¹⁴³ than the time a firm controls a market under the serial monopoly theory. Therefore, antitrust laws should apply to those firms with market power that persist after the

136. Pitofsky, *supra* note 14, at 2.

137. *Aluminum Co. of Am.*, 148 F.2d at 423-24; *see also* Pitofsky, *supra* note 14, at 2. The competitive nature of the market that gave rise to the technology at issue and built the monopoly could reasonably chill future innovation.

138. Pitofsky, *supra* note 14, at 3. *See also* David A. Balto & James F. Mongoven, *Antitrust Remedies in High Technology Industries*, 708 PLI/Pat 113, 115 (2002); Charles E. Biggio, *Handling Mergers & Acquisitions in a High-Tech and Emerging Growth Environment-Antitrust and Your Deal*, 985 PLI/Corp 599, 603 (1997); Matthew Fagin, Frank Pasquale & Kim Weatherall, *Beyond Napster: Using Antitrust Law to Advance and Enhance Online Music Distribution*, 8 B.U. J. Sci. & Tech. L. 451, 534-35 (2002); John H. Barton, *Antitrust Treatment of Oligopolies with Mutually Blocking Patent Portfolios* 69 ANTITRUST L.J. 851, 865 (2002); Carol B. Swanson, *Antitrust Excitement in the New Millennium: Microsoft, Mergers, And More*, 54 OKLA. L. REV. 285, 305 (2001); Robert Pitofsky, *Challenges of the New Economy: Issues at the Intersection of Antitrust and Intellectual Property*, 68 ANTITRUST L.J. 913, 916 (2001); *but see* Thomas A. Piraino, Jr., *Proposed Antitrust Approach to High Technology Competition*, 44 WM. & MARY L. REV. 65, 76-77 (2002) ("In mature high technology markets, however, antitrust enforcers should be more willing to intervene to prevent dominant firms from using their market power to raise already substantial entry barriers.").

139. Pitofsky, *supra* note 14, at 3.

140. *See* LEIBOWITZ & MARGOLIS, *supra* note 2, at 136-37.

141. *Cf.* Pitofsky, *supra* note 14, at 3.

142. *Id.*

143. This analysis is beyond the scope of this Comment and, therefore, not fully addressed here.

legal protections normally would run out.¹⁴⁴

The result of network effects and barriers to entry is that incumbent companies are able to take advantage of higher switching costs. Yet, as discussed earlier with the previous antitrust analyses, there seems to be a dilution of the network effects and barriers analyses. On that point, the dilution occurs because of the increased attention to efficiency gains and decreased attention to loss of innovation arising from anticompetitive activity that may, over the long run, return efficiency losses. If so, there is some acceptance of the anticompetitive activity. That acceptance possibly relies on the distinction between those "activities [that are] socially desirable and [those] which are not."¹⁴⁵

D. Monopoly and Predation:

Predation analysis, if for no other reason than the connotations associated with predation, should be clear of any balancing between what are arguably societal benefits and anticompetitive losses. The primary question for determining predation in pricing is whether a company is selling its product below either marginal cost or average variable cost.¹⁴⁶ Notably, this rule as usually employed is hard to apply to intellectual property markets, like software, because the reproduction costs are *de minimus*.¹⁴⁷

However, predation may still exist because "[p]redatory pricing is

144. *But cf. id.* See also LEIBOWITZ & MARGOLIS, *supra* note 2, at 10-11, 16, 136-37, 202, 267. For example, "[s]tandard setting, often under the auspices of a trade association, can facilitate innovation." Janice M. Mueller, Symposium, *Patent Misuse Through the Capture of Industry Standards*, 17 BERKELEY TECH. L.J. 623, 630 (2002). Furthermore,

the New Economy that distinguish it from traditional markets and place new demands on antitrust enforcement. First, because the initial costs of research and development of a product are particularly high and the variable costs relatively low, providing incentives to innovate, such as the limited monopoly right of a patent, is especially important. On the other hand, the importance of innovation necessitates preserving competition at the research and development stage. Finally, the dynamic nature of high technology, as contrasted with other industries, makes it more difficult for any one firm to dominate a particular market share. The unpredictability of how these and other factors drive the New Economy places new demands on antitrust enforcement officials. Consequently, antitrust enforcement must take special care to ensure that the right balance of competition and protection of innovation is maintained.

Lara J. Glasgow & Alicia N. Vaz, Symposium, *Foreword: Beyond Microsoft: Antitrust, Technology, and Intellectual Property*, 16 BERKELEY TECH. L.J. 525, 527 (2001).

145. See Demsetz, *supra* note 117, at 168.

146. The two-part test is whether the price is less than the cost of the good and the likelihood that the company selling below cost is able to recuperate the losses over the long run. See generally *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993). See generally HOVENKAMP, *supra* note 45, at 173-75. The initial inquiry depends upon marginal cost but because of measuring difficulty, average variable cost is a frequently used surrogate.

147. Once a program is created, there is very little cost involved with mass-producing

not the only possible predatory strategy that a firm may use in trying to eliminate current competition or deter future competition.”¹⁴⁸ A suggested alternative is to determine whether the firm is maximizing profits in light of the competitors’ continued existence in the market.¹⁴⁹ For instance, a firm that is continually creating products or services without regard to efficiency may be acting predaciously. One such example is when an organization acquires a company that is developing a competitive product, to prevent competition with the acquiring company’s existing product because that competitive product might interfere with established network effects.

Critics suggest that such a test would fail to consider the social welfare gains derived from the tie-in, network, or complementary products.¹⁵⁰ Hypothetically, it is possible that such a test for predatory practices would decrease innovation or efficiency by precluding the creation of marketable products or services. Moreover, that test’s implication is that there would be no incentive to gain economies of scale if the quest could lead to an antitrust violation. Yet, as seen in *Jefferson Parish*, when social loss is not part of the calculus for tying arrangements, it would seem likely that predation analysis similarly would not account for social loss stemming from stunted innovation.¹⁵¹ Perhaps both concepts are too speculative and, therefore, do not belong in the calculus.¹⁵²

Generally, the courts recognize that the government should not defeat a company that competes and wins, provided the achievement does not occur during an attempt to monopolize.¹⁵³ The distinction between aggressive competitiveness and attempting to monopolize is at least as difficult as the previous analyses. Yet, that distinction may implicate long-term inefficiencies that may surface when government intervention hinders a firm’s innovation in the quest to control through exclusionary or predatory behavior.¹⁵⁴ Accordingly, exclusionary or predatory behavior, as used herein, means “the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic

duplicates. In fact, some software, if not all, is available on the Internet. Thus, reproduction costs are negligible.

148. See Rubinfeld, *supra* note 109, at 5.

149. Cf. Joseph Gregory Sidak, *Debunking Predatory Innovation*, 83 COLUM. L. REV. 1121, 1124 (1983). The Ordover and Willig analysis seeks to determine if the firm has sacrificed profits by looking at the post innovation pricing and the research and development investment decision.

150. *Id.* at 1126.

151. *But cf.* LEIBOWITZ & MARGOLIS, *supra* note 2.

152. See HOVENKAMP, *supra* note 45.

153. *Spectrum Sports, Inc. v. McQuinlan*, 506 U.S. 447, 809-91 (1993). See also Piriano, *supra* note 128, at 22 (quoting *Aluminum Co. of Am.*, 148 F.2d 416).

154. See Rubinfeld, *supra* note 109, at 8.

accident.”¹⁵⁵

Inasmuch as the court uses various terms to describe disfavored behavior, and each one has distinct elements bound up in its interpretation, for the purposes of this Comment “anticompetitive,” “exclusionary,” and “predatory”¹⁵⁶ are used only to indicate the specific disfavored conduct of a company.¹⁵⁷ Only those organizations that act poorly in the context of competition should be subject to prosecution. Inadvertent aggregation of market power, without more, should consequently come under the civil enforcement realm rather than governmental prosecution. Therefore, regardless of the term used, intent (important for this distinction) exists when monopolizing, because in order to monopolize, the firm must be cognizant of its actions.¹⁵⁸ Understanding these terms leads to the simple test for determining whether there exists a violation of section 2 of the Sherman Act: “(1) the defendant engaged in predatory or exclusionary conduct, (2) the defendant had a specific intent to monopolize, and (3) there was a dangerous probability that the defendant would successfully attain monopoly power.”¹⁵⁹

To apply the third prong of the test, there must be an inquiry into market power, which is a fact question dependent on “proximity and degree.”¹⁶⁰ Consider, after all, that accompanying the monopoly test is the view that excluding competitors on “some other basis than efficiency” is a predatory practice.¹⁶¹ This view is important to the antitrust analysis of the high-tech market because the “carve-out” for efficiency seems to provide an excuse for predatory practices. For instance, there is likely a valid efficiency justification for the practices of monopolistic companies, as seen in Microsoft’s argument (i.e. “pro-competitive justification”).¹⁶² While some may argue that consumer benefit is the overarching principle behind the antitrust doctrine, it is not the short-term benefits that are at stake, but rather the long-term losses unknowable at the time of the wrongful conduct.

Consequently, predatory or exclusionary behavior is understood

155. *U.S. v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966). See also *Microsoft Corp.*, 253 F.3d at 58 (“We shall see that this . . . ingredient presents no major problem here, as what was done in building the empire was done plainly and explicitly for a single purpose [- monopolization].”).

156. See, e.g., *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 602 (1985).

157. The independent meaning attached to these terms and the associated analysis is beyond the scope of this Comment. The only use of these concepts intended is to point out the types of behavior that give rise to the negative effects in high tech markets.

158. *Aspen Skiing*, 472 U.S. at 603.

159. *Taylor Publishing Co. v. Jostens, Inc.*, 216 F.3d 465, 474 (5th Cir. 2000).

160. *Microsoft Corp.*, 253 F.3d at 80 (quoting *United States v. Am. Airlines, Inc.*, 743 F.2d 1114, 1118 (5th Cir. 1984) (quoting *Swift & Co. v. United States*, 196 U.S. 375, 402 (1905))).

161. *Aspen Skiing*, 472 U.S. at 605.

162. *Microsoft Corp.*, 253 F.3d at 59.

most broadly as diminishing the “opportunity [for] rivals” and narrowly defined as either “not further[ing] competition on the merits or do[ing] so in an unnecessarily restrictive way.”¹⁶³ In any case, the judicial analysis includes the balancing of efficiency against anticompetitive behavior, which weakens the likelihood of finding predation. A problem arises, however, because this represents a departure from what seems to be the Sherman Act’s intent.

As such, it seems that interpreting predation via efficiency is counterintuitive because efficiency is an economic benefit that has a return to society, and theoretically, the consumer benefits from all efficiency gains. This reasoning defeats the anticompetitive side of the equation, as the high-tech company can usually show that the net efficiency benefits to both the company and the market outweigh the net harm to consumers. Therein lies the paradox: agreeing with high-tech companies regarding the benefits to the market and consumer means that predatory behavior also benefits the public. Yet, there is a significant long-term effect on the market despite the fact that the net harm is insufficient under current judicial inquiry. *All thieves would argue that they have Robin Hood qualities.*

E. *Finding and Hitting a Moving Target:*

The speed of change within the high-tech market, in conjunction with the fact-finding in the adversarial process, makes prosecuting antitrust cases arduous and lengthy.¹⁶⁴ The most well known example of this is

the debacle when the U.S. Government brought a monopolization case against IBM, representing at the time the cutting edge of high-tech innovation. . . . After seven years of discovery and six years of trial, including a trial presentation that covered 104,000 pages of transcript, the Government in 1982 dismissed the case — almost certainly correctly — on grounds, among others, that by that time IBM was no longer a monopolist.¹⁶⁵

Most of the antitrust cases involving high-technology require complicated analysis,¹⁶⁶ as well as interpretation of intricate, highly technical information about the products and harm to competition¹⁶⁷ — all of which adds to the time needed to prosecute Sherman Act violators.

Consider the argument that antitrust law is irrelevant to the high-

163. *Aspen Skiing*, 472 U.S. at 605.

164. See Pitofsky, *supra* note 14, at 11.

165. *Id.* at 10.

166. See Part II, *supra*.

167. See Pitofsky, *supra* note 14, at 11.

tech markets.¹⁶⁸ Indeed, the speed of changes in technology tends to diminish the deterrent effect of prosecuting antitrust violators because the monopolist is gone before the completion of the case.¹⁶⁹ On the other hand, if that is true, then another paradox arises: What is the reason for Microsoft's continued dominance given the speed of change in the industry? Under such a theory, Microsoft should not be able to muster such power because its monopolistic power derives from technology that quickly becomes obsolete.

This constantly changing and complicated web of technology and science results in disadvantages for the legal system.¹⁷⁰ As a result of this dynamic, it is imperative that all interested parties keep abreast of technology within the market and anticipate advances, as well as keep up with the firm's innovation.¹⁷¹ That is not to say that each of these parties must continually monitor high-tech companies. Rather, as is perhaps the case with all specialties, those who are continually involved should maintain that expertise. Nonetheless, with continued exposure, lawyers and judges will be able to operate within this complicated industry.¹⁷² The widely accepted notion that the monopoly will self-disintegrate, notwithstanding the slowness of the judiciary, again seems less convincing in light of Microsoft's longevity.¹⁷³

What is certain to this author is that prosecuting high-tech companies under the Sherman Act is proper. While the entire process may be slow, not properly enforcing the Sherman Act is an alternative that allows anticompetitive acts to go unchecked. Seemingly more valuable is a legitimate authority to ensure the protection of competition. *Upon return of the king, Robin Hood fell silent.*

F. *Why the Sherman Act?*

Despite all of the inadequacies of the legal system, the Sherman Act is precisely the right tool in place to deal with restraint of trade in the high-tech arena.¹⁷⁴ The original statute has undergone substantial

168. See generally LEIBOWITZ & MARGOLIS, *supra* note 2.

169. *Id.*

170. See generally *Microsoft Corp.*, 253 F.3d 34 (the discussion in the opinion describes the situation in what appears to be another language but is actually a series of acronyms); see also Appellant's Brief at 18-32. Microsoft used all of these pages to describe, in a glossary, the terms it was going to use, indicating the complexity of the market. See Pitofsky, *supra* note 14, at 11.

171. See Rubinfeld, *supra* note 109, at 9.

172. Pitofsky, *supra* note 14, at 11.

173. In light of all of the arguments against Microsoft being able to sustain market power and defeat competition, the firm does exactly that.

174. See Rubinfeld, *supra* note 109, at 1. Many of the other authorities, some of which this Comment cites, suggest that there is no place for antitrust regulation within the high technology market.

interpretive change over the years, resulting in balancing tests between the benefits of anticompetitive behavior and the losses associated with restraint of trade. Therefore, high-tech antitrust regulation may be diluted (or continue to be diluted, depending on your point of view) because the current interpretive trend seemingly seeks to shelter anticompetitive companies based on what could be defined as delivery of societal or public benefits.

Instead, there should be some discretion. For instance, either the courts or the government (or both) could perform an analysis of the societal gain resulting from the alleged monopolist's overall activity before prosecuting the company. This raises the question of how to discriminate between antitrust violations that ought to be prosecuted, while simultaneously avoiding the introduction of negative bias. In other words, how does the public separate the do-gooders and the thieves?

III. DISCRETIONARY PROSECUTION: FOR REAL

At the inception of the Sherman Act, the Republican administration refrained from prosecuting the trusts,¹⁷⁵ possibly because the potential defendants contributed substantially to the presidential campaign.¹⁷⁶ In light of the statute's slow initiation, one reason could be that trusts might not be able to contribute to the political party without the benefit of extraordinary profits.¹⁷⁷ Enforcing the new law would take away the "monopoly profits" trusts had at their disposal, thus leaving little for contributions.¹⁷⁸ From its enactment through today, the Sherman Act's application continually depended on either the governmental prosecution or an individual's claim initiated by a civil suit.¹⁷⁹ If one focused only on the government's discretionary prosecution, it is clear that discretion (in principle) is not a new concept.¹⁸⁰

Even if the government does not prosecute an antitrust case, busi-

175. A trust, as used here, is a combination of large companies within an industry that agree to conduct various anticompetitive activities.

176. Section 256, Act of Feb. 28, 1925, ch. 368, title III, § 301, 43 Stat. 1070, provided for citation of the act as the "Federal Corrupt Practices Act."

Currently, the Coercion of Political Activity statute provides a similar restriction to those enacted in 1925. 18 U.S.C. § 610 (2000).

See also *Why Not Begin in Ohio*, N.Y. TIMES, July 28, 1891 at 4.

177. Steven C. Salop & R. Craig Romaine, *Preserving Monopoly: Economic Analysis, Legal Standards, and Microsoft*, 7 GEO. MASON L. REV. 617, 628 (1999).

178. See *Why Not Begin in Ohio*, *supra* note 176. Notably, this is true of any business regulation.

179. 15 U.S.C. § 2 (2001).

180. Consider the different levels of prosecution over the years. See WILLIAM F. SHURGART II, ANTITRUST POLICY AND INTEREST-GROUP POLITICS 83-92, 130-32 (William F. Shurgart II ed., 1990).

For example, one only has to look to the debates between the "antitrusters" and the

nesses are not without a tool to fight companies with pervasive market power; there remains the civil cause of action for those firms that find themselves falling victim to anticompetitive assaults. Additionally, as mentioned earlier, the Sherman Act's emphasis is to protect competition, not competitors. Importantly, however, the civil litigant will face the same standards used in the federal criminal prosecution of alleged monopolists.

In light of the statutory remedy available to businesses, a continued disintegration of the antitrust laws and standards will create insurmountable hurdles for companies to protect markets victimized by monopolists that create enough benefits to avoid liability. One of the most critical depletions of the antitrust regulations is the judicial attempt to account

"economic planners" from the Great Depression era to see some of the same type of arguments that exist today and, for that matter, within this Comment:

The Great Depression, however, with its mass unemployment and declining incomes, brought a new and acute awareness of the monopoly problem, a new consciousness of the gap between ideal and reality. Along with the concern over centralization, injustice, and loss of individual freedom, came a new concern, a growing belief that the misuse of business power was responsible for the economic breakdown and the persistence of depression conditions. Reorganization and reform of the business system, so many Americans felt, had now become an imperative necessity; as one might expect, the approaches to the problem tended to follow the patterns established earlier. Once again, opinion divided along lines that were roughly similar to those which had divided the New Freedom, the New Nationalism, and the "new competition."

Like the advocates of the New Freedom, for example, the antitrusters or neo-Brandeisians favored a policy of decentralizing the business structure and enforcing competitive behavior. They did so both with the idea of implementing democratic and individualistic ideals and with a growing conviction that enforced competition was the best way to achieve sustained prosperity. The depression, as they saw it, was a product of monopolistic rigidities. The businessmen, because of their market power, had been able to maintain prices even though their costs of production were falling. This had resulted in excessive profits, oversavings, and a failure of consumer purchasing power. And the only real solution, they felt, if such crises were to be averted in the future, was a program that would restore flexible prices and allow competitive forces to keep the economy in balance. They believed, moreover, that these goals were attainable. They could be attained by rigorous antitrust prosecution, by limits on size, by a tax on bigness, by controls over business financing and competitive practices, and by other measures that would encourage more reliance on free markets.

The economic planners, on the other hand, like the New Nationalists of an earlier period, felt that antitrust action was a hopeless anachronism. In a modern economy, they maintained, concentrations of economic power were inevitable. They were necessary for efficient mass production, technical progress, and reasonable security; and while the abuse of this power was largely responsible for the depression, the idea that it could be dispersed was both impractical and dangerous. The only real answer lay in systematic organization and planning, in conscious and rational administrative control of economic processes so as to restore economic balance and prevent future breakdowns.

See HAWLEY, *supra* note 37, at 12-13.

for the entire economics—the social gain and benefit interwoven and balanced with the anticompetitive activities. That is not to say the inquiry includes such things as safety and welfare, as those terms loosely apply to societal benefits. Rather, what is meant here is simply societal gains arising from the market.

It seems that there is a better way to keep the Sherman Act consistent with its original intent by using the balancing contortions of the courts, applied in a slightly different way: Use the government's discretion before prosecuting to weed out the antitrust violators that create benefits for society. Instead, the discretion calculus would take into account creation of societal benefit substantial enough to outweigh the cost of the anticompetitive behavior when deciding whether to prosecute a firm. Conceivably, such companies would survive an antitrust action anyway; therefore, it would be more efficient to avoid prosecuting those firms in the first place. This benefit, however, should not be as narrow as what is currently used by the courts. Alternatively, the government could inquire whether the monopolistic company invests its monopoly profits in philanthropic¹⁸¹ activity sufficiently enough to create public benefit.

181. Philanthropic activity could be any private use of funds directed toward the public without regard for the business dealings normally encountered in everyday operations. The donation need not be for the benefit of the entire public, but instead could improve some sub-group of society. An example of this type of dynamic is the contribution of computers by a software manufacturer to impoverished public schools. Compare this type of contribution with the donation of computers to a company that uses the software of the donor.

Contrast this dichotomy with the donation of the manufacturer's software, which would not redistribute very much of the extreme profits realized by a company with dominant market power. This type of grant seems to fit in the gray area between public benefit and private benefit because the donor may reap a greater benefit through the network effects and potential path dependence created in the donees.

There is a general definition of path dependence that seems to encompass many disciplines but consider this notion that specifically contemplates new high technology companies:

- **Origins Matter** — Just as some developmental psychologists profess that "biology is destiny," notions of organizational inertia and imprinting imply that a company's early organization-building activities might preordain its destiny.
- **Change is Disruptive** — In their best-selling *Built to Last*, James Collins and Jerry Porras argue that companies that have prospered over the long haul have adhered to enduring values, which have served as guideposts for strategy and operations over time. Of course, adherence to enduring values can also impede a company's ability to respond effectively to dramatic environmental changes. However, the evolutionary perspective on organizations suggests that the potential benefits of altering a company's deeply held values and longstanding practices have to be traded off against the significant risks that such changes often entail, in terms of undermining internal routines and external relations that help make life predictable and controllable.

James N. Baron & Michael T. Hannan, *Organizational Blueprints for Success in High-Tech Start-Ups: Lessons from the Stanford Project on Emerging Companies*, CAL. MGMT. REV. Spring 2002 at 8, 18-19. See also LEIBOWITZ & MARGOLIS, *supra* note 2, at 51.

While this unusual approach to prosecutorial decisionmaking sounds extremely out of sorts when compared to the mainstream thought on antitrust, consider the fact that many activities presently aiding the public receive preferential treatment under the law. Also, there are many companies indulging in this philanthropic activity. For example, "IBM has committed a total of \$70 million to its Reinventing Education program, which now reaches 65,000 teachers and 6 million students."¹⁸² In fact, such a charitable endeavor brings with it a competitive advantage in and of itself.¹⁸³

The idea is not new. There are exemptions from competitive regulations where the organization provides some return to the community. For instance, purchases by a company may be exempt from antitrust "proscriptions" so long as they comply with the strict interpretation of the standards applied to the exemption.¹⁸⁴ In fact, the Court acknowledged that the creation of the exemption was "concerned with the suspicion [the regulation] . . . actually might operate to outlaw price favors that sellers would wish to grant to eleemosynary institutions."¹⁸⁵ *Here comes Robin Hood; perhaps the best way to account for the good intentions of the thief is by determining his selflessness.*

182. Michael E. Porter & Mark R. Kramer, *The Competitive Advantage of Corporate Philanthropy*, HARV. BUS. J., Dec. 2002 at 5, 14.

183. For a complete discussion on the competitiveness of philanthropy, *see generally, id.* For example, the strategy is easily discerned by common business analysis:

When corporations support the right causes in the right ways — when they get the where and the how right — they set in motion a virtuous cycle. By focusing on the contextual conditions most important to their industries and strategies, companies ensure that their corporate capabilities will be particularly well suited to helping grantees create greater value.

Id. at 14.

184. *Abbott Labs. v. Portland Retail Druggists Ass'n, Inc.*, 425 U.S. 1 (1976) (holding that the Nonprofit Institutions Act exemption for purchases of supplies by a nonprofit hospital for its "own use" does not exempt all of such a hospital's drug purchases from the Robinson-Patman Act but only those supplies that reasonably may be regarded as used by the hospital in the sense that such use is part of and promotes the hospital's intended institutional operation in the care of its patients). The Robinson-Patman Price Discrimination Act is an antitrust statute; however, it does not deal with the same type of conduct as the Sherman Act. *See* 15 U.S.C. § 13(c). Nonetheless, this is one example where the benefit associated with anticompetitive conduct becomes condoned because of the broad benefit to the public such conduct creates. In a further refinement of the antitrust exemption, the court stated that it would not extend the exemption to those who then proceeded to sell the product in competitive markets. *Jefferson County Pharmaceutical Ass'n, Inc. v. Abbott Labs.*, 460 U.S. 150 (1983) (holding that state and local government hospitals could not resell, in competitive markets, pharmaceutical products bought under the antitrust exempted price discount).

185. *Abbott Labs.*, 425 U.S. at 1313. "Eleemosynary" means, "pertaining to alms or almsgiving; charitable. . . . It derives from medieval Latin *eleemosynarius*, 'compassion, mercy. . . .' World Wide Words at <http://www.quinion.com/words/weirdwords/ww-ele1.htm> (last modified Feb. 22, 1999).

A. *Public Versus Private Benefit:*

For this new (or not so new) analysis to work, the government or the courts must first determine if a public benefit exists. For this purpose, the tax code provides a particularly appropriate analogy. For instance, the provision dealing with exempt organizations¹⁸⁶ involves an inquiry into the philanthropic activity of an organization to determine whether there is any tax liability. Moreover, the inquiry analyzes charitable activity that furthers a “religious, charitable, scientific, testing for public safety, literary, or educational purposes, or for the prevention of the cruelty to children or animals.”¹⁸⁷ Further expanding the type of activities sheltered from taxation are

[c]ivic leagues or organizations not organized for profit but organized exclusively for the promotion of social welfare, or local associations of employees, the membership of which is limited to the employees of a designated person or persons in a particular municipality, and the net earnings of such entity are dedicated exclusively to charitable, educational, or recreational purposes.¹⁸⁸

As interpreted in the federal tax regulations, guidelines are available to determine the purpose of activities within an organization. The interesting irony in this analogy, however, arises when the government determines tax exemption; the government must avoid the trap of looking for private benefit as a way to defeat the exemption (i.e., although there is a private benefit, the fact that there is a predominant public benefit is sufficient to maintain exempt status).¹⁸⁹ Conversely, for this analysis to work, the standard must measure private benefits balanced against the public benefit. Inasmuch as exempt status is a measurement to construe public benefit or, arguably, societal gain, the additional private benefits available to the company should not create another advantage that could defeat competition.¹⁹⁰ For this analysis to have any

186. 26 U.S.C. § 501(c) (2001); 26 C.F.R. § 1.501(c)(3) (2002); Treas. Reg. § 1.501(c)(3) (2002).

187. 26 U.S.C. § 501(c)(3) (2001); 26 C.F.R. § 1.501(c)(3) (2002); Treas. Reg. § 1.501(c)(3) (2002). These categories are used to define the types of objectives that will provide organizations with tax exemption.

188. 26 U.S.C. § 501(c)(4) (2001).

189. STAFF OF THE JOINT COMM. ON TAXATION, 106TH CONG., STUDY OF THE OVERALL STATE OF THE FEDERAL TAX SYSTEM AND RECOMMENDATIONS FOR SIMPLIFICATION, PURSUANT TO SECTION 8022(3)(B) OF THE INTERNAL REVENUE CODE OF 1986, VOLUME III: ACADEMIC PAPERS SUBMITTED TO THE JOINT COMMITTEE ON TAXATION 144 (Comm. Print 2001). (Frances R. Hill, Private Benefit, Public Benefit and Exemption, Prepared for the Joint Committee on Taxation Simplification Study). See also FRANCES R. HILL & DOUGLAS M. MANCINO, TAXATION OF EXEMPT ORGANIZATIONS (2002).

190. See generally Porter & Kramer, *supra* note 182.

meaning at all, private benefits need to be distinguished from public benefit.

There are two perspectives in viewing the distinction between public and private: from the giver and from the receiver. Both perspectives are important to gain an understanding of the difference.¹⁹¹ Both intended and unintended beneficiaries exist, depending on the type of exempt activity; this parallels the free-rider¹⁹² issue in economics.¹⁹³ From this perspective, the public benefit arises regardless of "whether preventing cruelty to animals or presenting opera or fostering interest in stamps or any of the other hundreds, if not thousands, of interests"¹⁹⁴

Next, perhaps adding more difficulty for antitrust discretionary prosecution, an analysis of the activities from the perspective of the company with market power should follow. The same activity may easily create private interest when directed at one group and establish a valid public benefit if aimed at a different group.¹⁹⁵ Consider the contrast between a gift of football tickets to prospective clients versus the same gift to economically challenged children — the former demonstrates private benefit and the latter illustrates public benefit.¹⁹⁶ As with most of the previous models, however, this too is simplified because the standard does not account for the many permutations of activity mixed with both public and private benefits.

One such complication occurs when the public/private benefit category is mixed; in fact, this is when antitrust violations invite this analysis. When the value of the private benefit portion of the activity becomes substantial, it seems to diminish the value of the public benefit.¹⁹⁷ As a clarifying example, the existence of just one private benefit activity, if it is significant, "destroy[s] the exemption regardless of the

191. *Id.*

192. *See generally* Polk Bros., Inc. v. Forest City Enterprises, Inc., 776 F.2d 185 (7th Cir. 1985). The free-rider concept refers to using the positive benefits arising from an activity although it was not intended for the one receiving the benefit. In antitrust litigation, a party uses the free rider doctrine as a defense to the prosecution.

Arguably, the suggested analysis does not pose a free rider problem because the inquiry is more individualized, as it relates only to the alleged monopolist. If, on the other hand, there were benefits transferred to non-contributors, that would necessitate a greater isolation in the inquiry.

193. STAFF OF THE JOINT COMM. ON TAXATION, *supra* note 189, at 143.

194. *Id.*

195. *See generally id.*

196. *Id.* at 144, n.5.

197. *Cf.* World Family Corp. v. Comm'r of Internal Revenue, 81 T.C. 958, 966 (1983) (holding that when there is an otherwise charitable organization, an insubstantial private benefit endeavor does not defeat the exempt status). It is important to note that the court stated that if the private benefit activity were substantial there would be no grounds to maintain the exemption.

number or importance [of public benefits gained.]”¹⁹⁸ Generally, a private benefit is likely associated with the philanthropic activity that generates a public benefit. However, the private benefit might be incidental.¹⁹⁹

With the definitions of public-versus-private benefit set forth, the notion of what “substantial” means requires further clarification. Considerably critical to this analogy, the standard for when a benefit is “substantial” versus “incidental” is best articulated by the following: “[a] benefit will be incidental in the quantitative sense if it is insubstantial when compared with the public benefit provided by the organization. The quantitative standard is thus not a bright line percentage test but instead a facts and circumstances test balancing public and private benefits.”²⁰⁰

The difficulty exists when a public benefit includes an expressly private benefit that will generate profit for the subject organization.²⁰¹ In light of this conflict, the fact that a substantial portion of the performance becomes a private benefit is only important if the exempt activity confers private benefits to the subject company.²⁰² Accordingly, a private benefit to the organization that specifically occurs through an activity for a public purpose defeats its public benefit exemption status.²⁰³

The tax regulations seem to contain a framework that lends itself to a better determination of the socially beneficial activities than the arguably *ad hoc* inquiry used in today’s antitrust analysis. Whether the government or the courts conduct this inquiry is not critical to this Comment because both branches currently conduct the analysis for exempt status. Either the Internal Revenue Service (“IRS”) in the first instance, or the tax court reviewing the IRS’s determination, are usually able to determine whether an organization is exempt.²⁰⁴ Along the same lines, the public benefit of the company with market power measured against its corresponding private purpose does not belong in the antitrust analysis.

198. *Better Bus. Bureau of Wash., D.C., Inc., v. United States*, 326 U.S. 279, 283 (1945).

199. *See* STAFF OF THE JOINT COMM., *supra* note 189, at 152. (citing Gen. Couns. Mem. 37789 (Dec. 18, 1978)).

200. *Id.* (citing Gen. Couns. Mem. 37789 (Dec. 18, 1978); Gen. Couns. Mem. 35701 (Mar. 4, 1974); Gen. Couns. Mem. 39862 (Nov. 22, 1991)).

201. *Cf. United Cancer Council, Inc. v. Comm’r of Internal Revenue*, 165 F.3d 1173, 1174 (7th Cir. 1999).

202. *See generally id.*

203. *Cf. Gen. Couns. Mem. 36157* (Feb. 10, 1975). (“[A]lthough the organization is primarily engaged in promoting the general welfare of the community, it is not organized and operated exclusively for charitable purposes. The organization is not, therefore, exempt under Code § 501(c)(3).”). The community organization, in doing its work, created a private benefit for its members. It is unclear where the balance is drawn between the incidental nature and substantiality of the private benefit versus the public purpose and its benefit.

204. This process could track the exempt organization process of the Tax Court.

Instead, the Federal Trade Commission ("FTC") can use the tools presently used by the IRS. After using this analysis, the FTC would know which suspect firms to prosecute.²⁰⁵

Consider the case where a company with market power in software would provide its product for impoverished communities. This is facially a public benefit; nevertheless, the private purpose could be that the firm creates path dependence for its product.²⁰⁶ The follow-up inquiry would be whether the private benefit is incidental or substantial.²⁰⁷ The network effects of the software provided to the underprivileged could be of such a value as to overwhelm the public benefit.²⁰⁸ The direct benefit returned to the manufacturer, however, may be so attenuated that the public purpose survives. This is analogous to the court's antitrust balancing of the monopolist's negative impact on competition with the economic benefit of the actions of that same organization.²⁰⁹

This suggested adaptation seeks to split antitrust analysis; nevertheless, antitrust policy "supplies a general legal framework that can be called upon by many firms in a variety of industries to secure advantages over rivals or to obtain protection from competitive market forces."²¹⁰ In so doing, the use of the antitrust laws both protects the competitive forces in the economy and, through wealth redistribution, keeps the benefits flowing to the public.²¹¹ This result occurs because the discretion used in the application of the law "consider[s] each case on its merits, weighing the social benefits and costs of the practice at issue in passing

205. Admittedly, this is a simplified description. Importantly, however, the illustration is appropriate to demonstrate the strategic framework within which the analysis would operate. The tactical specificity becomes more critical after the scheme is incorporated.

206. Compare Gen. Couns. Mem. 36157 (Feb. 10, 1975) with Baron & Hannan, *supra* note 181; Leibowitz & Margolis, *supra* note 2, at 51.

207. See *United Cancer Council*, 165 F.3d at 1174; See also STAFF OF THE JOINT COMM., *supra* note 189, at 152.

208. One such example may be the distribution of free software by America Online for the purposes of creating a group of users dependant on the service to the exclusion of other Internet providers. This Comment does not take the naïve position that impoverished communities have access to computers on any expansive scale. Instead, there are circumstances under which the required hardware may be made available in much the same way as cell phones. A full discussion of this issue is beyond the scope of this Comment.

209. Some of the analysis that the court undertakes is known as "filtering." Cf. Oliver E. Williamson, *Delimiting Antitrust*, in REVITALIZING ANTITRUST IN ITS SECOND CENTURY, ESSAYS ON LEGAL, ECONOMIC, AND POLITICAL POLICY 219 (Harry First et al. eds., 1991). "The purpose of a filter is to perform a sort between problematic and unproblematic cases." Williamson differentiates filters based on strategic versus non-strategic factors.

210. See SHURGART, *supra* note 180, at 53. The quote is from chapter 3, which discusses business enterprises and the antitrust arena.

211. *Id.* at 54.

on its legality.”²¹² Thus far, the theme is to decide carefully which anticompetitive activities to prosecute and then strictly apply the rules based upon the idea - protect competition.²¹³

Under this approach, fewer governmental prosecutions will occur. The civil remedies of treble damages and costs²¹⁴ provide enough incentive for private protection of the competitive marketplace. The danger is that the incentives combined with the current state of antitrust analysis may lead to abuse of the power to commence litigation.²¹⁵

An opposing view is that companies will limit anticompetitive behavior because the threat of civil suit remains a deterrent. Indeed, the reason for the Sherman Act’s treble damages provision is to deter anticompetitive behavior; this is arguably a tactic commonly employed by legislatures to induce civil enforcement of difficult issues. One reason for reliance on the proposed pre-litigation public benefit standard is that this proposal concerns only governmental prosecutions. Furthermore, the current competitiveness-versus-benefit analysis favored by pro-high-tech antitrust commentators, moved to extra-judicial determinations, simplifies the judicial antitrust inquiry.

Thus, the restructured analysis will create easier outcome predictions ultimately showing the concerns about burgeoning civil claims to be unwarranted.²¹⁶ Moreover, despite the deterrent effect of civil litigation, at least one additional limitation to the problem of excessive litigation exists: the fact that high technology markets involve a moving target²¹⁷ might create a mootness issue and thus provide further disincentive to making the civil claim.²¹⁸ For instance, while the monopolist might remain liable for damages during the monopoly period, the limited time of monopoly dominance shrinks the amount of damages available in most cases. This lessened amount of damages would likely deter the civil claimant due to the risk associated with an unfavorable outcome versus the expected award from a favorable one.

212. *Id.* at 180.

213. The challenge is that the Sherman Act, Clayton Act, and the “rule of reason” contain very vague language with respect to the harm to competition. As such, the strict application of legislative intent may be the ad hoc inquiry that exists today. On the other hand, the intent was to protect competition. Under that broad construction, this Comment attempts to fashion a standard to govern high technology companies.

214. 15 U.S.C. § 2 (2001).

215. See SHURGART, *supra* note 180, at 140.

216. *Contra id.* at 138-54. The entire book argues that antitrust litigation is damaging to the economy. The private interests will take advantage of the structure to transfer the gains from competition to the inefficient.

217. See *supra* text accompanying note 164.

218. See, e.g., *Pan Am. World Airways, Inc. v. United States*, 371 U.S. 296, 327 (1963). See also *Public Utilities Comm’n of the State of California v. F.E.R.C.*, 236 F.3d 708, 713-14 (D.C. Cir. 2001).

IV. CONCLUSION

*Competition is a public good and each individual customer and supplier has a natural inclination to act as a free rider. The antitrust laws allow society to make a collective decision that internalizes the provision of this public good.*²¹⁹

Many arguments exist that support companies' contentions, like Microsoft's, that antitrust is ill-suited for the high-tech market. Yet, the Sherman Act's drafters understood that, regardless of the breadth of commerce and competition, the "power of control, [is] unlimited save by the discretion of Congress."²²⁰ Demonstrating its discretion, Congress enacted antitrust laws. All of the arguments to avoid the implications of the Sherman Act use the perception that society benefits (regardless of whether it is called economic efficiency, consumer benefits, or some other term) because the products or services are valued. Nevertheless,

that was not the way that Congress chose; it did not condone "good trusts" and condemn "bad" ones; it forbade all. Moreover, in so doing it was not necessarily actuated by economic motives alone. It is possible, because of its indirect social or moral effect, to prefer a system of small producers, each dependent for his success upon his own skill and character, to one in which the great mass of those engaged must accept the direction of a few. These considerations, which we have suggested only as possible purposes of the Act, we think the decisions prove to have been in fact its purposes.²²¹

Thus, the likely intent of antitrust laws was to ensure the efficient operation of the free market and secure long-term benefits to the consumer, the industry, and the economy; in other words, to protect society from anticompetitive behavior. Although high technology creates many opportunities to view competitiveness as providing successful firms with an escape from antitrust liability, the fundamental question remains: Is the company acting anticompetitively? Regardless of all the variations of antitrust analysis, when a firm engages in predatory or exclusionary practices, it should be liable under the Sherman Act.

Predatory and exclusionary behavior tends to reduce the benefits of

219. See Salop & Romaine, *supra* note 177, at 628.

220. 20 CONG. REC. S3445 at 1457 (1899), reprinted in 3 AMERICAN LANDMARK LEGISLATION 1976, 33 (representing the statements of Sen. Jones).

221. *Aluminum Co. of Am.*, 148 F.2d at 427. While subsequent cases may have repudiated *Aluminum Co.*, the fact remains that the intention of the Sherman Act was to eliminate trusts. See generally *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447 (1993); see also *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993). Moreover, this article argues that the purpose of the antitrust laws is to eliminate anticompetitive behavior that returns no public benefit to society. As such, the later cases tend to weaken the proscriptions against anticompetitive behavior to the point that those who would assert a private suit face the problematic analysis that exists within the antitrust inquiry today.

innovation because there is a chilling effect on the incentive to developing new high-tech products. Unfortunately, it is not easy to understand the impact today on the innovations of the future resulting from the restricted competition. Accordingly, one could view antitrust litigation as preventative, punishing the anticompetitive actions of a company to fashion a remedy that will protect upcoming products. One such remedy available for the courts is to disgorge an abusive firm's profits. By taking the profits, the court imposes on the firm what this Comment suggests the firm do on its own: transfer profits back to society.

Redistributing the profits to benefit the public allows the courts to either maintain or return to a more focused interpretation of the antitrust laws. Furthermore, watching from the sidelines, the FTC can exercise discretion in prosecuting companies under the Sherman Act. Looking for those organizations that actively participate in public benefit through philanthropy ensures that all anticompetitive activities lack the financial incentive of extraordinary profits.

Because the philanthropic company's self-disgorgement of monopoly profits to society would not be subject to government prosecution, continuing to operate as a monopoly, therefore, does not seem to have the same appeal as before. Instead, the company may diversify into other unrelated markets. In any event, under this construct the result would be that anticompetitive behavior has no potential return to the would-be antitrust violator.

As for those companies that do not redistribute monopoly profits, they face the full force of governmental prosecution. In addition, these companies also face civil action under antitrust law. The likely effect of increased civil litigation acts as another deterrent. Perhaps the result would be fewer anticompetitive acts. After all, is that not the purpose of antitrust in the first place?

The current judicial inquiry arguably disfavors antitrust litigation if sufficient economic benefits exist; this Comment argues these benefits are part of the prevailing social good. Thus, the probable outcome of such an economically focused inquiry leaves the prosecution with a losing case. High-technology antitrust commentators favor different analyses, some of which exist in law today, thereby leaving the antitrust civil suit severely weakened. This potential or actual atrophy opens the high-technology market to attack by predatory practices disguised in the costume of societal good.

As a result, today's high-technology companies are not Robin

Hoods, acting with grace of courage, but modern footpads, committing their robberies by stealth.

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