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ANTITRUST POLICY AFTER CHICAGO

*Herbert Hovenkamp**

The so-called "Chicago School" of analysis has achieved ascendancy within the fields of antitrust policymaking and scholarship. In this Article, Professor Hovenkamp predicts that flaws in the Chicago model's basic premises will one day cause it to be eclipsed, just as previously ascendant doctrines have been eclipsed. Professor Hovenkamp enumerates and expands upon a list of criticisms of the Chicago School's neoclassical efficiency model, grouping the arguments within two categories: criticisms from "outside" and "inside" the model. From "outside" the model, Professor Hovenkamp disputes the premises that policymakers can know enough about the real world to make truly efficient decisions, that antitrust law can pursue the single goal of efficiency and remain consistent with other legal policies, and that the antitrust laws' legislative history reflects an exclusive concern with efficiency. Furthermore, from "inside" the model, the author argues that even if it were appropriate for antitrust policy to take account only of efficiency concerns, the Chicago School's neoclassical efficiency model is not sophisticated enough to account for real world behavior. He demonstrates that Chicago scholars' erroneous characterization of markets as static leads them to underestimate the importance and severity of strategic behavior. Professor Hovenkamp reinforces his critique of the Chicago School model by describing two previously overlooked forms of strategic behavior and by showing how such behavior can and does undermine the model's reliance on the market.

I. INTRODUCTION

If one hundred years of federal antitrust policy have taught us anything, it is that antitrust is both political and cyclical. Almost every political generation has abandoned the policy of its predecessors in favor of something new. Antitrust policymakers have created the common law school,¹ the rule of reason school,² the monopolistic

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The author admits a great admiration for Chicago School antitrust policy, and confesses that he has been a fellow traveler for some time. Nevertheless, he believes that the Chicago School generally did a much better job of defending its position when it was a tiny squad of embattled outsiders instead of a triumphant division. Those who no longer need to defend themselves, don't.

1. For example, see Judge Taft's opinion in *United States v. Addyston Pipe & Steel Co.*, 85 F. 271, 279-83 (6th Cir. 1898), *aff'd.*, 175 U.S. 211 (1899), applying common law principles to interpretation of "contract in restraint of trade" under the Sherman Act. Also, see Justice Holmes's opinion in *Swift and Co. v. United States*, 196 U.S. 375, 396 (1905), applying common law attempt principles to the Sherman Act. See generally Baxter, *Separation of Powers, Prosecutorial Discretion, and the "Common Law" Nature of Antitrust Law*, 60 TEXAS L. REV.

competition (New Deal) school,³ the workable competition school,⁴ the liberal school,⁵ and the law and economics, or Chicago, school.⁶

Each of these schools left an impression that affected antitrust policy indefinitely, although some continue to have a far more visible influence than others. The common law may continue to guide antitrust decisionmaking, but in most cases the evidence is hard to find.⁷ The rule of reason is very much with us, however, and continues to play a large and expanding role in antitrust adjudication.⁸ The theory of monopolistic competition has frequent revivals, most recently in the ready-to-eat breakfast cereals case.⁹ Both the workable competition thesis¹⁰ and the liberal theory¹¹ are currently in disrepute among those

661 (1982); Easterbrook, *Vertical Arrangements and the Rule of Reason*, 53 ANTITRUST L.J. 135, 136-40 (1984).

2. See Chief Justice White's opinion in *Standard Oil Co. v. United States*, 221 U.S. 1, 63-67 (1911), adopting a rule of reason, apparently for all litigation under the Sherman Act. The historical development of the rule of reason is recounted in A. BICKEL & B. SCHMIDT, *THE JUDICIARY AND RESPONSIBLE GOVERNMENT*, 1910-21, at 86-199 (9 Oliver Wendell Holmes Devise History of the Supreme Court of the United States, 1984).

3. See E. CHAMBERLIN, *THE THEORY OF MONOPOLISTIC COMPETITION* (7th ed. 1956) (1st ed. 1933). For the relationship between the theory of monopolistic competition and Depression-era antitrust policy, see Rowe, *The Decline of Antitrust and the Delusions of Models: The Faustian Pact of Law and Economics*, 72 GEO. L.J. 1511, 1541-47 (1984). See also E. HAWLEY, *THE NEW DEAL AND THE PROBLEM OF MONOPOLY: A STUDY IN ECONOMIC AMBIVALENCE* 13, 35, 40-48, 297-99 (1966).

4. See REPORT OF THE ATTORNEY GENERAL'S NATIONAL COMMITTEE TO STUDY THE ANTITRUST LAWS 320-38 (1955) [hereinafter cited as 1955 COMMITTEE REPORT] (proposing that antitrust policy be guided by a theory of "workable competition"); see also Clark, *Toward a Concept of Workable Competition*, 30 AM. ECON. REV. 241 (1940). Clark's theory of "workable competition" was intended to be a rejection of Chamberlin's theory of monopolistic competition, under which public policy efforts to improve real-world competition by such devices as the antitrust laws were deemed to be ineffectual.

5. The "liberal school" here refers to the antitrust policy developed by the Warren Court during the 1950s and 1960s. See text at notes 28-37 *infra*.

6. See R. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* (1978); Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925 (1979).

7. *But see* *United States v. American Airlines*, 743 F.2d 1114, 1118-20 (5th Cir. 1984) (applying common law principles to the offense of attempt to monopolize), *cert. dismissed per stipulation*, 106 S. Ct. 420 (1985). Today, discussion about the "common law" nature of antitrust refers to the power of the courts to devise specific rules that interpret a broadly worded statute. The phrase is *not* generally used to suggest that federal antitrust law today follows the common law of restraints on trade. See generally Baxter, *supra* note 1; Easterbrook, *supra* note 1.

8. See *National Collegiate Athletic Assn. v. Board of Regents*, 104 S. Ct. 2948 (1984); *Broadcast Music, Inc. v. Columbia Broadcasting Sys.*, 441 U.S. 1 (1979). See generally Blake, *The Rule of Reason and Per Se Offenses in Antitrust Law* (Columbia University Center for Law & Economics Studies, working paper No. 10, 1984).

However, some Chicago School writers argue that the dichotomy between *per se* and rule of reason analysis is wrongheaded and should be replaced by an analysis that develops through a series of presumptions. Easterbrook, *supra* note 1, at 153-68. See generally Easterbrook, *The Limits of Antitrust*, 63 TEXAS L. REV. 1 (1984) [hereinafter cited as Easterbrook, *Limits*].

9. *In re Kellogg Co.*, 99 F.T.C. 8 (1982).

10. See, e.g., G. STIGLER, *THE ORGANIZATION OF INDUSTRY* 12 (1968) (criticizing the "workable competition" thesis).

11. See R. BORK, *supra* note 6, at 198-216.

of the dominant (Chicago) school. Nevertheless, one can find any number of people who adhere to them, particularly to the liberal theory.¹²

The life of a school of antitrust policy is like the life of a scientific model.¹³ First the model experiences a period when only one or a few people dare to propose it. These people may be treated as charlatans by those who work within the consensus model.¹⁴ Later a breakthrough or discovery, or perhaps a series of discoveries, occurs that both discredits the accepted model and makes the new model seem far more palatable. Then the new model achieves consensus, and most people in the scholarly community try to jump on the wagon — to do research that will validate the model, or that is guided by the framework established by the model.¹⁵

The model determines “relevance.”¹⁶ Relevant evidence is that which is explained by or “fits into” the existing model. Irrelevant evidence is that which cannot be accounted for by the model. Within the neoclassical market efficiency model,¹⁷ for example, evidence that a particular practice distributes wealth in a certain way or that a rule increases the opportunities for small business is generally irrelevant, because the model does not take such values into account. The model purports to distinguish only the efficient from the inefficient, without reference to distributional consequences. If “justice” has anything at all to do with the way wealth is distributed, then the model is unable to distinguish the just from the unjust.¹⁸

The Chicago School model of antitrust policy dictates that allocative efficiency as defined by the market should be the only goal of the antitrust laws.¹⁹ Within that paradigm even evidence derived from the

12. See Fox, *The Modernization of Antitrust: A New Equilibrium*, 66 CORNELL L. REV. 1140 (1981); Pitofsky, *The Political Content of Antitrust*, 127 U. PA. L. REV. 1051 (1979); Schwartz, “Justice” and Other Non-Economic Goals of Antitrust, 127 U. PA. L. REV. 1076 (1979).

13. See generally T. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* (2d ed. 1970) (describing the process by which scientific thought evolves).

14. *Id.* at 10-34. For example, Posner notes that early Chicago School theorists were regarded by outsiders as a “lunatic fringe.” Posner, *supra* note 6, at 931.

15. T. KUHN, *supra* note 13, at 10-34.

16. *Id.* at 15.

17. In this article the term “neoclassical market efficiency model” refers to the price theory of the Chicago School, which is the price theory that dominates American antitrust policy today. A good brief overview of the theory is R. BORK, *supra* note 6, at 90-133. See also H. HOVENKAMP, *ECONOMICS AND FEDERAL ANTITRUST LAW* 1-36 (1985).

18. See R. BORK, *supra* note 6, at 90 (“Antitrust . . . has nothing to say about the ways prosperity is distributed or used.”); see also Hovenkamp, *Distributive Justice and the Antitrust Laws*, 51 GEO. WASH. L. REV. 1, 16-26 (1982). For criticism of this view, see text at notes 155-65 *infra*.

19. See R. BORK, *supra* note 6, at 91; R. POSNER, *ANTITRUST LAW: AN ECONOMIC PERSPECTIVE* 4 (1976).

legislative history of the antitrust laws is unimportant, unless to show that the legislative history supports or undermines the model. If the latter, the preservation of the model requires that the legislative history of the antitrust laws be deemed irrelevant to their current interpretation.²⁰

The market efficiency model for antitrust policy is very powerful, and is as appealing intellectually as any of its predecessors. One of the strongest elements in its appeal has been its advocacy of expertise outside the legal profession. Today more than ever antitrust decisionmakers have been forced to submit their views to another group of specialists — economists — for evaluation.²¹ Antitrust academia, the antitrust bar, and the federal judiciary are filled with people who have made serious efforts to learn about price theory and industrial organization.

This article begins with the premise that nothing — not even an intellectual structure as imposing as the Chicago School — lasts forever. In fact, a certain amount of stagnation is already apparent. Most of the creative intellectual work of the Chicago School has already been done — done very well, to be sure. The new work too often reveals the signs of excessive self-acceptance, particularly of quiet acquiescence in premises that ought to be controversial.²²

Today the cutting edge of antitrust scholarship is coming, not from protagonists of the Chicago School, but rather from its critics.²³ The critics began as most critics of a model do, first by making refinements

20. See text at notes 167-97 *infra*.

21. For example, see ANTITRUST POLICY IN TRANSITION: THE CONVERGENCE OF LAW AND ECONOMICS (E. Fox & J. Halverson eds. 1984).

22. See, e.g., Landes, *Optional Sanctions for Antitrust Violations*, 50 U. CHI. L. REV. 652 (1983) (assuming that economic efficiency should be the basis for damages measurement, notwithstanding that § 4 of the Clayton Act appears to mandate a compensatory basis for measurement — three times the damages “by him [the plaintiff] sustained”). See also Easterbrook, *The Limits of Antitrust*, *supra* note 8, at 2-3 (assuming without proof that overdeterrence is more socially costly than underdeterrence). For an alternative view, that overdeterrence is probably beneficial in highly concentrated markets, while underdeterrence is probably beneficial in competitive markets, see Joskow & Klevorick, *A Framework for Analyzing Predatory Pricing Policy*, 89 YALE L.J. 213, 222-39 (1979). Finally, see Baxter, *Reflections Upon Professor Williamson's Comments*, 27 ST. LOUIS U. L.J. 315 (1983) (acknowledging that industrial organization theory may have discerned ways in which strategic firm behavior is anticompetitive, but arguing that courts should not consider such questions).

23. See Dixit, *A Model of Duopoly Suggesting a Theory of Entry Barriers*, 10 BELL J. ECON. 20 (1979); Kaplow, *Extension of Monopoly Power Through Leverage*, 85 COLUM. L. REV. 515 (1985); Markovits, *The Limits to Simplifying Antitrust: A Reply to Professor Easterbrook*, 63 TEXAS L. REV. 41 (1984); Salop, *Strategic Entry Deterrence*, AM. ECON. REV., May 1979, at 335; Salop & Scheffman, *Raising Rivals' Costs*, AM. ECON. REV., May 1983, at 267; Scherer, *The Economics of Vertical Restraints*, 52 ANTITRUST L.J. 687 (1983); Wentz, *Mobility Factors in Antitrust Cases: Assessing Market Power in Light of Conditions Affecting Entry and Fringe Expansion*, 80 MICH. L. REV. 1545 (1982); Williamson, *Antitrust Enforcement: Where It's Been, Where It's Going*, 27 ST. LOUIS U. L.J. 289 (1983) [hereinafter cited as Williamson, *Antitrust*].

in the given model, then by uncovering some major anomalies, and finally, in some cases, even by considering alternatives to the classical market efficiency model. This process is only barely underway, and this essay will do no more than carry it marginally toward its goal. However, the initial premise of this paper cannot easily be refuted: the Chicago School, just as its predecessors, is mortal.

II. ON THE ROLE OF ECONOMICS IN FEDERAL ANTITRUST POLICY: 1890-1980

Chicago School antitrust advocates sometimes say that courts, the Federal Trade Commission, and the Department of Justice first developed an "economic approach" to antitrust in the early 1980s.²⁴ Critics of the Chicago School likewise suggest that "economists are kings" over antitrust policymaking in the 1980s in a way that they were not during earlier periods.²⁵ The impression created by these statements is that antitrust policymakers somehow discovered economics at the time of the Chicago School revolution in antitrust policy.

Such a conclusion must rest on one of two alternative premises. Either (1) economic theory had nothing useful to say about antitrust policy until the 1970s, or (2) although economists in earlier periods had something to say about antitrust policy, the policymakers paid little or no attention, but developed their policies in a vacuum that was free of theoretical economics. Only an extreme form of historical myopia will admit the first premise. While the second should perhaps be taken a little more seriously, its truth is far from clear.

Much of the criticism that American antitrust policy has historically been economically unsophisticated is really a criticism that the earlier policy employed a *different* economic model than the model that is currently in vogue. In that case the Chicago School "revolu-

Enforcement]; Williamson, *Predatory Pricing: A Strategic and Welfare Analysis*, 87 YALE L.J. 284 (1977) [hereinafter cited as Williamson, *Predatory Pricing*].

The exchange in the *St. Louis University Law Journal* between Professor Baxter (then head of the Antitrust Division), *supra* note 22, and Professor Williamson, *supra*, is instructive. In it both Williamson, a critic of the Chicago School, and Baxter, a proponent, appear to agree that within the disciplines of price theory and industrial organization traditional Chicago School scholarship is giving way to more complex theories designed to account for strategic behavior. The two authors differ only on the question whether courts should accommodate the new scholarship. Courts ignored the Chicago School for thirty years. Mr. Baxter appears to believe that post-Chicago economic scholarship should be treated the same way.

24. See Gerhart, *The Supreme Court and Antitrust Analysis: the (Near) Triumph of the Chicago School*, 1982 SUP. CT. REV. 319; Posner, *The Rule of Reason and the Economic Approach: Reflections on the Sylvania Decision*, 45 U. CHI. L. REV. 1, 5, 12-13 (1977).

25. See Baker & Blumenthal, *The 1982 Guidelines and Preexisting Law*, 71 CALIF. L. REV. 311, 317-21 (1983); Fox, *Introduction, The 1982 Merger Guidelines: When Economists Are Kings?*, 71 CALIF. L. REV. 281, 281-83, 296-99 (1983).

tion" in antitrust policy is much less far-reaching than its supporters suggest, although its importance should not be understated. Antitrust policymakers did not first develop an "economic approach" in the late 1970s or early 1980s.²⁶ They simply changed economic models. This was hardly the first time that such a change occurred, and at least one earlier change was just as sudden and dramatic.²⁷

The Chicago School has been particularly relentless in its criticism of the antitrust policy of the Warren Era, which has been presented as the antithesis of sound economic thinking in antitrust policy.²⁸ Yet despite all that has been said about the lack of sophistication or even the hostility toward economics manifested by Warren Court and Eisenhower administration antitrust policy, that policy was in fact very much informed by academic economists. The price theory and industrial organization that dominated the academic study of economics in the 1960s were simply quite different from the dominant economic ideology of the 1980s.

For example, Harvard economist Joe S. Bain, who exercised a strong influence on federal antitrust policy in the 1960s and 1970s, based his relatively prointerventionist theories on three important economic premises. The first was that economies of scale were not substantial in most markets and dictated truly anticompetitive concentration levels in only a small number of industries.²⁹ As a result, many industries contained larger firms and were more concentrated than necessary to achieve optimal productive efficiency.³⁰ The second was that barriers to entry by new firms were very large and

26. The date chosen for the adoption of an "economic approach" by antitrust policymakers is more or less arbitrary. The most plausible candidates are 1977, the year of the Supreme Court's decision in *Continental T.V. v. GTE Sylvania*, 433 U.S. 36 (1977) (adopting a rule of reason for vertical nonprice restraints), and 1981, when President Reagan took office and named William F. Baxter to head the Antitrust Division of the Department of Justice.

27. That change occurred in 1935 and 1936, and was in large part prompted by the Supreme Court's decision in *Schechter Poultry Corp. v. United States*, 295 U.S. 495 (1935), which struck down the National Industrial Recovery Act. Under the Act competing firms were strongly encouraged to "cooperate" with one another in the development of "codes of fair competition," and enforcement of the antitrust laws was nearly suspended. After the *Schechter* case, however, the Roosevelt administration suddenly shifted positions and adopted a policy of aggressive enforcement of the antitrust laws, based largely on 1930s theories of oligopoly performance in concentrated markets subject to substantial product differentiation. See E. HAWLEY, *supra* note 3, at 283-380.

28. See, e.g., R. BORK, *supra* note 6, at 201-16.

29. See Bain, *Economies of Scale, Concentration, and the Condition of Entry in Twenty Manufacturing Industries*, 44 AM. ECON. REV. 15, 38 (1954).

30. J. BAIN, BARRIERS TO NEW COMPETITION: THEIR CHARACTER AND CONSEQUENCES IN MANUFACTURING INDUSTRIES 53-113 (1956); Bain, *Relation of Profit Rate to Industry Concentration: American Manufacturing, 1936-40*, 65 Q. J. ECON. 293 (1951); see also Stigler, *Monopoly and Oligopoly by Merger*, AM. ECON. REV., May 1950, at 23.

could easily be manipulated by dominant firms.³¹ The third was that the noncompetitive performance (pricing above marginal cost) associated with oligopoly began to occur at relatively low concentration levels.³²

The combination of these views created an antitrust policy that was quite concerned with deconcentrating oligopolistic markets and, to a degree, with protecting small firms from larger rivals, generally on the theory that a large number of small firms would yield lower prices than a relatively small number of larger firms.³³ To be sure, the Warren Court did not always follow this reasoning. For example, some of its merger decisions appear to identify low prices, rather than oligopoly or large firm dominance, as the primary "evil" at which the antitrust laws were targeted.³⁴ The Justice Department's enforcement policy manifested in the 1968 Merger Guidelines was not so careless, however.³⁵ Today no one can say that those guidelines reflect an approach that was any less "economic" than the approach taken by the 1984 Merger Guidelines.³⁶ The 1968 guidelines simply reflect the academic thinking of the 1960s, in which product differentiation, industrial concentration, barriers to entry, and large firm dominance rather than tacit collusion were the principal areas of economic concern for the competitive process.³⁷ All of these were explicitly "economic"

31. J. BAIN, *supra* note 30, at 1-42. Bain identified product differentiation as one of the most common ways that incumbent firms could manipulate the market to make entry more difficult. *Id.* at 114-43.

32. J. BAIN, *supra* note 30, at 1-42.

33. The best statement of the policy is C. KAYSER & D. TURNER, *ANTITRUST POLICY: AN ECONOMIC AND LEGAL ANALYSIS* (1959), which relied heavily on Bain's work. *See also* Turner, *The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal*, 75 HARV. L. REV. 655 (1962).

34. *See, e.g.*, *Brown Shoe Co. v. United States*, 370 U.S. 294, 344 (1962) (holding that Congress wanted amended § 7 of the Clayton Act to be used "to promote competition through the protection of viable, small, locally owned businesses"). For that reason, a merger that lowered a firm's costs and thereby injured smaller competitors should be condemned. The Supreme Court applied similar analysis in *United States v. Von's Grocery Co.*, 384 U.S. 270 (1966), and in *FTC v. Procter & Gamble Co.*, 386 U.S. 568 (1967).

35. *See* 1968 Department of Justice Merger Guidelines, 2 TRADE REG. REP. (CCH) ¶ 4510 [hereinafter cited as 1968 Merger Guidelines].

36. 1984 Department of Justice Merger Guidelines, 49 Fed. Reg. 26,823, 26,837 [hereinafter cited as 1984 Merger Guidelines]; *see* R. POSNER & F. EASTERBROOK, *ANTITRUST: CASES, ECONOMIC NOTES, AND OTHER MATERIALS* 60 (2d ed. Supp. 1984) (suggesting that the 1984 Justice Department Merger Guidelines represent a "great advance in economic sophistication over the 1968 guidelines").

37. The most noteworthy difference between the Justice Department's 1968 Merger Guidelines and the 1984 Merger Guidelines is not that the former adopted the four-firm concentration ratio (CR4) as an index of market concentration, while the latter adopted the Hirschman-Hirschman Index (HHI). Both indexes have been around since before the 1968 guidelines were drafted and are simply alternative ways of measuring market concentration. *See, e.g.*, Hirschman, *The Paternity of an Index*, 54 AM. ECON. REV. 761 (1964); Stigler, *A Theory of Oligopoly*, 72 J. POL. ECON. 44, 55 (1964). A much more important distinction between the two sets of guidelines is

concerns — howbeit concerns that achieved prominence within a different economic model than the one that dominates antitrust policy today.

Even the 1950s and 1960s were not the first decades that economic models influenced antitrust policy.³⁸ Federal antitrust policy contained a strong economic element much earlier. In fact, one must go all the way back to the first thirty years of antitrust enforcement to find a policy that can reasonably be characterized as having little or no economic content.³⁹

When the Sherman Act was first passed in 1890, most (but not all)⁴⁰ economists condemned it as at best irrelevant to the problem of the trusts and at worst as harmful to the economy because the statute would prohibit firms from combining to take advantage of economies of scale made possible by recent technological development.⁴¹ During this period, roughly 1890-1930, American economists developed a set of theories that found consumer benefits in concentration and large firms probably to a greater extent than did any economic model until the rise of the Chicago School.⁴²

the degree of danger that the Justice Department perceived in high market concentration. The 1968 Guidelines reflect the Justice Department's perception that concentrated markets discouraged vigorous price competition and encouraged other kinds of conduct, "such as use of inefficient methods of production or excessive promotional expenditures, of an economically undesirable nature." 1968 Merger Guidelines, *supra* note 35. On the other hand, virtually the only perceived danger under the 1984 guidelines is collusion. Another important difference between the two sets of guidelines is the concentration *level* at which mergers are considered to be dangerous. The 1968 guidelines, following Bain, regarded mergers as anticompetitive at generally lower concentration levels than do the 1984 guidelines.

38. For some insights into pre-1950s models, see Rowe, *supra* note 3.

39. Even in the early period the government may have followed prevailing economic theory. During that time the majority of economists believed that the antitrust laws were useless or perhaps even harmful, because they would deprive firms of the ability to take full advantage of scale economies. The government, for its part, brought very few antitrust cases during the first decade after the Sherman Act was passed. See W. LETWIN, *LAW AND ECONOMIC POLICY IN AMERICA: THE EVOLUTION OF THE SHERMAN ANTITRUST ACT 106-42* (1965). Some Chicago School antitrust scholars have argued that the framers of the Sherman Act essentially had the market efficiency model in mind in 1890. See text at notes 179-80 *infra*.

40. One important economist who took exception to the consensus was Henry Carter Adams. See Adams, *Relation of the State to Industrial Action*, 1 PUBLICATIONS AM. ECON. A. 465 (1887). Adams argued for a certain amount of government intervention against monopolies; however, he believed it should be directed at monopoly conduct rather than market structure, which Adams believed was predetermined by economies of scale.

41. See Hatfield, *The Chicago Trust Conference*, 8 J. POL. ECON. 1, 6 (1899) (noting that a consensus of economists at this important meeting believed that the problems of high concentration and large firm size at which the Sherman Act was directed were the "outgrowth of natural industrial evolution," and were therefore efficient). The proceedings of this meeting were published as CHICAGO CONFERENCE ON TRUSTS: SPEECHES, DEBATES, RESOLUTIONS (1900).

42. In large part the free market bias of economists during this period may be attributed to the powerful influence of Alfred Marshall, whose *Principles of Economics* (1890) restored neo-classical price theory to its most eminent position since the publication of Adam Smith's *Wealth of Nations* (1776). For a summary of economists' typical attitudes toward the Sherman Act and

The First New Deal⁴³ saw substantial inroads of economic theory into antitrust policy⁴⁴ — but at that time the dominant economic theory was dedicated to the Progressive Era economic proposition that regulation, including self-regulation and creative cooperation, would be much more efficient than ruthless competition in increasing American wealth.⁴⁵ Only after the National Industrial Recovery Act was declared unconstitutional did the administration bring in a different group of economists who were much more aggressive in their antitrust enforcement goals.⁴⁶ Their work became the basis for the “workable competition” theory that dominated antitrust policy in the 1950s.

The workable competition theory was probably the first economic model expressly designed to be a tool of antitrust policy. Economist J.M. Clark, who first developed the theory,⁴⁷ accepted the most important premise of the far more academic monopolistic competition school:⁴⁸ that widespread product differentiation limits the degree to which firms in the same product market compete with one another and therefore permits them to raise price above marginal cost. However, from that point Clark attempted to define an amount of competition that could realistically be achieved by a real world enforcement policy.

Antitrust policymakers were happy to accept Clark’s call for an antitrust policy that would respond to a complex economic model. The 1955 report of the Attorney General’s National Committee to Study the Antitrust Laws relied heavily on Clark’s workable competition thesis.⁴⁹ The Committee concluded that the theory of workable

existing antitrust enforcement during this period, see J.D. CLARK, *THE FEDERAL TRUST POLICY* 100-01 (1931); F. FETTER, *MODERN ECONOMIC PROBLEMS* 533 (2d ed. 1922); S. FINE, *LAISSEZ FAIRE AND THE GENERAL-WELFARE STATE* 139, 337 (1956).

Even liberal and progressive economists such as Richard T. Ely and Charles Van Hise were pessimistic about the federal antitrust laws. Both believed that economies of scale, particularly in innovation, necessitated the growth of monopoly in high technology markets. Antitrust would deprive firms in these markets from achieving optimal productive efficiency. Both Ely and Van Hise preferred a regime of broad federal price regulation rather than enforced “competition” along the lines of the neoclassical model. See R. ELY, *MONOPOLIES AND TRUSTS* (1900); C. VAN HISE, *CONCENTRATION AND CONTROL: A SOLUTION TO THE TRUST PROBLEM IN THE UNITED STATES* 76-87, 255-56 (1912).

43. I am referring to the period from the election of Franklin Roosevelt in 1932 until the National Industrial Recovery Act was struck down in *Schechter Poultry Corp. v. United States*, 295 U.S. 495 (1935).

44. See E. HAWLEY, *supra* note 3, at 41-46.

45. *Id.* For an analysis of the perceived dichotomy between “competition” and “cooperation” during this period, see Hovenkamp, *Evolutionary Models in Jurisprudence*, 64 *TEXAS L. REV.*, in press.

46. *Id.* at 47-52, 283-303.

47. Clark, *supra* note 4.

48. E. CHAMBERLIN, *supra* note 3.

49. 1955 COMMITTEE REPORT, *supra* note 4, at 318-39. The report defined “workable com-

competition would operate as a kind of practical theory of "second best" that would permit antitrust enforcers to consider the differences between the economic model of perfect competition and the apparent degree of competition that existed in the real world.⁵⁰ The result was a state of affairs that was not capable of being precisely modeled, and this may explain the difficulties that some later economists had with the concept of workable competition.⁵¹ In short, the concept of workable competition was an early attempt to create an economic model that took into account such real world market imperfections as economies of scale, information failures, and transaction costs. The goal of antitrust policy within this model was to discern areas in which legal rules or administrative controls could encourage a market to perform more similarly to the perfect competition model.⁵²

Clearly, antitrust policymakers did not first discover economic the-

petition" as "the economists' attempt to identify the conditions which could provide appropriate leads for policy in assuring society the substance of the advantages which competition should provide." *Id.* at 320.

The Committee was chaired by Stanley N. Barnes and S. Chesterfield Oppenheim and included many economists and antitrust lawyers. The report is analyzed in T. KOVALEFF, *BUSINESS AND GOVERNMENT DURING THE EISENHOWER ADMINISTRATION: A STUDY OF THE ANTITRUST POLICY OF THE ANTITRUST DIVISION OF THE JUSTICE DEPARTMENT 17-48* (1980). See also Hovenkamp, Book Review, 33 *HASTINGS L.J.* 755 (1982) (reviewing Kovaleff).

50. The theory of second-best suggests that in a world in which a certain amount of monopoly power (positive deviations from marginal cost pricing) is pervasive, an increase of competition in one area will not necessarily improve general welfare, for the increase may be more than offset by decreases elsewhere. Clark recognized already in 1940 that

[i]f there are, for example, five conditions, all of which are essential to perfect competition, and the first is lacking in a given case, then it no longer follows that we are necessarily better off for the presence of any one of the other four. In the absence of the first, it is *a priori* quite possible that the second and third may become positive detriments; and a workably satisfactory result may depend on achieving some degree of "imperfection" in these other two factors.

Clark, *supra* note 4, at 242. For further elaboration of the conditions that would facilitate the achievement of workable competition within Clark's model, see Sosnick, *A Critique of Concepts of Workable Competition*, 72 *Q. J. ECON.* 380 (1958).

For technical development of the theory of second-best, see Lipsey & Lancaster, *The General Theory of Second-Best*, 24 *REV. ECON. STUD.* 11 (1956). For less technical descriptions of the theory, see H. HOVENKAMP, *supra* note 17, at 37-39; F. SCHERER, *INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE* 24-29 (2d ed. 1980). Clark was perhaps the first economist to recognize the theory of second-best and deal with some of its ramifications. See C. FERGUSON, *A MACROECONOMIC THEORY OF WORKABLE COMPETITION* 27 (1964).

51. One example is George Stigler, who faulted the principle of workable competition for not containing any mechanism for quantifying *how much* competition is "workable." G. STIGLER, *supra* note 10, at 12; see also 1955 COMMITTEE REPORT, *supra* note 4, at 339 (noting that some members of the Attorney General's committee made a similar criticism).

52. See Markham, *An Alternative Approach to the Concept of Workable Competition*, 40 *AM. ECON. REV.* 49 (1950):

An industry may be judged to be workably competitive when, after the structural characteristics of its market and the dynamic forms that shaped them have been thoroughly examined, there is no clearly indicated change that can be effected through public policy measures that would result in greater social gains than social losses.

Id. at 361.

ory in the last decade. More accurately, they changed theories. However, the statement that recent antitrust policy was the first to develop an "economic approach" may mean that antitrust policymakers have only recently relied *exclusively* on economics. That is, earlier courts and enforcers may have recognized economic goals for antitrust policy, but they mixed these goals in some way with distributive goals. After the 1977 *Sylvania*⁵³ decision, or perhaps after the 1981 appointment of Mr. Baxter to head the Antitrust Division of the Justice Department,⁵⁴ however, antitrust policymakers may first have begun to consider efficiency goals exclusively. If that characterization is correct, one can say with some meaning that the rise of Chicago School antitrust policy represents the beginning of an "economic approach" — that is, an approach concerned exclusively with efficiency.

This view is subject to both an objection and a qualification, however. The objection is that it is probably untrue. Although the Justice Department may be going through a period in which it recognizes efficiency as the exclusive goal of the antitrust laws,⁵⁵ the Supreme Court has not adopted such a general antitrust policy, and some of its recent decisions seem inconsistent with such a policy.⁵⁶

The qualification is much more fundamental and goes to the nature of the relationship between economic theory and public policymaking. Economists have long stated that theoretical economic models cannot evaluate a state of affairs on the basis of how its wealth is distributed. These models are capable only of distinguishing the efficient from the inefficient.⁵⁷ However, for just as long, economists — even free mar-

53. *Continental T.V. v. GTE Sylvania*, 433 U.S. 36 (1977).

54. See note 26 *supra*.

55. However, this author knows of no official policy statement of either the Department of Justice or the Federal Trade Commission stating that distributive concerns are irrelevant to antitrust policy. Furthermore, the Justice Department continues to recognize distributive concerns in antitrust law when those concerns are clearly expressed in congressional policy. For example, the Justice Department's 1984 Merger Guidelines continue to recognize the failing company defense in merger cases, even though the defense has traditionally been viewed as not based on efficiency but rather on distributive concerns. See 1984 Merger Guidelines, *supra* note 36, at 26,837; P. AREEDA & H. HOVENKAMP, *ANTITRUST LAW* ¶ 925.1 (Supp. 1986) (forthcoming). However, for a recent argument that even the failing company defense has a basis in efficiency, see Campbell, *The Efficiency of the Failing Company Defense*, 63 *TEXAS L. REV.* 251 (1984). For responses, see Friedman, *Untangling the Failing Company Doctrine*, 64 *TEXAS L. REV.*, in press; McChesney, *Defending the Failing-Firm Defense*, 65 *NEB. L. REV.* 1 (1986).

56. See, e.g., *Monsanto Co. v. Spray-Rite Serv.*, 465 U.S. 752 (1984) (condemning vertical restraints by a nonmonopolist, in spite of a substantial Chicago School argument that the nonmonopolist cannot create market power by means of vertical restrictions); Easterbrook, *supra* note 1; Hovenkamp, *Vertical Restrictions and Monopoly Power*, 64 *B.U. L. REV.* 521 (1984); see also *Arizona v. Maricopa County Medical Socy.*, 457 U.S. 332 (1982) (condemning a maximum price fixing agreement under the *per se* rule, in the face of substantial evidence that the arrangement was efficient).

57. However, the distinction between efficiency and distribution of wealth was not clearly established until the ordinalist revolution in the 1930s. The ordinalists generally attacked the

ket economists — have recognized an important difference between theoretical economics and public policymaking, particularly if the policies are being made in a democratic State.

The public purpose of theoretical economics is not to eliminate distributive justice as a public policy concern.⁵⁸ Rather, it is to enable policymakers to make some judgments about the cost or effectiveness of a particular policy. The relative weight to be given to efficiency concerns in policymaking varies with the ability of the relevant economic model to identify efficient policies in the real world. If the “efficient” solution to a policy problem is clear, and the degree to which alternative solutions deviate from the efficient solution is also quite clear, then policymakers are likely to weigh efficiency concerns heavily. These efficiency concerns will trump competing distributive concerns unless those concerns are very powerful.

On the other hand, if the application of the economic model to real world policymaking is not particularly clear, or if the model is very complex, then the “efficient” solution to a real world problem will not always emerge as obvious. In that case, distributive or political concerns, which are always more or less obvious, will weigh much more heavily.⁵⁹ For example, if the relevant economic model does not reveal unambiguously that big business is more efficient than small business, but the small business lobby is very powerful, a legislature is likely to be influenced very strongly by the lobby.

One important difference between the neoclassical market efficiency model and earlier economic models is that the neoclassical model claims a much greater ability to distinguish between efficient and inefficient policies. In this respect, the neoclassical model’s largest virtue is its simplicity. The monopolistic competition model that was created by Chamberlin, and which influenced antitrust policy during the New Deal, was far more complicated and made it far more difficult to examine a particular business practice and proclaim it efficient or

notion that one could evaluate wealth distributions on the basis of interpersonal comparisons of utilities. See text at notes 113-22 *infra*.

58. See W. SHEPHERD, PUBLIC POLICIES TOWARD BUSINESS 5-6 (7th ed. 1985). However, some members of the Chicago School might disagree. See Posner, *Economics, Politics, and the Reading of Statutes and the Constitution*, 49 U. CHI. L. REV. 263 (1982) [hereinafter cited as Posner, *The Reading of Statutes*] (arguing that “public interest” statutes are efficient); Posner, *The Ethical and Political Basis of the Efficiency Norm in Common Law Adjudication*, 8 HOFSTRA L. REV. 487 (1980) [hereinafter cited as Posner, *The Efficiency Norm*] (arguing that the common law ought to pursue efficiency as a goal).

59. The point is made forcefully in M. HORWITZ, THE TRANSFORMATION OF AMERICAN LAW, 1780-1860, 99-101 (1977). See also Hovenkamp, *Technology, Politics, and Regulated Monopoly: An American Historical Perspective*, 62 TEXAS L. REV. 1263, 1279 (1984); Kainen, *Nineteenth Century Interpretations of the Federal Contract Clause: The Transformation from Vested to Substantive Rights Against the State*, 31 BUFFALO L. REV. 381, 396 (1982).

inefficient.⁶⁰ For example, within that model product differentiation could increase consumer choice or encourage innovation; however, it could also be a mechanism by which large firms in concentrated industries avoided price competition with one another.⁶¹ Likewise, Joe Bain's complicated notion of "conditions of entry" appeared simultaneously to praise and condemn economies of scale in the production process. On the one hand, economies of scale reduced costs and facilitated lower consumer prices. On the other, they made it more difficult for new firms to enter the market and, at least in concentrated industries, facilitated oligopoly behavior.⁶²

Within the Chicago School model, on the other hand, both of these problems have unambiguous solutions. Product differentiation is almost always a blessing for consumers. When it is not, the firms participating in the differentiation will be injured rather than benefitted, for customers will refuse to buy.⁶³ Likewise, economies of scale are an unmixed blessing in all but extremely concentrated markets.⁶⁴ In any case, the welfare of the small business in such markets should be ignored.

Today, however, antitrust policy is coming increasingly under the influence of a "post-Chicago" economics that is both more complex and more ambiguous than the Chicago School model. For example, within the "strategic behavior" models championed by such people as Oliver Williamson and Steven C. Salop, certain phenomena such as economies of scale are not necessarily an unmixed blessing. Often scale economies can be manipulated by firms in such a way as to permit monopoly pricing while discouraging competitive entry.⁶⁵

This new complexity makes it much more difficult for enforcement agencies and particularly for courts to make judgments about whether a particular practice, such as the creation of a very large plant in a market subject to substantial economies of scale,⁶⁶ is competitive or anticompetitive. The likely effect of such complexity will be to make

60. E. CHAMBERLIN, *supra* note 3.

61. *Id.* at 56-57.

62. *See* J. BAIN, *supra* note 30, at 53-113.

63. *See* R. BORK, *supra* note 6, at 312-13.

64. *Id.* at 312-29.

65. *See* Salop, *supra* note 23; Williamson, *Predatory Pricing*, *supra* note 23; *see also* Scherer, *supra* note 23, at 697-704 (arguing that frequently vertical price restraints can be inefficient and anticompetitive).

66. *See In re E. I. du Pont de Nemours & Co.*, 96 F.T.C. 653 (1980) (refusing to find an illegal attempt to monopolize in du Pont's development of a new, lost-cost process for manufacturing a chemical, its refusal to license the process to anyone else, and its construction of a plant large enough to handle all anticipated demand for the chemical).

more room once again for distributive concerns.⁶⁷

III. CHICAGO SCHOOL ANTITRUST AND THE NEOCLASSICAL MARKET EFFICIENCY MODEL

Orthodox Chicago School antitrust policy is predicated on two assumptions about the goals of the federal antitrust laws: (1) the best policy tool currently available for maximizing economic efficiency in the real world is the neoclassical price theory model; and (2) the pursuit of economic efficiency should be the exclusive goal of antitrust enforcement policy.

Both of these statements are controversial. The first one raises several economic questions about the internal integrity of the neoclassical price theory model, as well as questions about the ability of *any* economic model to identify efficient policies in the real world. The second statement is probably contrary to the intent of the Congresses that drafted the various antitrust laws. These criticisms are addressed in subsequent sections of this article.⁶⁸

No attempt is made here to describe the content of the neoclassical market efficiency model. That has been done many times elsewhere.⁶⁹ However, the following discussion summarizes a few of the model's basic assumptions and principles that have been particularly important in Chicago School antitrust scholarship.

(1) Economic efficiency, the pursuit of which should be the exclusive goal of the antitrust laws, consists of two relevant parts: allocative efficiency and productive efficiency.⁷⁰ Occasionally practices that increase a firm's productive efficiency reduce the market's allocative efficiency. For example, construction of a large plant and acquisition of a large market share may increase a firm's productive efficiency by enabling it to achieve economies of scale; however, these actions may simultaneously reduce allocative efficiency by facilitating monopoly pricing. A properly defined antitrust policy will attempt to maximize *net* efficiency gains.⁷¹

67. There is a different possible response to such complexity: in cases of ambiguity assume that a practice is efficient and leave it alone; or alternatively, assume that the effect of an error of underdeterrence will be self-correcting, while one of overdeterrence will not be. Under either assumption the practice in question should not be condemned. See Easterbrook, *Limits*, *supra* note 8, at 2-3. The effect of Professor Easterbrook's argument is to say not merely that efficiency concerns should always trump distributive concerns in antitrust policy, but that distributive concerns are irrelevant even when efficiency consequences are unknown.

68. See text at notes 167-97 & 199-318 *infra*.

69. See, e.g., R. BORK, *supra* note 6, at 90-160; R. POSNER, *supra* note 19.

70. The two are distinguished in the discussion at notes 123-42 *infra*.

71. In Bork's words, "[t]he whole task of antitrust can be summed up as the effort to improve

(2) Most markets are competitive, even if they contain a relatively small number of sellers. Furthermore, product differentiation tends to undermine competition far less than was formerly presumed. As a result, neither high market concentration nor product differentiation are the anticompetitive problems earlier oligopoly theorists believed them to be.⁷²

(3) Monopoly, when it exists, tends to be self-correcting; that is, the monopolist's higher profits generally attract new entry into the monopolist's market, with the result that the monopolist's position is quickly eroded. About the best that the judicial process can do is hasten the correction process.⁷³

(4) "Natural" barriers to entry are more imagined than real. As a general rule investment will flow into any market where the rate of return is high. The one significant exception consists of barriers to entry that are not natural — that is, barriers that are created by government itself. In most markets the government would be best off if it left entry and exit unregulated.⁷⁴

(5) Economies of scale are far more pervasive than economists

allocative efficiency without impairing productive efficiency so greatly as to produce either no gain or a net loss in consumer welfare." R. BORK, *supra* note 6, at 91.

72. The modern Chicago School argument that even highly concentrated markets can perform competitively is made in R. BORK, *supra* note 6, at 179-91; Y. BROZEN, *CONCENTRATION, MERGERS AND PUBLIC POLICY* (1982); J. MCGEE, *IN DEFENSE OF INDUSTRIAL CONCENTRATION* (1971). See also Peltzman, *The Gains and Losses from Industrial Concentration*, 20 J. L. & ECON. 229 (1977).

Judge Posner, whose own antitrust policy is distinctively Chicago School, represents the "new" Chicago approach which is much more cautious about oligopoly than the approach of Brozen, Bork, or McGee. See R. POSNER, *supra* note 19, at 42-50 (arguing that oligopoly pricing, or tacit collusion, can be a significant problem in concentrated markets).

The more traditional argument about the danger of oligopoly pricing in concentrated markets can be found in C. KAYSSEN & D. TURNER, *supra* note 33, at 25-43, which finds a dangerous propensity to oligopoly in markets with an eight-firm concentration level (CR8) of 50% — that is, a market in which the eight largest firms collectively occupy 50% of the market. Such a market could have a largest firm with a market share of as little as 7% and a Hirschman-Herfindahl Index (HHI) reading as low as 500 or 600.

The Justice Department's 1984 Merger Guidelines do not follow the extreme Chicago School theory, but rather reflect a position between the "diehard" Chicago position and the Kaysen-Turner position. The guidelines perceive a real danger of oligopoly performance in markets with an HHI in excess of 1800. 1984 Merger Guidelines, *supra* note 36, at 26,823.

The traditional argument that product differentiation is an important mechanism by which oligopoly firms facilitate monopoly pricing can be found in J. BAIN, *supra* note 30, at 114-43. However, within the tacit collusion model developed by the Chicago School and written into the 1984 Merger Guidelines, product differentiation is regarded as making markets *more* competitive by making collusion more difficult. Thus the Justice Department is *less* likely to challenge a merger in a market in which product differentiation is substantial. 1984 Merger Guidelines, *supra* note 36, at 26,833.

73. See Easterbrook, *Limits*, *supra* note 8, at 2 (arguing that in the long run monopolies correct themselves; the goal of antitrust is merely to "speed up the arrival of the long run").

74. See R. BORK, *supra* note 6, at 310-29; see also Demsetz, *Barriers to Entry*, 72 AM. ECON. REV. 47 (1982); Weiszacker, *A Welfare Analysis of Barriers to Entry*, 11 BELL J. ECON. 399 (1980).

once believed, largely because earlier economists looked only at intra-plant or production economies, and neglected economies of distribution. As a result, many more industries than were formerly thought may operate most economically only at fairly high concentration levels.⁷⁵

(6) Business firms are profit-maximizers. That is, their managers generally make decisions that they anticipate will make the firm more profitable than any alternative decision would. The model would not be undermined, however, if it should turn out that many firms are not profit maximizers, but are motivated by some alternative goal, such as revenue maximization, sales maximization, or "satisficing."⁷⁶ The integrity of the market efficiency model requires only that a few firms be profit-maximizers. In that case, the profits and market shares of these firms will grow at the expense of other firms in the market.⁷⁷

75. The relevant issues are presented in the debate between John S. McGee, representing the Chicago position, and Frederic M. Scherer, representing a more traditional position, in *INDUSTRIAL CONCENTRATION: THE NEW LEARNING* 15-113 (H. Goldschmid, H. Mann & J. Weston eds. 1974).

76. The term "satisficing" refers to a theory of firm behavior that is contrary to the theory of profit maximization adopted by the Chicago School today. A firm "satisfices" when its management adopts a certain goal for profits, sales, or market share and then tries to meet the goal but not necessarily to exceed it. The theory posits that initially the firm's management will not be inclined to set an extremely high goal, because if they later fail to achieve it they will appear to the stockholders to be failures. Furthermore, once the goal is established the stockholders will demand an even higher goal in the future, and that higher goal will then be more difficult to achieve.

The theory of satisficing is part of a more general theory of the firm, which hypothesizes that the owners of capital (stockholders) and the managers of capital may have different motives, and that this circumstance makes the firm less efficient than the Chicago School would have us believe.

77. See R. POSNER & F. EASTERBROOK, *ANTITRUST: CASES, ECONOMIC NOTES AND OTHER MATERIALS* 855-57 (2d ed. 1981). A good discussion of some of the alternatives to profit-maximization is contained in P. ASCH, *ECONOMIC THEORY AND THE ANTITRUST DILEMMA* 90-101 (1970).

The classic book arguing that the separation of ownership and management in the large business corporation has encouraged firms to pursue goals other than profit maximization is A. BERLE, JR. & G. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* (1932). See the symposium on the Berle and Means study, much of it written from a Chicago School perspective, in 26 *J. L. & ECON.* 235 (1983).

Those who believe that most firms are not profit-maximizers have the additional obligation of demonstrating why that fact should be relevant to antitrust policy. For one valiant but ultimately inconclusive attempt to demonstrate such relevance, see Kaplow, *supra* note 23, at 550-52. One possibility, of course, is that the antitrust laws should protect firms from the consequences of their own inefficient behavior. More plausibly, perhaps the antitrust laws should protect outsiders from non-profit-maximizing behavior which injures the actor, but also injures those with whom the actor deals.

The theory that firms are not rational profit-maximizers can be used to provide explanations for why firms do certain things that seem irrational. For example, see R. LAFFERTY, R. LANDE, & J. KIRKWOOD, *IMPACT EVALUATIONS OF FEDERAL TRADE COMMISSION VERTICAL RESTRAINTS CASES* 11-13 (1984), a recent Federal Trade Commission study of vertical restraints finding that at least one firm used vertical restrictions such as resale price maintenance in order to gain access to the market — that is, in order to purchase shelf space from retailers who would be unwilling to display new merchandise unless they could be guaranteed a high profit. The

(7) Antitrust enforcement should be designed in such a way as to penalize conduct precisely to the point that it is inefficient, but to tolerate or encourage it when it is efficient.⁷⁸ During the Warren Court era, antitrust enforcement was excessive, and often penalized efficient conduct.⁷⁹

(8) The decision to make the neoclassical market efficiency model the exclusive guide for antitrust policy is nonpolitical.

The "neoclassical" nature of the Chicago School model is well illustrated by the list. The classical model originated before the rise of Big Government during the New Deal, and therefore before the State had become explicitly involved in the redistribution of social wealth. In the eighteenth century the redistribution of wealth was not perceived to be an important state function.⁸⁰ Within the market efficiency model, wealth distribution is not an "economic" concern at all.⁸¹

The Chicago School market efficiency model represents an explicit rejection of several revisionist economic theories which themselves had rejected various elements of the classical model. For example, the theory that firms in highly concentrated markets fail to perform competitively was a qualification of the naive classical model, which treated all firms as absolute price takers.⁸² Orthodox Chicagoans such as Robert

study found, however, that the restrictions often persisted after the firm imposing them had become well-established and the restrictions actually reduced the firm's profits. *Id.* at 13. They were preserved largely as a result of managerial nonresponsiveness to the changed situation. In such a case it appears that the restrictions may have been procompetitive when they were first employed by a struggling new entrant, but were inefficient when the firm later became established. See also Kaplow, *supra* note 23, at 551-52 (arguing that firms may employ tying arrangements in order to increase revenues, rather than profits).

Whether "self-detering" inefficient conduct should be condemned by the antitrust laws is a matter of some controversy. See Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263, 331-32 (1981) (arguing that predatory pricing should not be condemned until after it has succeeded); Williamson, *Antitrust Enforcement*, *supra* note 23, at 312 (suggesting that certain instances of failed attempts at predatory pricing could be condemned).

78. See Landes, *Optimal Sanctions for Antitrust Violations*, 50 U. CHI. L. REV. 652 (1983); Schwartz, *An Overview of the Economics of Antitrust Enforcement*, 68 GEO. L.J. 1075 (1980); see also K. ELZINGA & W. BREIT, *THE ANTITRUST PENALTIES: A STUDY IN LAW AND ECONOMICS* (1976); H. HOVENKAMP, *supra* note 17, at 379-407.

79. See Easterbrook, *Is There a Ratchet in Antitrust Law?*, 60 TEXAS L. REV. 705, 714 n.42 (1982).

80. The State may, however, have redistributed wealth through court decisions rather than by means of taxation and social programs. See M. HORWITZ, *supra* note 59, at 99-101.

81. See text at notes 95-105 *infra*.

82. For example, there is no well-developed theory of oligopoly in A. SMITH, *supra* note 42, or in A. MARSHALL, *supra* note 42. With the exception of Cournot's simple oligopoly theory developed in 1838, modern economic theories of oligopoly are a product of the 1890s and the first three decades of the twentieth century. See A. COURNOT, *RESEARCHES INTO THE MATHEMATICAL PRINCIPLES OF THE THEORY OF WEALTH* (N. Bacon trans. 1897) (1st ed. Paris 1838). In chronological order, the major historical contributions to the theory of oligopoly through the 1930s were Bertrand, *Theorie Mathematique de la Richesse Sociale*, 1883 JOURNAL DES SA-

Bork have come close to rejecting the theory of oligopoly outright.⁸³

Likewise, the classical model never seriously questioned that the firm's principal economic goal is the maximization of its profits. The arguments of Berle and Means,⁸⁴ who believed that firms do not maximize profits, were a product of the social science movement and Legal Realism of the 1930s and their attendant injection of sociological and psychological principles into theories about firm behavior.⁸⁵ Within the Chicago School model humankind's economic motives "trump" any noneconomic motives or else these noneconomic motives are irrelevant to the working of the model.⁸⁶

Classical price theory was not heavily concerned with the "conditions of entry" that might permit incumbent firms to earn monopoly profits while outsiders were deterred from coming in.⁸⁷ To the extent entry barriers were considered in antitrust economics before the 1950s, they were generally "barriers" created by the firms themselves — such as covenants not to compete contained in monopolists' purchase and sale contracts, lease-only policies and maintenance clauses that allegedly reduced the entry opportunities of independent competitors,⁸⁸ or entry deterrence through predatory pricing.⁸⁹ The notion that the market might contain "natural" barriers to entry — that is, barriers inherent in the technology or economic structure of the market, and not products of the dominant firm's strategic decisionmaking — was first elaborated in the 1940s and 1950s.⁹⁰ One of the significant accomplishments of the Chicago School has been its debunking of the notion

VANTS 499; F. EDGEWORTH, *The Pure Theory of Monopoly*, in PAPERS RELATING TO POLITICAL ECONOMY 111 (1925; originally published in French in 1897); Hotelling, *Stability in Competition*, 39 ECON. J. 41 (1929); E. CHAMBERLIN, *supra* note 3.

83. R. BORK, *supra* note 6, at 92.

84. *See* note 77 *supra*.

85. *See* E. PURCELL, *THE CRISIS OF DEMOCRATIC THEORY: SCIENTIFIC NATURALISM & THE PROBLEM OF VALUE* 86-87 (1973); Kirkendall, *A.A. Berle, Jr.: Student of the Corporation, 1917-1932*, 35 BUS. HIST. REV. 43 (1961).

86. That is, the Chicago School model may allow that occasionally firms or actors in them make decisions not motivated by profit-maximization. However, these decisions are either random and incapable of being fit into the profit-maximization model, or else they are of no consequence to antitrust policy because they are self-detering. A firm that does not make profit-maximizing decisions will, other things being equal, lose market share to one that does.

87. Likewise, Alfred Marshall's *Principles of Economics* generally assumes that entry is free, although he did acknowledge that entry takes time and that monopoly profits could be earned during the interval. A. MARSHALL, *supra* note 42, at 411.

88. For example, see the consideration of entry barriers in *United States v. United Shoe Mach.*, 110 F. Supp. 295, 312-20, 323-25 (D. Mass. 1953), *affd. per curiam*, 347 U.S. 521 (1954).

89. *See* McGee, *Predatory Price Cutting: the Standard Oil (N.J.) Case*, 1 J. L. & ECON. 137 (1958).

90. Principally in J. BAIN, *supra* note 30.

that the world is filled with such "natural" entry barriers.⁹¹ Barriers, when they exist, are generally artificial, created by either the government or else by the dominant, incumbent firms. The Chicago School has been quick to recognize the role of the State in the creation of entry barriers.⁹² This paper later argues, however, that Chicagoans have often been slow to recognize the strategic creation of entry barriers by incumbent firms.⁹³

Perhaps most significantly, Chicago School price theory adheres closely to the classical school's strong preference for a "free" market — that is, a market left alone by the State and its agencies unless a powerful reason exists for interfering.⁹⁴ Each of the "deviations" from the classical model described above — the oligopoly theory, the rejection of the profit-maximization theory, the entry barrier theory, and most importantly, the theory that the State should actively redistribute wealth — suggested increasing amounts of government intervention in the market process. In rejecting these theories, the Chicago School has restored the State to the position of neutral umpire, which it held in the classical model.

Finally, a word must be said about the eighth premise in the above list — the suggestion that Chicago School antitrust policy is "nonpolitical."⁹⁵ The classical market economist's notion of efficiency purports to evaluate states of affairs on the basis of criteria that have nothing to do with the way wealth is distributed.⁹⁶ The principle of potential Pareto efficiency or wealth maximization,⁹⁷ which guides Chicago School antitrust analysis, identifies a policy as "efficient" if total gains experienced by all those who gain from the policy are greater than the total losses experienced by all those who lose. The *identity* of the gainers and losers is irrelevant. If a policy produces bigger gains to businesses than it does losses to consumers, the Chicago School would approve the policy as efficient. However, it would also approve a policy that produced larger gains to consumers than losses to businesses. For this reason the Chicago School ideologist can

91. The strongest statement of the Chicago School position on entry barriers is probably R. BORK, *supra* note 6, at 310-29. See also Demsetz, *supra* note 74; R. POSNER, *supra* note 19, at 59; G. STIGLER, *supra* note 10, at 67-70.

92. See R. BORK, *supra* note 6, at 310-29.

93. See text at notes 247-55 *infra*.

94. A good statement of the position is Easterbrook, *Limits*, *supra* note 8, especially at 2-3, 5-7, 9.

95. See R. BORK, *supra* note 6, at 418-25; R. POSNER, *THE ECONOMICS OF JUSTICE* 92-94 (1981); Bork, *The Rule of Reason and the Per Se Concept: Price Fixing and Market Division*, 74 *YALE L.J.* 775, 831-32 (1965). See generally Pitofsky, *supra* note 12, at 1051.

96. See generally Hovenkamp, *supra* note 18.

97. See text at notes 135-42 *infra*.

argue that he is not taking sides in any political dispute about how wealth or entitlements from the State ought to be distributed to conflicting interest groups. Such things should always go where they will do the most *net* good.⁹⁸

Outsiders regard this Chicago School claim of freedom from political interest with a good deal of skepticism, and some believe it to be simple hogwash, or perhaps even a cover for a very strong, probusiness political bias that works to the benefit of the rich.⁹⁹

The claim that a particular policy has managed to transcend politics is both appealing and dangerous. Its appeal is that it permits the creation of a stable policy that will not change with every substantial change in political leadership.¹⁰⁰ Antitrust policy has been particularly susceptible to such changes. The danger, on the other hand, is that the assertion takes a particular policy out of the political process — which means, in the case of a democracy, that it is taken out of the democratic process. At the extreme, as is argued below, Chicago School policy does exactly that and permits the antitrust policymaker to ignore the legislative history of the antitrust laws.¹⁰¹

To be sure, within the American constitutional system we *do* attempt to exempt certain claims from democratic control — for example, claims involving the right to speak or the right to be free of discrimination based on one's race or gender.¹⁰² At one time Americans came very close to having a constitutional right to a free market, governed pretty much by the neoclassical market efficiency model.¹⁰³ Today, however, a large literature argues that the constitutional doctrine of "liberty of contract" was anything but nonpolitical; on the contrary, it was a shrewd and calculated use of the political process to protect an established set of political interests from being displaced by

98. See note 58 *supra*.

99. Good examples of this kind of criticism are Horwitz, *Law and Economics: Science or Politics?*, 8 HOFSTRA L. REV. 905 (1980); Kennedy, *Cost-Benefit Analysis of Entitlement Problems: A Critique*, 33 STAN. L. REV. 387 (1981). For a critique of Kennedy's argument, see Markovits, *Duncan's Do Nots: Cost-Benefit Analysis and the Determination of Legal Entitlements*, 36 STAN. L. REV. 1169 (1984).

100. Bork, *supra* note 95, at 832.

101. See text at notes 167-98 *infra*.

102. See J. ELY, *DEMOCRACY AND DISTRUST: A THEORY OF JUDICIAL REVIEW* 73-104 (1980). See generally R. DWORKIN, *TAKING RIGHTS SERIOUSLY* (1977).

103. See *Murphy v. Sardell*, 269 U.S. 530 (1925) (striking down a state minimum wage statute under the fourteenth amendment); *Adkins v. Children's Hosp.*, 261 U.S. 525 (1923) (striking down a District of Columbia minimum wage statute under the fifth amendment); *Lochner v. New York*, 198 U.S. 45 (1905) (striking down under the fourteenth amendment due process clause a New York statute that prohibited bakers from working more than ten hours per day or sixty hours per week).

new political interests.¹⁰⁴

Within the liberal tradition, policy claims have often been defended with an argument that they are nonpolitical — that is, that they are somehow “best” for everyone, and not merely for the interest groups making the claims.¹⁰⁵ The problem with all such arguments is that they can be neither verified nor falsified in any general way. That is equally true of the claim that the market efficiency model is nonpolitical. Furthermore, it is easy to identify the beneficiaries of Chicago School antitrust policy — probably big business, certainly vertically integrated firms, perhaps some consumers. Likewise, one can predict that small businesses, less efficient firms, and perhaps some other consumers will be losers. However, we do not have the tools to quantify these gains and losses and net them out over all of society except in very easy cases. That leaves us with only the *claim* to political transcendence. Historically, many ideologies have made that claim, but none have been able to convince the rest of the world.

IV. CHICAGO SCHOOL ANTITRUST POLICY: CRITICISM FROM OUTSIDE THE MODEL

The neoclassical market efficiency model is designed to identify the prerequisites for efficient market performance, and to explain how deviations from perfect competition affect market efficiency. Given certain assumptions, the model can identify the efficiency consequences of certain behavior. For example, given an assumption of zero transaction costs, it predicts that vertical restrictions do not increase a firm's ability to earn monopoly profits.¹⁰⁶

The application of the market efficiency model to federal antitrust

104. See, e.g., L. FRIEDMAN, *A HISTORY OF AMERICAN LAW* 358-62 (2d ed. 1985); M. HORWITZ, *supra* note 59, at 259-66; P. MURPHY, *THE CONSTITUTION IN CRISIS TIMES 1918-1969*, at 41-67 (1972); A. PAUL, *CONSERVATIVE CRISIS AND THE RULE OF LAW: ATTITUDES OF BAR AND BENCH, 1887-1895*, at 1-81 (1960). Holmes, a contemporary observer, agreed:

When socialism first began to be talked about, the comfortable classes of the community were a good deal frightened. I suspect that this fear has influenced judicial action both here and in England I think that something similar has led people who no longer hope to control the legislatures to look to the courts as expounders of the Constitutions, and that in some courts new principles have been discovered outside the bodies of those instruments, which may be generalized into acceptance of the economic doctrines which prevailed about fifty years ago

Holmes, *The Path of the Law*, 10 HARV. L. REV. 457, 467-68 (1897).

105. See, e.g., R. DWORKIN, *supra* note 102; J. ELY, *supra* note 102; J. RAWLS, *A THEORY OF JUSTICE* (1971); Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 HARV. L. REV. 1 (1959).

106. See R. BORK, *supra* note 6, at 280-98, 365-81; Posner, *The Next Step in Antitrust Treatment of Restricted Distribution: Per Se Legality*, 48 U. CHI. L. REV. 6 (1981). The only likely exception to the statement in the text is that vertical restrictions may enable a firm to engage in price discrimination. See Scherer, *supra* note 23; Hovenkamp, *supra* note 56, at 548-59.

policy can be faulted for reasons that have nothing to do with the internal logic or completeness of the model itself, but rather with the premises upon which the model is based and the conclusions that flow from it. The model may solve its own problems very well, but nevertheless not be a very useful guide to antitrust policymaking. Such criticisms can generally be grouped into two types: (1) criticisms that, although the model's definition of "efficiency" serves the model's own purposes very well, it is different from any concept of "efficiency" that realistically can be applied to policymaking in the real world — more particularly, in a real world democracy,¹⁰⁷ and (2) criticisms that "efficiency" cannot be the only relevant factor in real world policymaking; or alternatively, that any argument to that effect rests on premises that can be neither verified nor falsified. These are criticisms from "outside" the model.

Any critique of Chicago School antitrust policy that begins from these premises must proceed very carefully if antitrust is not to become a meaningless hodge-podge of conflicting, inconsistent, and politicized mini-policies. One of the great achievements of Chicago School antitrust policy based on the market efficiency model is a claim to consistency that cannot be made by any alternative approach that requires the "balancing" of competing interests, such as consumer welfare and small business welfare.¹⁰⁸ At the same time, the Chicago School's claim of a unified, internally consistent, and nonpolitical antitrust policy rests on premises whose soundness and application to the real world are not self-evident.

Some of these criticisms are addressed in a substantial economic literature, although most have not been developed at any length in antitrust scholarship. Economists continue to debate many of these issues, however, largely because they involve premises that can be neither proven nor disproven, at least not to everyone's satisfaction. In short, these issues involve the "statements of faith" made by economists — statements which often reflect, in Lindley Fraser's words, the "individual temperaments" of the people who make them.¹⁰⁹ Every economist, including the Chicago School economist, whose commitment to positivist methodology is probably exceeded by no one,¹¹⁰ ultimately rests his case on such statements of faith. Even the Chicago

107. See text at notes 133-54 *infra*.

108. For an attempt at such balancing, see Fox, *supra* note 12.

109. L. FRASER, *ECONOMIC THOUGHT AND LANGUAGE* 36 (1937).

110. Simply, a positivist scientific methodology is one that attempts to avoid metaphysical speculation by restricting scientific inquiry to those things that can be either verified or falsified from sensory experience. See generally K. POPPER, *THE LOGIC OF SCIENTIFIC DISCOVERY* (1959).

School policymaker assumes *some* things that could be assumed the other way by equally rational minds. Importantly, if these premises are given up, the Chicago School model falls apart.

Scientific models — and economic models are no exception — rest ultimately on unprovable premises. For example, every model that purports to explain the external world rests on the essential premise that our senses provide us with accurate information.¹¹¹ The researcher doing “normal science” — science within the confines of the model — generally accepts such premises as given and forgets about them.¹¹² Verifying them or disproving them is not a part of her research agenda.

The public policymaker, however, cannot always make such facile assumptions. As a general rule the policymaker assumes the less controversial premises — such as that our senses give us reliable information — but is forced by the political process continually to question the controversial ones. They are capable of being questioned, people question them daily, and because contrary assumptions give very different political results, someone is always around to assert them.

For example, the Chicago School assumes that welfare can be measured in constant dollars, so that a transfer of a dollar from a consumer to a monopolist has no welfare implications.¹¹³ This (unprovable) assumption performs many essential functions in the Chicago School framework. Intellectually, it helps the academic employing the market efficiency model to distinguish between the “deadweight loss” and the “wealth transfer” caused by the existence of monopoly in the market system.¹¹⁴ Secondly, it permits the Chicago School antitrust policymaker to justify a “nonpolitical” approach to antitrust, which distinguishes between politically neutral efficiency gains, and politicized wealth transfers.¹¹⁵ Finally, and most important, the “constant dollar” welfare assumption forms the chief basis for the notion that antitrust should be concerned with the deadweight loss caused by monopoly or the costs that the monopolist incurs in attaining or maintaining its monopoly position, but should disregard the wealth transferred from consumers, suppliers or rivals to the monopolizing firm.¹¹⁶ These principles are absolutely essential to Chi-

111. This concern dominates A.J. Ayer's recent book *Philosophy in the Twentieth Century* (1982).

112. See T. KUHN, *supra* note 13, at 10-42.

113. The assumption is defended in R. POSNER, *supra* note 95, at 48-87.

114. See H. HOVENKAMP, *supra* note 17, at 19-24.

115. See text at notes 95-105 *supra*.

116. For example, see R. BORK, *supra* note 6, at 111-12. See generally Posner, *The Social Cost of Monopoly and Regulation*, 83 J. POL. ECON. 807 (1975).

Chicago School antitrust analysis. In fact, Chicago School antitrust policy would lose its identity without them.

However, the constant dollar welfare assumption is both unprovable and quite controversial. One of the most significant debates in welfare economics this century has raged between the marginalist, or material welfare, school¹¹⁷ and the ordinalist school. The former believed that measurement of utility across individuals was both possible and essential to policymaking, while the latter believed that such "interpersonal comparisons" of utility were impossible. Chicago School welfare economics, which substitutes "wealth maximization" for utility and measures welfare in constant dollars, rests on the ordinalist premise that no one can compare the amount of welfare, or satisfaction, that is created by giving a dollar to a poor person, with the amount that is created by giving the same dollar to someone who is wealthy. Chicago School economic policymaking responds by making the assumption (just as unprovable as the ordinalist principle itself) that a dollar given to one person must be treated for policy purposes as creating the same amount of welfare as a dollar given to someone else.¹¹⁸

Recent scholarship has argued, however, that the ordinalist critique of the material welfare school missed the point of that school by substituting a different notion of utility.¹¹⁹ To be sure, interpersonal comparisons of utility are impossible if one must compare the *subjective* pleasure that one person receives from receiving, say, a dollar or a pair of opera tickets, with the pleasure that someone else might receive from the same gifts. However, the material welfare school measured utility *objectively* rather than subjectively. Furthermore, the objective criteria that it used were closely tied with such empirically measurable factors as productivity, which are the kind of data upon which the

117. The term "material welfare" school used here comes from Cooter & Rappoport, *Were the Ordinalists Wrong About Welfare Economics?*, 22 J. ECON. LIT. 507, 512 n.14 (1984).

118. See Markovits, *A Basic Structure for Microeconomic Policy Analysis in Our Worse-than-Second-Best World: A Proposal and Related Critique of the Chicago Approach to the Study of Law and Economics*, 1975 WIS. L. REV. 950, 984. Markovits notes that the basis for many economists' profession of indifference toward wealth transfers is the assumption that utility cannot be compared across persons. The conclusions to be drawn from such an assumption vary; however, the Chicago School appears to conclude that, since no assumption can be made that a dollar is worth more to one person than to another, they are entitled to assume that a dollar is worth the same to everyone. Markovits characterizes this assumption as "heroic." *Id.* at 987.

A large literature supporting the thesis that mere wealth transfers cannot effect a welfare improvement rests on the premise that utility cannot be quantified and compared across individuals. See L. ROBBINS, *AN ESSAY ON THE NATURE & SIGNIFICANCE OF ECONOMIC SCIENCE* (2d ed. 1935); Hicks & Allen, *A Reconsideration of the Theory of Value* (pts. 1 & 2), 1 *ECONOMICA* 52, 196 (1934). The literature, as well as the relevant economic issues, are summarized in Cooter & Rappoport, *supra* note 117, at 520-26.

119. See generally Cooter & Rappoport, *supra* note 117.

public policymaker must rely.¹²⁰ For example, the policymaker might make the empirical observation that a sum of money given to a poor person might enable the poor person to educate herself or buy an automobile, while the same sum given to a wealthy person would have no measurable effect on the wealthy person's behavior.¹²¹

This critique of ordinalist assumptions undermines any notion that the policymaker *must* regard wealth transfers as welfare neutral. The policymaker might just as easily assume that a dollar paid in wages to a consumer creates more welfare than a dollar paid in dividends to the shareholders of a monopoly corporation or in bonuses to its managers.¹²² Perhaps more important for antitrust purposes, he might also assume that the profits earned by a small family business contribute more to total welfare than an equal amount of profits earned by a very large firm. If "welfare" is defined objectively in such cases, by measured changes in behavior that result from a particular allocation of resources, the policymaker could quite easily produce empirical data that would support the claim.

In short, the fact that within the ordinalist model "efficiency," or welfare, is distinct from wealth distribution, does not require the policymaker to regard distributional concerns as irrelevant to antitrust policy. The market efficiency model in this case rests on an unverified assumption that the policymaker may find unconvincing and inappropriate. As a result, a *value* decision must still be made about whether wealth transfers are to be ignored in antitrust policymaking. If the policymaker decided that monopoly wealth transfers *do* affect welfare and that the antitrust laws are as good a legislative mechanism as any to deal with this problem, he would find plenty of economic argument — also supported by unprovable premises — to back him up.

A. *Efficiency: Inside and Outside the Model*

Economists use the word "efficiency" in several ways.¹²³ They may mean productive efficiency, which is a ratio between the amount of a

120. *Id.* at 509.

121. *See generally id.* at 515 n.21 (noting that the validity of objective interpersonal comparisons is "a theme of current philosophical inquiry").

122. Cooter and Rappoport argue very convincingly that the great debate in welfare economics between the cardinalists, who assumed that interpersonal comparisons of utility are possible, and ordinalists, who denied such a possibility, was really semantic. In fact, interpersonal comparisons of utility are possible if utility is measured objectively, in terms of what the "average" or "typical" person or class of persons desires, or alternatively, in terms of the effect of particular wealth transfer on *observed* behavior. However, such comparisons are impossible if utility is measured subjectively, in terms of what individual people actually want. *Id.* at 526-28.

123. *See, e.g.,* F. SCHERER, *supra* note 50, at 13-20 ("allocative" efficiency), 302-03 ("productive" efficiency), 20-21, 464-66 ("X-inefficiency").

firm's inputs and the amount of its outputs. The firm that can produce a widget worth one dollar with inputs costing ninety cents is more efficient in this sense than the firm that requires inputs costing one dollar to produce the same widget.

The classical price theory model has many things to say about productive efficiency. For example, it says that in a competitive market price will be established by the costs of the "marginal" firm, or the least efficient firm capable of sustaining production and selling at a price equal to or greater than its costs.¹²⁴ That firm will make roughly zero economic profits, while any firm in the market whose productive efficiency is greater will earn some economic profits. The model also tells us that practices such as vertical integration or mergers that increase a firm's productive efficiency will permit the firm to cut its price and increase its market share, or else make higher profits at the same price. Once the practice that creates productive efficiency is copied by competitors, the price will be driven down to a new marginal cost lower than the marginal cost before the efficiency-creating practice came into existence.¹²⁵

Even within the Chicago School paradigm, productive efficiency is not perceived to be a dominant concern of the antitrust laws, except in a negative sense.¹²⁶ Chicago School antitrust policy encourages productive efficiency merely by refusing to make increases in productive efficiency a reason for condemning certain practices¹²⁷ and by approving practices that are unlikely to increase a firm's market power and are likely to increase productive efficiency.¹²⁸ Under the Chicago School theory the market itself, not the antitrust laws, punishes productive inefficiency by loss of profits, loss of market share, or in extreme cases, forced exit from the market.¹²⁹ If a firm engages in a practice that raises its own costs above those of its competitors, that should be of no general concern to the antitrust laws, unless the prac-

124. This will generally be true only if the low-cost inputs enjoyed by the more efficient firms are incapable of being duplicated. If the low-cost inputs can be duplicated competition will force other firms to duplicate the low-cost input as well and the price will decrease. See H. HOVENKAMP, *supra* note 17, at 81.

125. See generally Bork, *Vertical Integration and the Sherman Act: the Legal History of an Economic Misconception*, 22 U. CHI. L. REV. 157 (1954).

126. For example, even Chicago School scholars are skeptical about the creation of an "efficiency defense" in merger cases, because the judicial task of measurement would be too complicated. See Hovenkamp, *Merger Actions for Damages*, 35 HASTINGS L.J. 937, 946-47 (1984).

127. The Supreme Court violated this rule in some Warren era cases such as *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962), where it condemned a merger *because* the postmerger firm was able to take advantage of efficiencies that enabled it to undersell smaller rivals. See 370 U.S. at 344.

128. See R. BORK, *supra* note 6, at 91.

129. See Easterbrook, *Limits*, *supra* note 8, at 24.

tice also increases the firm's market power or raises the overall price level in the market.¹³⁰

The Chicago School theory that antitrust policy generally ought to permit firms to maximize their own productive efficiency¹³¹ is not particularly controversial today. The more serious difficulty with Chicago School policy concerning efficiency is its insistence that the *exclusive* goals of the antitrust laws should be to maximize net *allocative* efficiency, and that the classical price theory model can define the circumstances under which this will occur.¹³²

Allocative efficiency is a much more global kind of efficiency than is productive efficiency. Allocative efficiency refers to the welfare of society as a whole. Situation *A* is more allocatively efficient than situation *B* if affected people as a group are somehow better off under *A* than they are under *B*.

The classic definition of allocative efficiency was provided by Vilfredo Pareto in 1909.¹³³ Under the Pareto definition, a situation is efficient, or "Pareto optimal," if no change from that situation could make someone better off without also making at least one other person worse off. Likewise, a given situation *A* is "Pareto superior" to situation *B* if the move from *B* to *A* does in fact make at least one person better off without making another person worse off.

The Pareto definition of allocative efficiency imposes such a strict requirement on efficiency-based policymaking that its conditions can virtually never be fulfilled. Nearly all policy changes fail to be allocatively efficient under the Pareto test. For example, the adoption of a rule condemning bank robbery is not a Pareto superior move from a situation in which bank robbery is tolerated, because people who profit from robbing banks are made worse off by the rule change. Nonetheless, most people would probably agree that society as a whole is somehow better off if bank robbery is forbidden.¹³⁴

Because of this severe practical limitation in the Pareto efficiency criterion, efficiency-based policymaking must generally be guided by some notion of efficiency other than orthodox Pareto efficiency. The most common alternative, generally advocated by the Chicago School, is "potential" Pareto efficiency, sometimes called Kaldor-Hicks effi-

130. Productive inefficiency might become an antitrust concern if a firm does something that raises its own costs, but that raises rivals' costs even more. See text at notes 289-307 *infra*.

131. See R. BORK, *supra* note 6, at 91.

132. See *id.*; R. POSNER, *supra* note 19, at 8-22.

133. V. PARETO, *MANUEL D' ECONOMIE POLITIQUE* (1909).

134. See Hovenkamp, *supra* note 18, at 9.

ciency.¹³⁵ A change is efficient in the potential Pareto sense if the gains experienced by those who gain from the change are larger than the losses experienced by those who lose due to the change. Such a change is said to be "potential" Pareto efficient because it could be turned into a pure Pareto efficient move if the gainers would compensate the losers out of their gains. If that occurred, then the losers would be no worse off, because they would have been fully compensated. However, the gainers would still be better off, because they have something left over after they have paid the compensation. Importantly, the potential Pareto criterion does not require the gainers actually to compensate the losers. That would be a distributive concern. The move is "potential" Pareto superior if the gainers could compensate the losers fully and still have some gains left over.¹³⁶

Unfortunately, the move from orthodox Pareto efficiency to potential Pareto efficiency as an efficiency norm for policymakers comes with a very large cost. The rigor of the orthodox Pareto criterion meant that real world changes seldom or never fulfilled its conditions; however, it also made a true Pareto improvement — or, more realistically, a change that was not a true Pareto improvement — relatively easy to identify. A change was a Pareto improvement if no one objected to it. On the other hand, if at least one person objected, then the change was presumptively *not* Pareto superior.¹³⁷

The potential Pareto criterion, however, requires the policymaker not only to *identify* all those who gain and lose from a particular change, but also to *quantify* their individual gains and losses, sum them, and net them out against each other in order to determine whether the net effect is a social gain or a social loss. Even if welfare can be measured in constant dollars,¹³⁸ it is by no means clear that the policymaker is up to this task.

To be sure, perhaps in extreme cases it may be fairly clear that a certain policy change is efficient or inefficient under the potential Pareto criterion. For example, the adoption of a rule condemning child molesting is probably efficient, while the adoption of a rule condemning singing in the shower is probably inefficient. However, in the vast middle range of cases — the "controversial" cases where political interests line up on both sides of the question — the identification of the "efficient" rule under the potential Pareto criterion is unclear.¹³⁹

135. R. POSNER, *supra* note 95, at 91.

136. *Id.* at 91-92.

137. *Id.* at 88.

138. *See* text at notes 116-22 *supra*.

139. For example, see Stigler, *The Origin of the Sherman Act*, 14 J. LEGAL STUD. 1 (1985), in

The market efficiency model provides considerable *conceptual* guidance in identifying efficient rule changes, provided that one accepts the limitations imposed by the model itself. For example, it can easily be shown that the move from competition to monopoly in a particular market is inefficient by the potential Pareto criterion. Although the amount of lost consumers' surplus is offset in part by a gain in producers' surplus, over and above this is a "deadweight loss" which entails that the net losses caused by monopoly are larger than net gains.¹⁴⁰

However, the ease with which allocative efficiency can be quantified within the confines of the market efficiency model belies the many complexities of measurement in the real world.¹⁴¹ For one thing, in a market economy every change imposed on one market affects dozens of other markets as well. Furthermore, the allocative effects of monopoly in multiple markets may tend to cancel each other out. In that case it is not at all clear that the elimination of monopoly in a single market will be Pareto efficient. Although the *existence* of such problems of "second-best" is widely accepted, the degree to which the problem frustrates the pursuit of allocative efficiency in the real world is quite controversial.¹⁴²

Problems of second-best may be so overwhelming and so hypothetical that the antitrust policymaker is well off to avoid them.¹⁴³ Other external problems of the market efficiency model are not so easy to ignore, however. The model fails to account for preferences that peo-

which a leading Chicago School economist attempted to measure the support and opposition to the Sherman Act but was able to produce only very ambiguous conclusions, even though the Sherman Act was one of the least controversial statutes ever passed by Congress. *See also* Markovits, *supra* note 23, at 45.

140. *See* R. POSNER, *supra* note 95, at 91-92. Once again, however, the illustration assumes that welfare can be measured in constant dollars.

141. Some of the problems are summarized in Markovits, *supra* note 23, at 45-49; Markovits, *Monopolistic Competition, Second Best, and The Antitrust Paradox: A Review Article*, 77 MICH. L. REV. 567, 570 (1979) (reviewing R. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* (1978)).

142. The literature on problems of second-best is extensive, and economists differ widely about the degree to which second-best problems frustrate any real-world policy of improving allocative efficiency. For an argument that second-best problems are substantial and generally make it impossible for the policymaker to know that an efficiency gain in one market will yield an overall efficiency gain, see Markovits, *supra* note 118, at 967-77. For arguments that second-best problems should be ignored, unless it is quite obvious that increased competition in one market is causing greater efficiency losses in a second market, see Baumol, *Informed Judgment, Rigorous Theory and Public Policy*, 32 S. ECON. J. 137, 144 (1965); Williamson, *Assessing Vertical Market Restrictions: Antitrust Ramifications of the Transaction Cost Approach*, 127 U. PA. L. REV. 953, 987 (1979). However, all these arguments are not "proofs" at all; rather, they should appropriately be regarded as "statements of faith" that an efficiency improvement in one market must, as a general rule, make all of society better off.

143. For a truly pessimistic conclusion, suggesting that second-best problems might be so substantial that they would undermine any policy search for allocative efficiency, see F. SCHERER, *supra* note 50, at 28.

ple do not express with their dollars — for example, a distrust of large concentrations of economic or political power in private hands, or perhaps even a preference for more expansive opportunities for small business.¹⁴⁴ As a general rule, these preferences have been considered even by supporters to be “noneconomic” — that is, as goals that have nothing to do with the public welfare.¹⁴⁵ Likewise, Chicago School scholars who advocate an exclusively “economic” approach to antitrust policy exclude such goals as being “noneconomic” or as somehow inconsistent with the notion that the antitrust laws ought to maximize allocative efficiency.¹⁴⁶

Such reasoning is based on the irrational assumption that people do not place a value on these asserted “noneconomic” goals. The reasoning is irrational because the fact that people are willing to assert such goals, and that political dialogue in the United States is heavily loaded with references to them,¹⁴⁷ indicates that people do indeed value such things as the diffusion of privately held economic or political power or the preservation of small business opportunity. That these goals are so prominent in the legislative history of the antitrust laws¹⁴⁸ as well as in the more general American democratic and egalitarian ideology¹⁴⁹ illustrates clearly enough that some people value them greatly. The concept of allocative efficiency or wealth maximization must include *everything* to which people assign a value. If a regime of small businesses is worth anything to anybody, then it deserves to be calculated into the equation offsetting the costs and benefits of a given antitrust policy. In that case, the antitrust policy of protecting small business is very much an “economic” goal.

Why are goals such as the preservation of small business or the diffusion of power, which some Americans clearly value, not even entitled to inclusion in the Chicago School cost-benefit calculus? The answer, it appears, is that Americans, no matter how strongly they might state those preferences in other contexts, fail to vote them with their dollars. People may prefer small business or resent political power in the abstract, and they may make or applaud political speeches to the same effect, but when the time comes to make purchase decisions, they

144. Such concerns are summarized in Pitofsky, *supra* note 12; Schwartz, *supra* note 12.

145. See Schwartz, *supra* note 12.

146. See, e.g., R. BORK, *supra* note 6, at 50-56; R. POSNER, *supra* note 19, at 19-20.

147. See Berthoff, *Independence and Enterprise: Small Business in the American Dream*, in *SMALL BUSINESS IN AMERICAN LIFE* 28-48 (S. Bruchey ed. 1980). See Schwartz, *supra* note 12, for citation of a substantial list of federal statutes concerned with the welfare of small business.

148. See H. HOVENKAMP, *supra* note 17, at 50-54; see also text at notes 167-76, *infra*.

149. See note 147 *supra*.

invariably look for the best product at the lowest price, even if the offeror is a very large and politically powerful corporation.

The explanation for such consumer behavior should be obvious to anyone familiar with the large literature on free riding, most of it written by Chicago School scholars.¹⁵⁰ Both a regime in which businesses have little political and economic power and expansive opportunity for small business are public goods — things that many people may want but believe they can avoid paying for.¹⁵¹ Although Chicago School economists developed the free riding model to explain why certain vertical restrictions are really efficient, they have neglected to apply the free riding model to the manifold situations in which free riding is a common occurrence.

It seems clear from the literature and mystique surrounding the small business in America that many people and the legislatures they elect place a high value on the so-called “mom and pop” store. Likewise, many people appear to be quite uncomfortable about the large amount of political and economic power wielded by large firms.¹⁵² Many members of society value a regime in which businesses do not have so much influence. However, such a regime can be paid for only if each consumer individually agrees to do business with smaller stores, stores with lower productive efficiency (and higher prices) and no such power. If each consumer prefers to save the money now, trusting others or the government to support the small firm, a substantial free rider problem exists. This is borne out by the fact that consumer statements frequently seem to be inconsistent with consumer exercises of preferences in the marketplace. The individual consumer buys where prices are low — not because he is not wary of economic concentration, but because his own unilateral purchase decision is not enough to change the economic structure of society. The Chicago School view that consumer preferences should dominate any “efficiency” analysis applies only to markets in which consumers are forced to pay for everything they receive. In most real world markets this is simply not the case.

One problem with this argument is that there is no way of stopping it. If people really prefer small shops but take a free ride by buying from larger stores with lower costs, then the world containing the

150. Bork, *Resale Price Maintenance and Consumer Welfare*, 77 YALE L.J. 950 (1968); Bork, *The Rule of Reason and the Per Se Concept: Price Fixing and Market Division* (pt. 2), 75 YALE L.J. 373 (1966); Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J. L. & ECON. 86 (1960).

151. For an analysis of the economics of public goods, see E. MANSFIELD, *MICROECONOMICS: THEORY AND APPLICATIONS* 466-90 (4th ed. 1982).

152. See note 147 *supra*.

small shops can be more "efficient" than the world without them, and an antitrust policy that protects them would be "efficient" as well.

In short, the presumption made by the market efficiency model that consumer behavior is the best guide to allocative efficiency works only when consumers can be forced to pay for everything they receive. It fails to consider values that are not reflected in consumer choices in the marketplace. Today we know that externalities are pervasive in almost every market transaction. For example, we cannot rely on individual consumer behavior to control air and water pollution — even though the great majority of consumers presumably prefer unpolluted air and water. Firms that do not clean their emissions into the air and water have lower costs and correspondingly lower prices; however, they would quickly go out of business if each consumer unilaterally decided to buy instead from a higher-cost firm that was more protective of the environment.¹⁵³ Consumers are not likely to do that on their own, however, because each one individually knows that her own purchase decision will have little impact on the behavior of the firm; she shifts the burden elsewhere. If such consumer free riding is widespread in society, then the neoclassical market efficiency model's reliance on consumer *behavior*¹⁵⁴ as a measure of allocative efficiency is too naive to be a useful policymaking tool for the real world.

B. *Is Efficiency the Only Thing That Counts?*

The broadest statement of the Chicago School position on efficiency and public policy is that *all* policymaking by the State should be concerned exclusively with allocative efficiency. Some Chicago School scholars adopt this position, or at least one that is very close.¹⁵⁵ A narrower rule is that *antitrust* policy should be concerned exclusively with efficiency.¹⁵⁶ Certain parts of the federal government, including some federal judges, may follow the narrower version;¹⁵⁷ however, the government is not close to following the broader version. The Reagan administration's efforts to destroy the New Deal notwithstanding, distributive justice is still very much a part of *general* federal policymaking.

The arguments for both the broad and the narrow versions of the

153. See E. MANSFIELD, *supra* note 151, at 472-73.

154. See R. BORK, *supra* note 6, at 91.

155. See R. POSNER, *supra* note 95; Posner, *The Efficiency Norm*, *supra* note 58.

156. See R. BORK, *supra* note 6, at 81.

157. See Gerhart, *supra* note 24; see also 1984 Merger Guidelines, *supra* note 36; Schwartz, *The New Merger Guidelines: Guide to Governmental Discretion and Private Counseling or Propaganda for Revision of the Antitrust Laws?*, 71 CALIF. L. REV. 575 (1983).

Chicago School position on policymaking appear to rest on four premises: (1) A society in which allocative efficiency, or welfare, is maximized is better than one in which it is not; or alternatively, more welfare is better than less. (2) Policymakers are capable of creating and implementing a policy of maximizing total social wealth without regard to the way in which wealth is distributed.¹⁵⁸ (3) Policy concerns about wealth distribution, on the other hand, reflect purely political conflicts between interest groups and cannot be justified in any rigorous, scientific manner. (4) Efficiency goals and distributional goals or, alternatively, efficiency effects and distributional effects can be segregated from each other.

Analysis of the soundness of these premises is beyond the scope of this paper.¹⁵⁹ Nevertheless, it is worthwhile to consider briefly the fourth premise, that efficiency concerns and distributive concerns can be separated from one another. If that premise is false, any notion that allocative efficiency can be the exclusive goal of the antitrust laws becomes unsupportable.

No one denies that wealth transfer policies can have a substantial effect on efficiency, particularly if people know about the policies in advance and plan their affairs around them. High tax rates on the wealthy may reduce the incentive to invest or work. On the other side, welfare payments may reduce the incentive to work or, alternatively, they may provide needed support such as education or child care that make the recipient a more productive member of society.

Likewise, no one doubts that a policy of maximizing wealth, which is expressly concerned only with efficiency, nevertheless has important effects on the way wealth is distributed.¹⁶⁰ An antimonopoly law may have the effect of transferring wealth away from the monopolist and toward consumers. An "efficiency defense" in merger cases may make consumers and larger firms, or firms in a position to merge, better off at the expense of other firms.¹⁶¹

It seems that the vast majority of policies simultaneously affect society's total wealth as well as the way that wealth is distributed. As a result, the fourth premise above needs to be modified. In the real world, efficiency and distributional *effects* generally cannot be separated from one another. It would probably be impossible to imple-

158. See text at notes 137-46 *supra*.

159. However, all four are discussed in somewhat different form in Markovits, *supra* note 118, at 38; Markovits, *supra* note 141, at 48.

160. See Hovenkamp, *supra* note 18, at 4.

161. See Williamson, *Economies as an Antitrust Defense: The Welfare Trade-Offs*, 58 AM. ECON. REV. 18 (1968).

ment a policy that increased social wealth without affecting the way wealth is distributed. Alternatively, although perhaps less clearly, it may be impossible to transfer wealth without affecting total social wealth.¹⁶² The correct premise must be that efficiency *goals* and distributive *goals* can be separated from one another, and that this fact, combined with the other three premises, justifies an antitrust policy of exclusive concern with efficiency.

If efficiency goals and distributive goals can really be separated, then it would appear that the duty of the Chicago School antitrust policymaker is to look only at the efficiency effects of a policy and ignore any distributional effects. Unpopular distributional effects can be corrected later by a different policy. For example, if a rigorous antitrust policy concerned exclusively with efficiency ends up transferring too much wealth away from small businesses, Congress can compensate by giving them low interest loans or other transfer payments.¹⁶³

Unfortunately, the low interest loans will undermine the antitrust policy of encouraging efficiency. To use an efficiency-based antitrust policy that permits firms to become very large and injures those that remain inefficiently small, but then to "compensate" the small businesses by low cost loans or other transfer payments, diminishes the efficiency advantage of being big. For example, suppose that a small firm produces widgets at a cost of ten cents each, while a large firm produces them at nine cents each. An antitrust policy of promoting efficiency would at least passively encourage firms to become large, perhaps by permitting mergers or internal growth that achieved production economies or by refusing to condemn the lower prices of larger firms as "predatory." However, if the smaller firms became the beneficiaries of low interest loans or tax incentives unavailable to the larger firms, the incentive to become large would be diminished and the antitrust policy frustrated.

It appears that an antitrust policy of maximizing efficiency cannot

162. There might be some exceptions here. For example, if the government conducted a secret lottery and suddenly announced that everyone whose birthday is May 29 must pay \$100 to someone whose birthday is August 27, the result might be a wealth transfer with no efficiency effects. In this case, however, the idiosyncratic nature of the exception probably proves the rule. Most real world wealth transfers invite people to alter their behavior, either so as to receive the benefit of the transfer or to avoid having to pay it. For an argument that the purpose of the just compensation clause of the fifth amendment is to force the state to pass efficient legislation that leaves the distribution of wealth untouched, see R. EPSTEIN, *TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN* (1985), especially at 3-6.

163. In fact, Congress has done that. For example, see the Small Business Act, 15 U.S.C. § 631-47 (1982); Small Business Emergency Relief Act, 41 U.S.C. § 252 (1982); Small Business Investment Act, 15 U.S.C. § 661-96 (1982).

be pursued with anything resembling consistency unless the government is willing to adopt a much more *general* policy of maximizing efficiency — or, to put the matter bluntly, unless the government abandons its concern with how wealth is distributed, at least with respect to business firms.¹⁶⁴ However, any argument in favor of a more general policy of maximizing efficiency while ignoring distributive concerns must meet one objection that no one has answered. The “efficient” allocation of resources in any particular society is substantially a function of the way that society’s wealth is distributed initially.¹⁶⁵ For example, if members of a society of one hundred people are all given equal amounts of wealth and then commence a process of exchange that will yield an efficient outcome, the outcome will be different than it would be if one person in that society had been given ninety percent of the wealth, while the other ninety-nine divided the remaining ten percent. This is so because the amount of wealth that someone has affects his or her wealth priorities. The wealthy may place high values on expensive jewelry or exotic vacations, for example. On the other hand, the working poor may place a very high value on bologna and actually bid it away from the wealthy, who show little interest.

The principle that the “efficient” outcome depends on the initial distribution of wealth is not particularly controversial. However, the principle plays havoc with any notion that a public policy can be concerned exclusively with efficiency in all areas of life. The problem might not be great if society could plausibly have an *antitrust* policy concerned exclusively with efficiency, and then freely use other policies based on notions of fairness to redistribute wealth in ways that society finds appropriate. However, as we saw above, such an anti-trust policy based exclusively on efficiency will not work unless other policies are based on efficiency as well.

The principle that the efficient outcome is a function of the initial distribution of wealth deprives the efficiency goal of a great deal of its intellectual appeal. Its proponents talk about the “initial distribution” of wealth and the “efficient outcome” as if both existed at some finite moment in time — as if there were a single starting distribution of wealth and a single concluding efficient outcome. In fact, in a dynamic world the problem is far more complex. The distribution of

164. A program of redistributing wealth might have no effect on an efficiency-only antitrust policy if the redistribution were completely random as to business firms. However, many government economic policies *do* favor smaller firms. See the statutes cited in note 163 *supra*. Furthermore, it would be impossible to devise a redistribution policy whose effects did not favor any particular class of business firm.

165. See Sen, *Rational Fools: A Critique of the Behavioral Foundations of Economic Theory*, 6 PHIL. & PUB. AFF. 317, 331 (1977).

wealth in society shifts daily, and the market itself never arrives at an efficient "outcome." It only approaches such an outcome through a never ending series of exchanges.

Monopoly distributes wealth to the monopolist and away from consumers. To the extent that the world contains monopolists, the efficient "outcome" at any particular time is a function of a starting distribution of wealth that already reflects the existence of monopoly. What, then, does it mean to say that the market is "efficient," or generates efficient solutions? It means simply that people's preferences are a function of the position in which they find themselves. People with wealth, including wealth caused by monopoly, express different preferences than people who are poor. As far as allocative efficiency is concerned, however, one initial distribution is as good as another.

To date, no compelling argument has been made for a policy of maximizing satisfaction from a given starting point that says nothing about the location of the starting point. Until such an argument is made, the notion of "allocative efficiency" is, at best, a trivial guide to policymaking.¹⁶⁶

On the other hand, it seems clear that the market is a very powerful device by which people maximize their satisfactions *given* the existing distribution of wealth. Furthermore, absent legal restraints on alienation, the market functions *whether or not* the State is involved in the involuntary redistribution of wealth. People are very good at "inventing around" constraints imposed by the State, and they will use the market to pursue wealth maximizing, or "efficient" outcomes, no matter what the "starting" distribution of wealth is. As a result, from the point of view of allocative efficiency, one starting distribution is as good as another. From the viewpoint of justice, however, one starting distribution may be much more desirable than another. For this reason the State may as well pursue a just distribution of wealth as permit

166. That the efficient outcome is a function of the initial distribution of wealth weakens the argument for efficiency even more under the Chicago School concept of "wealth maximization" than under the more traditional utilitarian notion that welfare is reflected by people's preferences. Wealth maximization measures welfare *only* by what people actually buy, not by what they would like to have. As a result, the purchase "vote" of the wealthy person who does not care to have, say, a new house and that of a poor person who would like to have one very much but cannot afford one receive the same weight in the wealth maximization welfare calculation: zero. See Leff, *Economic Analysis of Law: Some Realism About Nominalism*, 60 VA. L. REV. 451, 478-79 (1974); see also Tribe, *Constitutional Calculus: Equal Justice or Economic Efficiency?*, 98 HARV. L. REV. 592, 595 (1985). On one hand, the theory of wealth maximization, which weights actual purchases rather than preferences, solves the empirical problem that no policymaker could ever measure stated preferences but can measure actual purchases. On the other hand, the result is that wealth maximization appears not to measure "welfare" at all, unless the ability to purchase is an essential ingredient in welfare. It seems clear, for example, that gifts of a new house to the wealthy person and the poor person described above would not produce identical amounts of satisfaction.

an unjust one. The market can always be trusted to maximize people's welfare, given any particular starting point.

C. *The Problem of Legislative History*

A democratic sovereign must pay more than lip service to the proposition that the voters are entitled to have what they want, even if they want something irrational or inconsistent with the dominant model for policy. This creates a problem for the economic policymaker different from any encountered by the academic economist or other scientist. The people who collect empirical data and "apply" a particular natural science model in, say, physics, have a certain sensitivity to the scientific model and its limitations. However, the participants in the democratic process usually exhibit no such sensitivity. This is certainly true of voters, special interest groups, and lobbyists, but it may also describe elected members of the legislative, executive, and even the judicial branches. To be sure, the economist employed by the Department of Justice "makes" economic policy, and may be very sensitive to the demands of a particular economic theory. But the Justice Department economist is hired and directed by an appointed antitrust chief, who answers to an appointed Attorney General who in turn responds to the policies of an elected president. As a result the Justice Department economist is likely to be pulled as hard by political necessity as by scientific integrity. Which of these should prevail in a democratic country? More appropriately, to what degree can an appointed policymaker take advantage of "market failures" in the *legislative* process¹⁶⁷ to create enforcement policy that is inconsistent with the legislative history of the statute being enforced?

The legislative histories of the various antitrust laws fail to exhibit anything resembling a dominant concern for economic efficiency. Dozens of scholars have scrutinized these legislative histories in order to determine what Congress had in mind.¹⁶⁸ Their efforts will not be

167. *I.e.*, instances when the legislative process fails to provide the efficient solution to the problem.

168. On the Sherman Act, see Bork, *Legislative Intent and the Policy of the Sherman Act*, 9 J. L. & ECON. 7 (1966) (arguing that the legislative history of the Sherman Act reveals a dominant concern for efficiency); Lande, *Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged*, 34 HASTINGS L.J. 65 (1982) (arguing that the framers of the Sherman Act were concerned about protecting consumers from unfair distributions of wealth away from them and toward monopolists). On the Clayton Act, see Bok, *Section 7 of the Clayton Act and the Merging of Law and Economics*, 74 HARV. L. REV. 226, 233-38 (1960) (arguing that Congress was excessively concerned with protecting small business, particularly in the 1950 amendments). On the Robinson-Patman Act, see Hansen, *Robinson-Patman Law: A Review and Analysis*, 51 FORDHAM L. REV. 1113 (1983) (concluding that Congress was concerned chiefly with protecting small businesses from the buying practices of larger firms). See also H. HOVENKAMP, *supra* note 17, at 50-54.

repeated here. No one, it appears, has even attempted to argue that Congress had "efficiency" in mind when it passed the Robinson-Patman Act in 1936, or the Celler-Kefauver amendments to Section 7 of the Clayton Act in 1950. Those statutes were designed to protect a particular constituency, small business, that had managed to make its case to Congress.¹⁶⁹ Likewise, no compelling case has been made that efficiency considerations dominated in the passage of the Clayton Act itself.¹⁷⁰ The strongest argument that Congress was motivated by concerns of efficiency when it passed an antitrust law has been made by Professor (now Judge) Bork, and is concerned largely with the Sherman Act.¹⁷¹ However, Bork's work has been called into question by subsequent scholarship showing that in 1980 Congress had no real concept of efficiency and was really concerned with protecting consumers from unfavorable wealth transfers.¹⁷²

Of course, Congress could rewrite the antitrust laws and make concerns for efficiency express, but it has not done so. In fact, the widely proclaimed Chicago School "revolution" has pretty much passed Congress by. Historically, liberals¹⁷³ have been fairly successful in getting Congress to write liability-expanding antitrust statutes.¹⁷⁴ However, with only a few trivial exceptions, free marketers have had no such luck.¹⁷⁵ Leaders in conservative administrations have asked for legislation weakening the merger laws or abolishing

169. See Hansen, *supra* note 168.

170. On the legislative history of the original Clayton Act, see W. LETWIN, *supra* note 39, at 273-76; D. MARTIN, *MERGERS AND THE CLAYTON ACT* 20-43 (1959).

171. See Bork, *supra* note 168.

172. See Lande, *supra* note 168.

173. That is, welfare liberals, not classical liberals.

174. For example, the Clayton Act, ch. 323, 38 Stat. 730 (1914) (codified as amended in scattered sections of 15 U.S.C. and 29 U.S.C. (1982)), passed in 1914 during the Wilson administration; the Robinson-Patman Act, ch. 592, 49 Stat. 1526-28 (1936) (codified at 15 U.S.C. §§ 13-13b, 21a (1982)), passed during the Franklin D. Roosevelt administration; the Celler-Kefauver amendments to § 7 (relating to mergers) of the Clayton Act, ch. 1184, 64 Stat. 1125 (1950) (codified at 15 U.S.C. § 18 (1982)), passed during the Truman administration.

Perhaps the one notable exception is the Consumer Goods Pricing Act of 1975, Pub. L. 94-145, 89 Stat. 801 (amending 15 U.S.C. §§ 1, 45a (1968)), which abolished "fair trade" and arguably restored the *per se* rule for resale price maintenance. That statute was passed during the Nixon administration. However, given the controversial nature of resale price maintenance, it is difficult to characterize the statute as either liberal or conservative.

175. The liability-restricting statutes that have been passed are generally either jurisdictional, or else nibble away at economic areas that cover a relatively small percentage of antitrust activity. Examples are the Local Government Antitrust Act of 1984, 15 U.S.C. §§ 35, 36 (Supp. II 1984), which abolished treble damages for antitrust violations by municipalities; the Export Trading Company Act of 1982, 15 U.S.C. §§ 4001-4021 (1982), which gives a limited antitrust exemption to qualified export trade associations and companies; and the National Cooperative Research Act of 1984, 15 U.S.C. §§ 4301-05 (Supp. II 1984), which gives an exemption from the *per se* rule to qualified research joint ventures. All three of these statutes were passed during the Reagan administration.

treble damages, but Congress has generally resisted these requests.¹⁷⁶

To be sure, there may be a very good explanation for this: no one lobbies Congress for allocative efficiency. A statute is "efficient" if it produces more gains than losses, regardless of where the gains and losses appear. However, the interest groups that reach Congress are concerned not with maximizing the *amount* of wealth that is produced, but rather with making sure that a particular group gets its fair share. To be sure, the farmers' lobbyist may *argue* that price supports will make America as a whole wealthier — but what he really wants is to make farmers wealthier.¹⁷⁷

Of course, this fact does not distinguish the antitrust laws from any other kind of legislation. Whether any legislation is "efficient" and enlarges social wealth, or merely reflects the desires of one or more interest groups, depends on the ability of Congress to listen to the arguments from all sides, "net them out," and then pass a statute that, on balance, does more good than harm to all affected interests. The more successful Congress is at this, the more frequently its statutes will be efficient. On the other hand, the more successful a particular interest group is in making its case to Congress, the more frequently that group will obtain legislation that shifts wealth in its direction, whether or not such legislation is efficient.¹⁷⁸

Initially, Chicago School antitrust scholars expressed sensitivity to the relationship between economic policymaking and the democratic legislative process. At least they once felt obliged to demonstrate congressional approval of the view that efficiency should be the exclusive goal of antitrust enforcement. For example, Robert Bork attempted at various times to find a mandate for Chicago School antitrust policy in the legislative history of the federal antitrust laws.¹⁷⁹ Bork's argument may have strained credulity,¹⁸⁰ but that is not the point. The point is

176. For example, see Commerce Secretary Malcolm Baldrige's proposal to repeal § 7 of the Clayton Act, 48 ANTITRUST & TRADE REG. REP. (BNA) 385 (Feb. 28, 1985); and see the Reagan administration proposal to abolish treble damages for rule of reason violations, *Draft Reagan Administration Legislation on Antitrust, Patents, and Joint Research and Development Ventures*, 44 ANTITRUST & TRADE REG. REP. (BNA) No. 1121, at 1272 (June 30, 1983). The latter proposal is discussed in H. HOVENKAMP, *supra* note 17, at 405 n.4. See also the comprehensive administration package of antitrust proposals, intended to reduce damages, narrow the coverage of § 7 of the Clayton Act, and reduce the extraterritorial jurisdiction of the antitrust laws. *Administration's Antitrust Law Package*, [Current] TRADE REG. REP. (CCH) No. 744, pt. 2 (Feb. 24, 1986).

177. Professor Easterbrook uses the term "rent-seeking" statutes. Easterbrook, *Forward: The Court and the Economic System*, 98 HARV. L. REV. 4, 15-17 (1984).

178. See Posner, *The Reading of Statutes*, *supra* note 58, at 264-72; see generally Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3 (1971); Peltzman, *Toward a More General Theory of Regulation*, 19 J. L. & ECON. 211 (1976).

179. See R. BORK, *supra* note 6, at 50-71; Bork, *supra* note 168.

180. See Hovenkamp, *supra* note 18, at 7-24; see generally Lande, *supra* note 168.

that Bork deemed it important to show that Congress had maximization of consumer welfare in mind. From that premise Bork developed the argument that this congressionally mandated consumer welfare principle necessitated the adoption of the market efficiency model for antitrust.

More recently, however, some Chicago School scholars have apparently abandoned as hopeless the attempt to find support for their position in the legislative history of the antitrust laws. Instead, they have adopted a different approach — developing arguments for the proposition that statutes should be interpreted relatively broadly or relatively narrowly depending on their nature. Efficient, or “public interest,” legislation should be interpreted broadly, and courts should not hesitate to interpolate Congress’ meaning when the language of such statutes contains ambiguities or gaps. On the other hand, rent-seeking, or “interest group,” legislation should be interpreted narrowly, and no remedy should be provided unless Congress was very explicit about creating it.¹⁸¹

Within this paradigm the Sherman Act appears to qualify as public interest legislation.¹⁸² The Sherman Act condemns “contracts in restraint of trade” and “monopolies.” As a general rule, condemnation of both of those things is efficient, provided that they are properly de-

181. See Baxter, *supra* note 1, at 661 (written when Professor Baxter was head of the Antitrust Division of the Department of Justice). At various places in his discussion Baxter concludes: (1) Because the Robinson-Patman Act “recognizes as unlawful conduct that injures competitors, regardless of its effects on competition,” the statute “is not regarded as a true ‘antitrust’ law.” This justifies the Justice Department decision not to enforce that Act. *Id.* at 662 n.6. (2) The antitrust laws are really “enabling legislation that has permitted a common-law refinement of antitrust law through an evolution guided by only the most general statutory discretions.” *Id.* at 663. (3) Although the framers of the Sherman Act probably intended to federalize the common law of trade restraints, they probably misunderstood that law as protecting competition rather than competitors; as a result, courts need not look to this common law in making federal antitrust policy. *Id.* at 664 n.12.

As for the first point above, Mr. Baxter’s conclusion is inconsistent, not merely with the legislative history of the antitrust laws, but with its clearly expressed language. Section 1 of the Clayton Act, 15 U.S.C. § 12 (1982), defines the phrase “antitrust laws” to include the Clayton Act itself, § 2 of which is the Robinson-Patman Act. 15 U.S.C. § 13 (1982). Congress has amended the Clayton Act at least a half dozen times; however, it has never changed the definition of “antitrust laws” in such a way as to exclude § 2 of the Clayton Act.

The Chicago School literature on statutory interpretation is growing rapidly. In general, that literature argues that “public interest” statutes — i.e., statutes that are “efficient,” or that create more social gains than losses — should be interpreted relatively broadly and courts should be willing to fill in statutory “gaps” by inferring the legislature’s intent. See Posner, *The Reading of Statutes*, *supra* note 58, at 269. On the other hand, private interest statutes, in which an interest group “buys” favorable legislation from Congress, should be strictly interpreted, as a contract would be. See Easterbrook, *supra* note 177, at 15. For a view of executive policymaking and inefficient legislation that is much more sensitive to the democratic process, see Sunstein, *Cost-Benefit Analysis and the Separation of Powers*, 23 ARIZ. L. REV. 1267 (1981).

182. Easterbrook, *supra* note 177, at 15. *But see* Stigler, *supra* note 139, at 7 (finding “modest support” for the conclusion that support for the Sherman Act came from small business).

fined. Although various interest groups (such as farmers, who purchased from monopolists and cartels) may have supported the legislation,¹⁸³ the legislation itself was in the public interest — or, more precisely, was designed to produce total gains larger than total costs.

On the other hand, an antitrust law such as the Robinson-Patman Act¹⁸⁴ would probably have to be considered special interest legislation.¹⁸⁵ The Robinson-Patman Act does not articulate any goal of economic efficiency. On the contrary, it was designed to protect small, inefficient retail grocers from large chain stores, which had lower costs and would drive the small grocers out of business in a competitive market. In this instance the small grocers had managed successfully to make their case before Congress, which forced the rest of American society to pay the bill.¹⁸⁶ The same thing can be said for the 1950 Celler-Kefauver amendments to the antimerger statute,¹⁸⁷ which were designed primarily to protect small business from horizontal and vertical mergers that produced more efficient rivals.¹⁸⁸

Even within the Chicago School there appears to be disagreement about the ease with which courts can distinguish between public interest, or efficient, legislation and interest group, or special interest, legislation.¹⁸⁹ Perhaps more important, this distinction between types of statutes inserts into political theory a definition of efficiency that can be applied only ambiguously, if at all, to real world policy problems. To permit judges to weigh statutes on the basis of presumed efficiency and to give the interpretive edge to parties invoking efficient statutes is little more than to attempt to force a particular concept of efficiency into the democratic process. The argument means, quite simply, that “efficient” statutes are to be given more weight than “inefficient” ones. In the case of the latter, enforcement should be no broader than is clearly mandated by the language of the statute.

The argument can too easily be used to deny remedies that Congress anticipated but did not write into the statutory language. For example, Congress clearly had the protection of small business from

183. See Stigler, *supra* note 139, at 7.

184. 15 U.S.C. §§ 13-13b, 21a (1982).

185. See Baxter, *supra* note 1, at 662 n.6 (asserting that the Robinson-Patman Act is not “a true ‘antitrust’ act”).

186. See generally Hansen, *supra* note 168.

187. Celler-Kefauver Act, ch. 1184, 64 Stat. 1125 (1950) (codified as amended at 15 U.S.C. §§ 18, 21 (1982 & Supp. II 1984)).

188. See generally Bok, *supra* note 168.

189. Compare Easterbrook, *supra* note 177, at 16-17 (suggesting that it is difficult or impossible to draw the line between public interest and special interest statutes); with Posner, *The Reading of Statutes*, *supra* note 58, at 270-71 (creating a four-type classification scheme for statutes).

larger competitors in mind when it passed *both* the Robinson-Patman Act¹⁹⁰ and the Celler-Kefauver amendments¹⁹¹ to the antimerger statute. However, that intent is not readily apparent in the language of either statute. For example, all of the dirty work done by the Celler-Kefauver amendments and castigated by the Chicago School was accomplished by the statute's legislative history, not by its language.¹⁹² That language, which condemns mergers the effect of which "may be substantially to lessen competition, or to tend to create a monopoly," is pernicious by Chicago School measurement not because of what it says, but because of what it means.¹⁹³ "Competition" within the meaning of the statute does not refer to a state of affairs in which prices are driven to marginal cost and firms are encouraged to pursue all economies in production and distribution. Rather it refers to a regime in which small businesses have a chance to compete against larger, more efficient rivals. There is no question that Congress had precisely that in mind; however, one will reach this conclusion only by examining the *Congressional Record* and the reports, not by reading the statutory language.¹⁹⁴

The Chicago School's classification scheme for statutes is troublesome not only for what it does to statutory interpretation, but also for its self-serving compromise of the Chicago School model itself. The argument shows the nation's leading advocates of the free market dealing with troublesome legislation by suggesting numerous "market failures" of truly gargantuan proportions. Nearly all the world's other markets, including the common law,¹⁹⁵ work quite well within the

190. See Hansen, *supra* note 168. Chicago School scholars acknowledge as much. See R. BORK, *supra* note 6, at 382-84; R. POSNER, THE ROBINSON-PATMAN ACT: FEDERAL REGULATION OF PRICE DIFFERENCES 25-26 (1976).

191. See generally Bok, *supra* note 168. At least one Chicago School scholar agrees. See R. POSNER, *supra* note 19, at 99-100.

192. See the Supreme Court's analysis of the legislative history of the Celler-Kefauver amendments in *Brown Shoe Co. v. United States*, 370 U.S. 294, 311-23 (1962).

193. This language is criticized by at least one member of the Chicago School for the "incipiency" test which it creates. That is, it is designed to nip anticompetitive mergers in the bud by condemning mergers whose effect "may be" to lessen competition or which may "tend to" create a monopoly. See R. BORK, *supra* note 6, at 47-49. However, it seems that the real problem is not the "incipiency" test itself, but rather the definition of "competition" implicit in both the Celler-Kefauver amendments and the Supreme Court cases such as *Brown Shoe*, which interpreted them.

194. The legislative history is quite clear. See notes 191-92 *supra*.

195. On the common law as an efficient market, see Priest, *The Common Law Process and the Selection of Efficient Rules*, 6 J. LEGAL STUD. 65 (1977); Rubin, *Why is the Common Law Efficient?*, 6 J. LEGAL STUD. 51 (1982) (suggesting that both common law and legislation have become increasingly efficient in recent years). For good critiques of the notion that the common law is efficient, written from somewhat different perspectives, see Epstein, *The Social Consequences of Common Law Rules*, 95 HARV. L. REV. 1717 (1982); Friedman, *Two Faces of Law*,

Chicago School paradigm.¹⁹⁶ As a result, the State's reliance on the market should be very broad and the need for price regulation, artificial restrictions on entry, or other forms of state intervention are minimal. However, for some reason one market that seems not to work is the political market. The Chicago School literature on legislation is full of detailed explanations of why the legislative process consistently fails to produce "efficient" statutes.¹⁹⁷

If a statute is truly efficient — that is, if the gains enjoyed by the interest groups that profit from the statute truly outweigh the losses suffered by those who lose — then any good Chicagoan should expect the political process to generate passage of the statute. The lobbying and other political resources contributed by the potential gainers should exceed those contributed by the potential losers, because the former should be willing to pay more to purchase passage of the statute than the latter are willing to pay to purchase its nonpassage.

On the other hand, the Chicagoan ought to expect "special interest" legislation not to be passed at all. In order for special interest legislation to be enacted, the special interest group that supports the statute must succeed in having its will with Congress even though it stands to gain less from the passage of the statute than the losers stand to lose. To be sure, it seems clear to this author that this happens, and that it happens often. That is not the point here. Rather, the point is that the Chicago School's distinction between special interest and efficient legislation is manifestly inconsistent with the general Chicago theory that when a market speaks — even a political market — the presumption is very strong that it should be listened to.¹⁹⁸

V. CHICAGO SCHOOL ANTITRUST POLICY: CRITICISMS FROM INSIDE THE MODEL

Criticisms from "inside" the model assume that the model ad-

1984 WIS. L. REV. 13; Kennedy & Michelman, *Are Property and Contract Efficient?*, 8 HOFSTRA L. REV. 711 (1980).

196. Within the Chicago School model even "natural monopoly" public utilities might be better left to competitive bidding rather than price regulation. See Demsetz, *Why Regulate Utilities?*, 11 J. L. & ECON. 55 (1968). The theory is criticized in Shepherd, "Contestability" vs. Competition, 74 AM. ECON. REV. 572 (1984).

197. For an atypical — in fact, almost out of character — explanation of why the legislative "market" does not work, see Posner, *The Reading of Statutes*, supra note 58. See generally Becker, *A Theory of Competition Among Pressure Groups for Political Influence*, 98 Q. J. ECON. 371 (1983).

198. In fact, the political market has many characteristics that suggest it should work quite well — rather low entry barriers (anyone who wants has a constitutionally protected right to petition the government), a large number of competing participants, and easy access to market information.

dresses all relevant values that the policymaker must consider. Furthermore, such criticisms generally do not fault the Chicago School premise that allocative efficiency should be the exclusive goal of antitrust enforcement.¹⁹⁹ The general nature of such critiques is that, even though efficiency should be the exclusive goal of antitrust enforcement, the neoclassical market efficiency model is not sophisticated enough to describe or predict the consequences of real world behavior.

This discussion is too brief to consider all critiques from inside the model.²⁰⁰ Rather, it focuses on two prominent weaknesses in the neoclassical market efficiency model that render the model too naive to be the exclusive tool of antitrust policymakers: (1) an excessive reliance on static concepts of the market in empirical situations where only dynamic concepts will explain behavior or results; and (2) a failure to appreciate fully the extent and welfare consequences of strategic behavior. The second weakness is in large part a consequence of the first.

A. *The Static Market Fallacy*

The neoclassical price theory model is static.²⁰¹ This means that it measures the effects of certain practices on price or output *given* a premise that the market being examined is unaffected by external events. Unfortunately, antitrust policy must deal with real world markets, and real world markets are always affected by a complex array of external influences. Application of a static model to a real world market often causes a court to ignore the obvious. To be sure, the assumption of a static market is a highly useful explanation device. The premise that the economic analyst can “freeze” a market often yields a clearer understanding of how a particular practice or phenomenon, *ceteris paribus*, will affect price, output, or competition.²⁰²

To illustrate, the neoclassical market efficiency model shows quite clearly that the monopolist will reduce output below the competitive

199. Criticism internal to the Chicago School model *may* disagree with the premise that allocative efficiency should be the exclusive goal of the antitrust laws if they conclude that no model for economic efficiency is capable of assessing the efficiency consequences of real world behavior. In that case, admission of factors other than efficiency may be essential to policymaking.

200. In fact, a great deal of both welfare economics and price theory — particularly the theories first developed in the 1930s — was devoted to criticizing the market efficiency model as developed by such neoclassical economists as Alfred Marshall. *See* text at notes 81-86 *supra*.

201. *See* Posner, *supra* note 6, at 939-40; Williamson, *Antitrust Enforcement*, *supra* note 23, at 299-300; *see also* Kaplow, *supra* note 23, at 529-30 (criticizing Professor, now Judge, Easterbrook for relying too heavily on a static model).

202. The point is that *ceteris paribus* is an imaginary island that no real explorer will ever find.

level.²⁰³ The Standard Oil of New Jersey trust became a monopolist in the 1860s and 1870s.²⁰⁴ No one has ever contended, however, that petroleum output was less in 1900, when Standard was a monopolist, than in 1860, when the market was structured more competitively. When we say that a monopolist “reduces output” we ordinarily do not examine a real world market before and after monopolization occurred and conclude that output was greater before than after. Rather, we compare the output that occurs under the existing monopoly with the *hypothetical* output that would occur in a market that was identical in all respects but for the existence of the monopoly. Importantly, that alternative market does not exist, never did exist, and never will exist. Only in the most extreme situations, such as where a dominant firm buys the plant of its only rival and shuts it down, can we engage with some confidence in before-and-after comparisons of empirical situations and conclude that monopoly reduces output. Many monopolists acquire their initial dominant position as a result of patents. As a result, total pre-monopoly output may have been far lower than output during the monopoly period.²⁰⁵

Consider, for example, the case of *Kartell v. Blue Shield*,²⁰⁶ recently decided by the First Circuit. Judge Breyer, who authored the opinion, is not only a good federal judge, but also a good economist.²⁰⁷ The opinion exonerated Blue Shield from charges that its ban on “balance billing” violated the Sherman Act. Blue Shield, a large health insurer with a market share approaching monopoly levels, had created a system under which participating doctors agreed to accept Blue Shield’s published reimbursement rates as their total payment for a specified medical procedure.²⁰⁸ The result was that a patient who went to a participating physician (from a list provided by Blue Shield) knew that his or her insurance policy would provide full coverage.

In addressing the question whether the Blue Shield plan amounted to illegal monopolization, Judge Breyer concluded — quite correctly,

203. See R. BORK, *supra* note 6, at 101; H. HOVENKAMP, *supra* note 17, at 14-24; Harberger, *Monopoly and Resource Allocation*, AM. ECON. REV., May 1954, at 77.

204. See B. BRINGHURST, *ANTITRUST AND THE OIL MONOPOLY: THE STANDARD OIL CASES, 1890-1911*, at 10-16 (1979).

205. Examples of monopolies that almost certainly produced far more than was produced before the monopoly came into existence are the monopolies at issue in *United States v. Aluminum Co. of America*, 148 F.2d 416 (2d Cir. 1945) (aluminum); *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377 (1956) (cellophane); and *E.I. du Pont de Nemours & Co.*, 96 F.T.C. 653 (1980) (titanium dioxide).

206. 749 F.2d 922 (1st Cir. 1984), *cert. denied*, 105 S. Ct. 2040 (1985).

207. See S. BREYER, *REGULATION AND ITS REFORM* (1982).

208. 749 F.2d at 923. For example, if Blue Shield paid \$100 for a covered procedure, a doctor participating in the Plan could not charge \$120 and force the patient to pay the difference.

it seems — that Blue Shield was a purchaser of physicians' services on behalf of its insureds.²⁰⁹ This raised the possibility that Blue Shield's ban on balance billing might be an exercise of monopsony power. That is, Blue Shield may have been using its buying power in the market for health care services to force the price below the price that would prevail in an unrestrained, competitive market. The result of such an exercise of monopsony power would be that the supply of physicians' services would be reduced below the competitive equilibrium level. Judge Breyer suggested that the plaintiff's argument of monopsony was not well founded, citing with apparent approval the district court's finding that the supply of doctors in the market area had "increased steadily" during the period covered by the litigation.²¹⁰

It can easily be shown geometrically or algebraically that when a monopsony buyer reduces its outlay to the profit-maximizing level, the result will be reduced output of the monopsonized product.²¹¹ This only means, however, that the absolute supply of the monopsonized product will decrease if all other elements of the market remain unaffected during the period in which the market becomes monopsonized. As a result, the *backwards* reasoning — from the premise that supply did not decrease to the conclusion that the market was not monopsonized — works only if we can assume that a market was completely static during the relevant time period, but for the alleged violation.²¹²

Not only is that assumption of a perfectly static market unwarranted, but it is impossible for a court to identify and measure the degree to which the market changed — that is, the degree to which all factors external to the market caused the supply of doctors to increase or decrease.²¹³ For example, during the relevant time period, Blue Shield's monopsony may have tended to reduce the supply of doctors or of medical services offered. However, hundreds of other factors

209. *Kartell*, 749 F.2d at 925-26.

210. 749 F.2d at 927.

211. For a geometric illustration, see G. STIGLER, *THE THEORY OF PRICE* 205 (3d ed. 1966); for an algebraic illustration, see J. HENDERSON & R. QUANDT, *MICROECONOMIC THEORY: A MATHEMATICAL APPROACH* 190-91 (1980).

212. *I.e.*, the premise works if we can either assume that the market was static, or we can identify and quantify all other changes in the market.

213. Professor Easterbrook is quite sanguine about a court's ability to identify and quantify all such changes. He suggests in a recent article that courts should assess the competitive effect on output. As to the practicability of such an approach, he concludes that "[t]here are statistical tools for doing this, if the data are available." Easterbrook, *supra* note 1, at 163-64. In fact, sufficient data are never available, and if they were, no agency would be large enough or powerful enough to deal with them. For a discussion of some of the random determinants of output, and the problems of predicting firm size or market share, see F. SCHERER, *supra* note 50, at 145-50. For some interesting observations concerning the current inability of econometricians to make accurate predictions concerning market or firm growth, see Blatt, *How Economists Misuse Mathematics*, in *WHY ECONOMICS IS NOT YET A SCIENCE* (A. Eichner ed. 1983).

might have encouraged the supply of doctors to increase during the same period. These might have included: (1) higher income by medical patients in the relevant market area; (2) a high rate of medical school graduation, perhaps caused by increasing funding for such education; (3) a high rate of illness in the relevant market area; (4) increased federal or state subsidies for health care; (5) a reduction in state taxes in the relevant market area, which induced professionals to move into that area; (6) a population increase; or (7) a change in immigration policy which admitted more foreign doctors into the area. The list is merely illustrative, but the point should be clear: to conclude that Blue Shield was not monopsonizing the market because the amount of the monopsonized product increased rather than decreased is not a legitimate use of the theoretical observation — which is quite true as far as it goes — that the exercise of monopsony power reduces market supply.²¹⁴

The same thing can be said of vertical restrictions, such as those analyzed by the Supreme Court in *Continental T.V., Inc. v. GTE Sylvania, Inc.*²¹⁵ The Court noted that after Sylvania imposed territorial restrictions its overall market share increased from roughly two percent to roughly five percent.²¹⁶ It has been suggested by members of the Chicago School that the fact that a firm's market share or output *increased* after it began to employ vertical restrictions is strong evidence that a practice is competitive rather than anticompetitive.²¹⁷ In most cases, however, such evidence is irrelevant, for the court is incapable of assessing its meaning.

214. Actually, even the "output" question that Judge Breyer addressed in *Kartell* was the wrong one. He cited evidence that the *total* supply of physicians in Massachusetts had increased during the alleged monopolization period. *Kartell*, 749 F.2d at 927. A more appropriate question, however — and one that is at least theoretically easier to measure empirically — is not whether the absolute number of doctors in the entire market decreased as a result of monopsonization, but rather whether Blue Shield's *market share* decreased. When Blue Shield exercised monopsony power, total supply in the market would, *ceteris paribus*, decline. More importantly, Blue Shield's market share within that market would decline to the extent that the doctors looked for more profitable alternatives than dealing with Blue Shield under its medical cost reduction plan. Evidence that a firm's market share within a market changed is somewhat more convincing than evidence about output in the market as a whole, because the first kind of evidence segregates out all exogenous factors that affected the market as a whole. Nevertheless, even change in market share is extremely difficult to measure empirically, for the fortunes of individual firms in markets can vary enormously. See F. SCHERER, *supra* note 50, at 145-50.

215. 433 U.S. 36 (1977).

216. 433 U.S. at 38.

217. See Easterbrook, *supra* note 1, at 163-64 (footnote omitted). Professor Easterbrook suggests that a court analyzing vertical restrictions hold other factors such as demand constant. Then, if "the manufacturer's sales rise, the practice confers benefits exceeding its costs. If they fall, that suggests (although it does not prove) that there are no benefits." *Id.*; see also Posner, *supra* note 24, at 18. Posner would place on the government the burden of showing, "perhaps utilizing econometric methods," that the effect of the vertical restraint was to reduce the defendant's output. *Id.*

Why would a television manufacturer's market share roughly double in the space of a few years? Some obvious explanations come to mind: (1) perhaps it developed a superior television, where formerly it had struggled along with sets that were inferior; (2) perhaps it had been able to lower its relative costs, maybe because larger competitors had entered into unfavorable labor contracts, or perhaps because it was able to negotiate for low-cost production from abroad; or (3) perhaps a dominant firm in the industry had exited from the market or fallen on hard times.

In fact, any one of these market changes could have had a much more substantial impact on Sylvania's market share than its adoption of a restricted distribution scheme.²¹⁸ The lesson to be learned here is not that restricted distribution is monopolistic or inefficient. It is probably efficient in most situations in which it is employed.²¹⁹ However, a court cannot profitably engage in the simple device of comparing market share before and after the restrictions took effect in order to determine the effects of the practice on competition or welfare — not, at least, unless it can isolate and quantify all other variables that may have affected the defendant's market share. No court is likely to be capable of doing this.²²⁰

B. *The Problem of Strategic Behavior*

Strategic behavior is conduct designed by the actor to reduce the attractiveness of the offers against which it must compete.²²¹ Not all

218. In fact, the adoption of restricted distribution may be quite risky. Output fell after Arnold, Schwinn & Co. imposed vertical nonprice restraints. *United States v. Arnold, Schwinn & Co.*, 388 U.S. 365, 368-69 (1967). The restraints in *Schwinn* were declared illegal per se, but that case was overruled by *Continental T.V., Inc. v. G.T.E. Sylvania, Inc.*, 433 U.S. 36 (1977). Presumably, the loss of output in *Schwinn* was not a result of the restraints, but of Schwinn's changing competitive position in the market. In this case an aggressive rival, Murray Ohio Manufacturing Co., surpassed Schwinn in sales.

219. See H. HOVENKAMP, *supra* note 17, at 248-58; Hovenkamp, *supra* note 56.

220. See note 214 *supra*. This is not to say that the static market fallacy is the exclusive prerogative of the Chicago School. On the contrary, very liberal United States Supreme Court Justices have been guilty as well. See, e.g., *United States v. Container Corp.*, 393 U.S. 333, 337 (1969), in which Justice Douglas wrote for the Court that a price information exchange between competitors is illegal under § 1 of the Sherman Act if the information exchange affects the market price. To be sure, within the neoclassical market efficiency model a price information exchange could "affect" an equilibrium price either by facilitating collusion, or else by improving market information and causing price to stabilize. See Posner, *Information and Antitrust: Reflections on the Gypsum and Engineers Decisions*, 67 GEO. L.J. 1187 (1979). However, a rule that requires a court to begin with price data and determine the degree to which those prices were affected by a price information exchange is hopelessly unrealistic, except in the most extreme cases.

221. The definition, used in a different context, comes from Markovits, *supra* note 23, at 44. See also Markovits, *Some Preliminary Notes on the American Antitrust Laws' Economic Tests of Legality*, 27 STAN. L. REV. 841 (1975).

strategic behavior is socially harmful, and much of it is competitive.²²² In general, however, strategic behavior is harmful and raises antitrust concerns when it reduces the attractiveness of the offers against which the strategizing firm must compete *without* producing substantial gains in productive efficiency to the strategizing firm.²²³ When socially harmful strategic behavior is successful, the firm engaging in the behavior earns monopoly profits, and competitors (or potential competitors) and customers pay the bill.

The static market fallacy²²⁴ and the failure of orthodox Chicago School antitrust policy to take strategic behavior seriously²²⁵ are closely related weaknesses in the market efficiency model. Both errors result from the model's failure to appreciate time and change, and the havoc these factors play with the economist's idea of competitive equilibrium, which exists nowhere in the real world, or at least not for long.²²⁶

The fact that strategic behavior exists and that it can be anticompetitive is not particularly controversial.²²⁷ Far more controversial is the question whether antitrust policy should do something about harmful strategic behavior and, if so, what it is capable of doing given the limitations of the judicial process. One position, perhaps not irrational, is to acknowledge that anticompetitive strategic behavior exists but to conclude that the issues are too complex to be dealt with in antitrust litigation.²²⁸ However, there certainly is no consensus among the courts that strategic behavior should be ignored.²²⁹

Although anticompetitive strategic behavior can take a wide variety of forms, these forms may be roughly grouped into two different

222. An example is product-improving research and development, which reduces the relative attractiveness of the offers against which the innovating firm must compete.

223. See, e.g., *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 105 S. Ct. 2847 (1985), discussed at notes 308-18 *infra*.

224. See text at notes 201-20 *supra*.

225. See, e.g., McGee, *Predatory Pricing Revisited*, 23 J. L. & ECON. 289 (1980); see also Baxter, *supra* note 22, at 315 (acknowledging that harmful strategic behavior may occur, but arguing that, at least for now, courts cannot do much about it).

226. For some insights into the difficulties of measuring market power in markets that are not in equilibrium, see Pindyck, *The Measurement of Monopoly Power in Dynamic Markets*, 28 J. L. & ECON. 193 (1985).

227. See Baxter, *supra* note 22, at 316 (a Chicago School proponent acknowledging that strategic behavior occurs).

228. See, e.g., *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 230-36 (1st Cir. 1983) (acknowledging that a price above average total cost might be "predatory" and thus anticompetitive, but declaring such prices lawful in part because the judicial process is not capable of undertaking the relevant economic analysis).

229. Though not explicitly identifying the targeted evil as "strategic behavior," courts have proscribed predatory pricing, which is a variant of such behavior. See 3 P. AREEDA & D. TURNER, *ANTITRUST LAW* ¶ 711 (1978).

categories. First, strategic behavior may include conduct that forces both the rival and the victims to sustain immediate losses. The conduct is profitable to the strategizing firm, however, because the strategist anticipates that the victim will be driven out of the market or into submission, and that the strategist will then be able to reap monopoly profits. Such strategic conduct is necessarily temporary, for even the well-financed strategist will not maximize its profits by sustaining losses indefinitely. The large traditional literature and case law on predatory pricing is concerned with this kind of strategic behavior.²³⁰ Most Chicagoans believe that true predatory pricing is at least rare; they are divided on the question whether it occurs at all.²³¹

The other kind of strategic behavior is immediately profitable to the dominant, strategizing firm. This behavior is generally initiated by the dominant firm or group of firms and is directed against smaller firms or, in some cases, potential entrants. The behavior is generally designed for one of two purposes. First, it may take advantage of irreversible investments made by fringe firms already in the market.²³² Second, it may force upon the smaller firms higher costs than the behavior imposes on the strategizing firm, although the behavior may be costly to the strategizing firm as well.²³³ In both cases the strategist earns monopoly profits *during* the period in which such strategic behavior occurs. As a result, such behavior is profitable even if it lasts for an indefinite time.²³⁴

Traditionally, antitrust policy has not only recognized strategic behavior, it has imagined a great deal of it that either did not exist or was in fact beneficial to the competitive process.²³⁵ In general, antitrust case law has classified illegal strategic behavior as either "predatory" — that is, directed at small firms already in the market²³⁶ — or else as

230. The literature is summarized in H. HOVENKAMP, *supra* note 17, at 172-81.

231. Those arguing that predatory pricing virtually never occurs include R. BORK, *supra* note 6, at 144-60; Easterbrook, *supra* note 77; McGee, *supra* note 225. A Chicago scholar who believes that predatory pricing may sometimes occur is Richard Posner. See R. POSNER, *supra* note 19, at 184-96.

232. See text at notes 247-88 *infra*.

233. See text at notes 289-307 *infra*.

234. "Predatory" pricing at prices above average total cost — often accompanied by the strategic carrying of excess capacity — also fits into this category. See Baumol, *Quasi-Permanence of Price Reductions: A Policy for Prevention of Predatory Pricing*, 89 YALE L.J. 1 (1979); Williamson, *Predatory Pricing*, *supra* note 23.

235. The classic example is *Utah Pie Co. v. Continental Baking Co.*, 386 U.S. 685 (1967). See Hovenkamp & Silver-Westrick, *Predatory Pricing and the Ninth Circuit*, 1983 ARIZ. ST. L.J. 443, 462-63.

236. See *William Inglis & Sons Baking Co. v. ITT Continental Baking Co.*, 668 F.2d 1014 (1981), *cert. denied*, 459 U.S. 825 (1982).

raising "barriers to entry" — that is, directed at potential rivals.²³⁷

Some economists reject the distinction between strategic behavior directed at incumbents and that directed at potential entrants as not useful analytically.²³⁸ In one sense they are correct. When strategic behavior raises rivals' costs, it makes little difference whether these are costs of production or costs of entry.²³⁹ The effect in both instances is to shelter the strategist from competition. Nevertheless, the distinction is important for antitrust policy for a number of reasons. One reason has to do with the way that the antitrust laws are enforced. Although strategic behavior is often directed at potential entrants rather than actual competitors, and although the potential entrant is a much easier target for cost-raising strategies than the incumbent firm is, the courts have been extremely skeptical about claims brought by "precluded plaintiffs."²⁴⁰ Such plaintiffs allege they *would* have gone into business but for the inefficient exclusionary practices of an established rival.²⁴¹

Likewise, within traditional antitrust case law the well-developed but perhaps misguided²⁴² concept of "barriers to entry" serves to distinguish the fringe firm already in the market from the firm seeking to enter. A properly defined barrier to entry generally protects *all* firms already in the market at the expense of the firm seeking entry. For example, a dominant firm that lobbies hard for a government-imposed cap on new entry (such as a maximum number of taxicab medallions) generally protects both itself and smaller competitors from new entry by outsiders. On the other hand, a dominant firm that employs an aggressive pricing strategy generally injures *both* established rivals and firms seeking entry.

Much of the literature on strategic behavior has been concerned with predatory pricing²⁴³ and certain nonprice practices, such as product innovation,²⁴⁴ which are sometimes alleged to be predatory. This writing is not surveyed here. Rather the discussion analyzes two kinds

237. See *United States v. United Shoe Mach. Corp.*, 110 F. Supp. 295 (D. Mass. 1953), *aff'd. per curiam*, 347 U.S. 521 (1954).

238. See Demsetz, *supra* note 74.

239. A firm with no rivals at all, however, is still better off than a firm with high cost rivals. See Note, *Standing at the Fringe: Antitrust Damages and the Fringe Producer*, 35 STAN. L. REV. 763, 769-73 (1983).

240. See H. HOVENKAMP, *supra* note 17, at 461-63.

241. See, e.g., *Neumann v. Vidal*, 710 F.2d 856 (D.C. Cir. 1983); *Hayes v. Solomon*, 597 F.2d 958 (5th Cir. 1979), *cert. denied*, 444 U.S. 1078 (1980).

242. See Demsetz, *supra* note 74.

243. See note 230 *supra*.

244. See Ordover & Willig, *An Economic Definition of Predation: Pricing and Product Innovation*, 91 YALE L.J. 8, 22-53 (1981).

of strategic behavior that are not yet well developed in the legal literature on antitrust policy. The two forms of strategic behavior have to do with the relationship between the credibility of threats and the sunk costs of either the dominant firm or the victim,²⁴⁵ and the strategy of raising rivals' costs.²⁴⁶ Although analysis of these strategies has not often appeared in the antitrust case law, both appear to be more susceptible to intelligent judicial analysis than predatory pricing is. Furthermore, it is quite plausible that these strategies are commonly used. If that is the case, then the two strategies should play a much more dominant role in the antitrust litigation of the future, provided the litigation system is capable of handling their complexities.

1. *Sunk Costs and Credible Threats*

The neoclassical market efficiency model concentrates on (1) long-run behavior, and (2) markets in which assets are freely transferable from one firm to another. In the real world, however, firms are often committed to short run investments in assets the costs of which cannot be fully recovered. This facilitates a great deal of monopoly pricing.²⁴⁷

The market efficiency model tends to look at markets over the long run, over which they generally appear to behave competitively. The "long run" refers to a period that is sufficiently long that a firm can make the optimal choice about such questions as what size plant to build and where to build it.²⁴⁸ Over the long run, firms will tend to build plants of optimal size which are efficiently distributed throughout the market. As a result, over the long run firms will be forced either to operate efficiently or to exit from the market. Likewise, over the long run, new firms will enter a monopolized market and bring it into competitive equilibrium.²⁴⁹

In many markets, however, the long run is indeed very long. A steel mill or chemical plant can easily have a life expectancy of forty years, and may last much longer. In the real world, firms frequently do not have the luxury of dwelling exclusively on the long run. They

245. See text at notes 247-88 *infra*.

246. See text at notes 289-307 *infra*.

247. Perhaps the best statement of this position is Klein, Crawford & Alchian, *Vertical Integration, Appropriable Rents, and the Competitive Contracting Process*, 21 J. L. & ECON. 297 (1978). See also Williamson, *Credible Commitments: Using Hostages to Support Exchange*, 73 AM. ECON. REV. 519 (1983).

248. See E. MANSFIELD, *supra* note 151, at 194-201.

249. *Id.* Professor Easterbrook suggests that the goal of the antitrust laws is to "speed up the arrival of the long run." Easterbrook, *Limits*, *supra* note 8, at 2. That language is largely rhetorical, since the long run never "arrives." Perhaps more accurately, the economic goal of antitrust policy is to make short-run market behavior approximate long-run behavior as accurately as possible.

must deal with a previously made decision about plant size and location. Often it is cheaper to operate the existing plant, in spite of possible inefficiencies, than to get rid of the plant and build one of a better size, or one that is located in a better place.

Likewise, in the real world many fixed cost assets are not freely transferable from one firm to another. Firms must constantly deal with the problem of "sunk" costs — that is, costs that simply cannot be recovered if a firm exits from the market. Sunk costs should be distinguished from "fixed" costs or capital costs, which a firm must spend in entering a new market but which it will be able to recover when it decides to exit. Although sunk costs are usually fixed costs, many fixed costs are not sunk costs. Every entry into a new market entails a certain amount of sunk costs, although the extent of sunk costs varies greatly from one market to the next.²⁵⁰

The extent of sunk costs depends on whether the firm exiting the market will be able to sell everything, including its good will, to a successor firm or whether it must take its productive capacity out of use entirely. For example, the restaurant owner who goes out of business may be able to transfer everything to a successor, including his built-up investment in name recognition, if the successor assumes the previous firm's name, method of doing business, etc. If liquor licenses are not transferable, however, the old firm's expense in obtaining its initial liquor license will be sunk — that is, it will have to be borne by the original firm. At the other extreme, a firm that goes out of business because it is poorly situated in a market with excess capacity may find that even its plant must be dismantled and sold for its salvage value. In that case, sunk costs may be substantial.²⁵¹

Although the impact of sunk costs is felt most strongly when the firm exits from a certain market, a rational firm will consider the extent of these costs when it makes a decision to enter. In short, the cost of *exit* from a market operates as a barrier to *entry*.²⁵² In a market in which capital flows freely into profitable areas, the fact that it costs \$10,000,000 to enter a certain market is not nearly as important as the

250. The economic literature on sunk costs, fixed costs, and strategic behavior is growing, although much of it is very technical. See W. BAUMOL, J. PANZAR & R. WILLIG, *CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE* 280-82, 482-83 (1982); Baumol & Willig, *Fixed Costs, Sunk Costs, Entry Barriers and Sustainability of Monopoly*, 96 Q. J. ECON. 405 (1981).

251. In this case sunk costs equal the unamortized cost of the plant, less the salvage value.

252. See Dixit, *The Role of Investment in Entry-Deterrence*, 90 ECON. J. 95 (1980); Eaton & Lipsey, *Exit Barriers Are Entry Barriers: the Durability of Capital as a Barrier to Entry*, 11 BELL J. ECON. 721 (1980).

fact that only ten percent of those costs can be recovered if the investment proves unprofitable and exit becomes necessary.

Likewise, the extent of sunk costs will influence a firm's decision about when to exit. For example, it is often said that a firm will continue to produce as long as it is covering its average variable costs, even if it is losing money because its earnings do not cover its fixed costs. The statement is true, however, only if the firm's fixed costs are also sunk costs.²⁵³ If the firm can exit the market by selling out to another firm willing to assume its entire capital commitment, then exit will be the best alternative any time business becomes unprofitable.²⁵⁴

Dominant firms can make strategic use of sunk costs in two different ways: (1) the dominant firm might take advantage of the sunk costs of smaller firms in order to obtain monopoly profits at their expense; or (2) the dominant firm might make sunk cost investments of its own in order to make its threats credible.²⁵⁵ Both strategies can result in extended periods of monopoly pricing.

a. Strategy, vertical integration and sunk costs. As a basic premise, vertical integration is efficient and should not be of concern to the antitrust laws. However, occasionally vertical integration, or in some cases the absence of integration, may permit a firm to take strategic advantage of a vertically related firm's sunk costs. The result of such advantage taking can be a deadweight efficiency loss similar to the loss that results from exercises of monopoly power.²⁵⁶

Certain vertical integration strategies, such as tying arrangements and exclusive dealing, permit firms to make the best use of or to minimize the risk of sunk cost investments. For example, the firm planning to build a large plant may use exclusive dealing arrangements to guarantee a market for itself once its investment in a certain amount of productive capacity has been made. Such use of market-based vertical integration strategies is generally efficient insofar as it prevents other

253. Sometimes fixed costs that are not sunk are referred to as "avoidable fixed costs." See D. McCLOSKEY, *THE APPLIED THEORY OF PRICE* 282-83 (1982).

254. For example, suppose that a firm's only capital asset is a general purpose delivery truck, whose fixed costs are amortized at \$500 per month. Variable costs are \$10 per hour. A firm operating the truck 100 hours per month with revenues of \$12 per hour is covering its variable costs and contributing \$200 to fixed costs. Continued operation in this case is "loss minimizing" — i.e., less costly than no operation at all. However, the firm is still losing \$300 per month. If the firm can sell the truck to a different firm which is willing to assume the *entire* fixed cost liability, it will be even better off.

If an asset is highly specialized, its owner is less likely to be able to sell it for its entire fixed cost. Thus, in general, the more specialized an asset is, the higher will be the percentage of sunk investment in it.

255. See Williamson, *Predatory Pricing*, *supra* note 23.

256. See text at notes 123-41 *supra*.

firms from taking advantage of the investor's sunk costs.²⁵⁷ However, the coin has another side. A firm may strategically take advantage of a vertically related firm's failure to guarantee its market by means of exclusive dealing arrangements or some alternative. One example of this is *Great Atlantic & Pacific Tea Co. v. FTC*,²⁵⁸ which is known to antitrust lawyers as a case that substantially emasculated section 2(f) of the Robinson-Patman Act.²⁵⁹ A&P was able to solicit a very low bid from Borden, one of its suppliers of dairy products, because Borden had recently built a new plant nearby and would not be able to produce at capacity if it lost the very large A&P contract. In short, once the Borden plant was built, Borden inadvertently made itself a "captive" to A&P, which was able to take advantage of the situation by forcing a very low bid from Borden.²⁶⁰

The best solution in such cases may be to permit the market to discipline Borden for its short-sightedness. Next time it will guarantee its market, perhaps by exclusive dealing arrangements, *before* it makes a large commitment to a new plant. The market solution will not always work, however, because not every situation conducive to taking advantage of sunk cost commitments can be foreseen. Perhaps more importantly, if every one that could be foreseen had to be covered before investment would occur, there would be much less investment.²⁶¹ In such circumstances the antitrust laws can encourage effi-

257. See Marvel, *Exclusive Dealing*, 25 J. L. & ECON. 1 (1982); Williamson, *Credible Commitments*, 29 ANTITRUST BULL. 33, 52-54 (1984). Firms may sometimes use tying arrangements in order to protect sunk cost investments. For example, see *Northern Pac. Ry. v. United States*, 356 U.S. 1 (1958), in which the Supreme Court condemned under the Sherman Act an arrangement by which Northern Pacific sold land close to its tracks using deeds containing covenants under which the grantee promised to ship over Northern Pacific's lines, provided that Northern Pacific's freight rates were competitive with those of other railroads. In this case Northern Pacific had made a large sunk investment in a natural monopoly market (railroad lines). In general, multifirm competition in natural monopoly markets will drive prices down to a level that is insufficient to enable each firm to make a profit. The covenants effectively guaranteed that Northern Pacific could retain 100% of the freight business simply by matching the price of any new entrant. The result was to create a very powerful entry deterrence mechanism. No firm would want to be second entrant into a natural monopoly market if it knew that it always had to undersell a rival in order to obtain any business at all.

258. 440 U.S. 69 (1979).

259. The case held that a buyer could not violate the Robinson-Patman Act unless the seller had also violated it. Thus, if the seller could avail itself of the good faith "meeting competition" defense, the buyer could not be in violation of the statute, even if the differential pricing ("price discrimination," within the meaning of the statute) was caused by the buyer's misrepresentation. 440 U.S. at 75-85. See H. HOVENKAMP, *supra* note 17, at 350.

260. 440 U.S. at 73. For an analogous situation involving contractual agreements between General Motors Corp. and Fisher Body Co., see Klein, Crawford & Alchian, *supra* note 247, at 308-10.

261. Arguably, such a rule would require complete vertical integration of all firms having sunk cost investments. Since all firms probably have at least *some* sunk costs, this could mean that virtually all of the enterprise would have to be organized into a single firm.

cient investment by protecting firms from strategic, inefficient advantage taking by others.

Within the Chicago School model, vertical integration is virtually always efficient; it is harmful only if it facilitates collusion or perhaps price discrimination.²⁶² Since the laws against collusion can be used against the first of these, and since the second is very difficult for courts to analyze, many Chicago School writers have argued that all vertical integration should be legal.²⁶³

For example, the Chicago School has been extremely critical of Judge Hand's analysis in *Alcoa*²⁶⁴ of the price and supply "squeeze" by which Alcoa supposedly monopolized the market for aluminum.²⁶⁵ The "squeeze," which was recently revived in *Bonjorno v. Kaiser Aluminum & Chemical Corp.*,²⁶⁶ was described by Judge Hand as a mechanism by which a vertically integrated monopolist might leverage additional monopoly profits by squeezing independent firms between high costs and low output prices.²⁶⁷

The allegation in both *Alcoa* and *Bonjorno* was that the vertically integrated monopolist produced raw aluminum ingot, some of which it fabricated itself and some of which it sold to independent fabricators. The monopolist allegedly sold the raw aluminum to the independent fabricators at a high price, but charged a low output price through its subsidiary fabricators for the fabricated product. As a result the independents were caught between the high price they had to pay for the raw aluminum and the low price they were able to collect for fabricated aluminum.

The Chicago School critique of the price squeeze rests on a number of observations. First, why would a firm that presumably has the right to deal or refuse to deal as it pleases bother to use a price squeeze to injure independent fabricators? It could quite easily refuse to deal with independents and fabricate all of its aluminum itself. Second, the notion that the squeeze is profitable is simply another instance of the overused leverage theory that a monopolist can use its monopoly power in one market to obtain additional monopoly profits in a second market.²⁶⁸ However, as has been demonstrated many times, the mo-

262. See Bork, *supra* note 125; Easterbrook, *supra* note 1; Posner, *supra* note 106.

263. See Bork, *supra* note 125; Easterbrook, *supra* note 1; Posner, *supra* note 106.

264. *United States v. Aluminum Co.*, 148 F.2d 416, 436-37 (2d Cir. 1945).

265. Cf. Bork, *supra* note 125, at 163-65 (criticizing Hand's "squeeze" doctrine as applied in *United States v. Corn Prods. Ref. Co.*, 234 F. 964 (S.D.N.Y. 1916)).

266. *Bonjorno v. Kaiser Aluminum & Chem. Corp.*, 752 F.2d 802, 808-10 (3d Cir. 1984), *petition for cert. filed*, 53 U.S.L.W. 3883 (U.S. June 6, 1985) (No. 84-1907).

267. 148 F.2d at 436-37.

268. See R. BORK, *supra* note 6, at 243-44.

nopolist of a single stage in a distribution system can obtain its full monopoly markup in that stage alone and will not enlarge its profits by adding another stage. This criticism applies equally to tying arrangements and reciprocity, exclusive dealing, vertical mergers and the price squeeze, as well as other forms of vertical integration by the monopolist.²⁶⁹

Posner and Easterbrook argue that the price squeeze can reflect three different circumstances. The first is the existence of efficiencies on the part of the vertically integrated relationship: to the extent the market transaction between the aluminum manufacturer and the independent fabricator costs money, the fully integrated fabricators will be able to undersell the independent fabricators, which will have higher costs. Secondly, the squeeze may reflect Alcoa's efforts to break up a cartel of independent fabricators by vertically integrating into fabrication itself. Finally, the dual fabrication system may be a mechanism by which Alcoa engages in price discrimination. Posner and Easterbrook conclude that only the third of these phenomena raises any antitrust concerns.²⁷⁰

Their analysis is based on the assumption that the assets of the independent fabricators are costlessly transferable.²⁷¹ In fact, the price squeeze may often be a mechanism by which a monopolist takes advantage of a vertically related firm's sunk investment in order to force an infracompetitive rate of return on the firm — at the extreme, a rate of return sufficient to cover only the firm's average variable costs.²⁷² In that case the monopolist will effectively transfer to itself the smaller firm's return on the fixed-cost part of its investment. The independent fabricator will not go out of business because production in this case produces fewer losses than shutdown would.²⁷³

269. See H. HOVENKAMP, *supra* note 17, at 199 (vertical integration in general); *id.* at 222-224 (tying arrangements and exclusive dealing).

270. R. POSNER & F. EASTERBROOK, *supra* note 77, at 874-75.

271. Alternatively, this analysis may be based on the even more implausible assumption that the independent fabricators have no fixed costs.

272. Plus the annualized salvage value of its fixed cost assets. See text at notes 250-51 *supra*.

273. That is, assuming the firm is not forced into bankruptcy and shutdown. By pursuing this strategy, the monopolist will make more money than it would make by vertically integrating into fabrication itself. If it did that, it would have to recover its fixed as well as its variable costs. Effectively, the monopolist is transferring to itself that part of the independent fabricator's return that reflects the fixed cost investment.

Suppose that a firm invests in land and a plant capable of producing 1,000,000 units of fabricated aluminum per year. Retirement of the fixed cost investment over the life of the plant requires an annual payment of \$1,000,000 per year. The costs of the raw material, energy, labor and other variable cost items total \$1.25 per unit. When the plant is operating at capacity it will be marginally profitable at a market price of \$2.25 per unit — \$1.00 per unit to cover fixed costs and \$1.25 to cover variable costs. However, the firm will not shut down unless the market price drops below \$1.25 per unit. The fixed costs must be paid whether or not the firm produces. If

In the long run, when the plant wears out, the independent fabricator faced with this dilemma will exit the market or relocate where the supply of raw material is more competitive. At that time the monopolist may vertically integrate into the market from which the independent exits. For the time being, however, the monopolist profits by taking strategic advantage of the independent's sunk costs.

b. *The Bonjorno case.* The facts of the Third Circuit's recent decision in *Bonjorno v. Kaiser Aluminum & Chemical Corp.*²⁷⁴ suggest that the defendant took anticompetitive advantage of a buyer's sunk costs in order to facilitate collusion at the buyer's expense, while simultaneously forcing the buyer to accept infracompetitive returns.

It is well known that various kinds of vertical integration can facilitate horizontal collusion at either the manufacturer (supplier) or the retailer (distributor) level.²⁷⁵ Most of the literature on the use of vertical integration to facilitate collusion has focused on the conspirator's use of vertical new entry, mergers, territorial division and resale price maintenance. However, exclusive dealing probably facilitates horizontal upstream collusion more effectively than resale price maintenance and perhaps more effectively than vertical nonprice restraints such as territorial division.²⁷⁶

Collusion at the manufacturer level, whether express or tacit, can be frustrated if large, well-informed buyers force the colluders to compete against each other by making various concessions.²⁷⁷ For example, the OPEC cartel has been nearly undermined by the fact that most of its buyers are large and well informed and have been able to strategize their buying so as to keep individual OPEC members unin-

the market price drops to \$1.50 the firm will still contribute twenty-five cents per unit to fixed costs and will "lose" \$750,000 per year. However, if it ceases production it will be obligated to pay \$1,000,000 per year.

The strategizing firm, which operates in similar markets, can quite easily guess the amount of the victim's sunk costs. Furthermore, it does not need to rob the victim of all return on fixed costs. Any amount that it takes will be profitable.

274. 752 F.2d 802 (3d Cir. 1984), *petition for cert. filed*, 53 U.S.L.W. 3883 (U.S. June 6, 1985) (No. 84-1907).

275. See Hovenkamp, *supra* note 56; Liebler, *Intrabrand "Cartels" under GTE Sylvania*, 30 UCLA L. REV. 1 (1982).

276. The concern that vertical restraints, including exclusive dealing, can facilitate collusion is addressed in the Department of Justice Vertical Restraints Guidelines, 48 ANTITRUST & TRADE REG. REP. (BNA) special supp. 3, 6 (Jan. 23, 1985). However, the guidelines do not distinguish the ways in which exclusive dealing might facilitate collusion from the ways in which vertical territorial division or resale price maintenance might accomplish the same end. See generally Marvel, *supra* note 257.

277. See *E.I. du Pont de Nemours & Co. v. FTC*, 729 F.2d 128, 141 (2d Cir. 1984) (citing this as a reason for not condemning alleged tacit collusion); H. HOVENKAMP, *supra* note 17, at 107-09.

formed about what competitors are doing.²⁷⁸

The cartel faced with disruptive buyers has a choice of strategic responses.²⁷⁹ First, it can eliminate the buyers by integrating vertically into the buyers' production level. Such a strategy is expensive, however, and places the cartel members under the antitrust law of vertical mergers, unless they integrate by new entry into the market where the disruptions are occurring. Integration by new entry can be disruptive of existing capacity, however, calling unnecessary attention to the cartel members' activities.

The cartel members can eliminate the disruptive buyer problem by exclusive dealing with the established downstream firms. Under an exclusive dealing arrangement, each buyer has a requirements contract with a particular seller and will not be permitted to purchase from one of the other cartel members. The buyer obligated by the exclusive dealing arrangement is effectively prevented from forcing the members of the sellers' cartel to compete with one another.

Such exclusive dealing will work, however, only if the buyer is agreeable to exclusive dealing. The buyer who knows that the exclusive dealing is being used to facilitate collusion at the upstream level is not likely to be agreeable, because the upstream collusion will cut into its own profits. In that case, a certain amount of strategic behavior on the part of the upstream firm may be necessary. Such strategic behavior will be possible if the buyer has substantial sunk costs in its own position in the product and geographic markets.

The facts of the *Bonjorno* case were as follows: The aluminum industry was an oligopoly, with only a few major producers.²⁸⁰ These producers had facilitated tacit collusion by developing a scheme under which all of them manufactured raw aluminum, but each became the dominant firm with respect to a particular intermediate level aluminum product from which finished products were fabricated. In short, they engaged in tacit product market division. The defendant Kaiser was the dominant firm in the manufacture of aluminum coil and sheet, which is used to make aluminum pipe. The plaintiff was an independent fabricator which purchased coil and sheet from the defendant and turned it into pipe. Because of the product division scheme, the

278. See generally J. MARQUEZ, *OIL PRICE EFFECTS AND OPEC'S PRICING POLICY: AN OPTIMAL CONTROL APPROACH* (1984).

279. The theory that a disruptive buyer can frustrate cartelization is developed in the context of vertical merger policy in 4 P. AREEDA & D. TURNER, *supra* note 229, at ¶ 1006. See also Justice Department's 1984 Merger Guidelines, *supra* note 36, at 26,836; P. AREEDA & H. HOVENKAMP, *supra* note 55, at ¶ 1000.1b.

280. *Bonjorno v. Kaiser Aluminum & Chem. Corp.*, 752 F.2d 802, 809 (3d Cir. 1984).

plaintiff was effectively dealing with a monopolist.²⁸¹

Defendant Kaiser also competed with the plaintiff in the fabrication of pipe by its wholly owned fabricators. The plaintiff alleged that Kaiser had imposed a classical price squeeze on the plaintiff by selling coil and sheet at a price so near the market price for finished pipe that profitable independent fabrication was impossible.²⁸² Secondly, the plaintiff alleged that the defendant continually ordered the plaintiff to buy coil and sheet only from the defendant and threatened to build its own fabrication plant near the plaintiff's plant if the plaintiff should ever attempt to buy coil and pipe from one of the defendant's competitors.²⁸³ Finally, when the plaintiff purchased aluminum from a competitor, the defendant carried out its threat and built a plant forty miles from the plaintiff's plant.²⁸⁴

This strategy is quite plausible if the manufacturer is "best placed" vis-à-vis the buyer — that is, if the buyer in an industry with high transportation costs is closer to the manufacturer than any other buyer is, thus giving the two firms a transportation cost advantage with respect to one another. The strategy will work even better if the buyer has a specialized plant dedicated to the processing of the manufacturer's product. Because of the plant's specialized character, its salvage value if taken out of that particular market is much less than its cost. The difference between the unamortized cost of the buyer's plant and its salvage value is a sunk cost which the manufacturer can use to its advantage. At the extreme, the monopoly manufacturer could force the buyer's margin down to a level sufficient to cover average variable costs plus the salvage value of the plant, without enough left over to cover fixed costs. In that case the monopolist will have developed a captive purchaser, who cannot move, cannot find an alternative supplier, and would lose even more money if it shut down.²⁸⁵

Suppose, for example, that the plant has a cost of \$1,000,000 per year and a salvage value of \$200,000 per year. The average variable cost of fabricating the aluminum is \$1500 per unit plus the price that the fabricator pays for the aluminum. The plant has a capacity of 1000 units of aluminum per year. In order to be profitable when it is operating at capacity, the fabricator must obtain \$2500 more than the wholesale price for the final product — \$1500 to cover average variable costs and \$1000 to cover fixed costs.

281. 752 F.2d at 809.

282. 752 F.2d at 810.

283. 752 F.2d at 808.

284. 752 F.2d at 808.

285. See text at notes 271-73 *supra*.

However, the plant will not shut down unless its margin (the difference between the wholesale price and its output price) falls to an amount insufficient to cover the average variable costs plus the salvage value. Suppose that the monopolist manufacturer raises the wholesale price of ingot to the independent fabricator, while continuing to sell fabricated aluminum through its own fabricators at its profit-maximizing price. As a result the margin between the independent fabricator's wholesale price and its output price falls to \$1800. In that case the fabricator will be losing money because the margin is insufficient to cover its total costs. Nevertheless, it will stay in production because the margin yields an annual amount equal to average variable costs plus \$300,000, which is \$100,000 more than the fabricator could obtain by shutting down and salvaging the plant.

The strategizing monopolist who knows that the independent firm's fabrication plant has a useful remaining life of, say, ten years, would engage in this price squeeze for ten years. Presumably at that time the independent fabricator would exit the market since it cannot make a profit, and the monopolist could build its own fabrication plant to serve that market. During the ten-year interval, the monopolist would pocket a substantial amount of the fabricator's annualized sunk costs.²⁸⁶

The view that a monopolist can make strategic, inefficient use of a vertically related firm's sunk costs does nothing to undermine the traditional Chicago School notion that vertical integration is efficient and generally should not raise antitrust concerns. On the contrary, vertical integration generally eliminates such advantage taking, and this is one of the principal reasons that firms engage in vertical integration.²⁸⁷ In this case the antitrust concern is caused, not by vertical integration, but by its absence.

The manufacturer like that in the *Bonjorno* case, faced with fabricators unwilling to participate in exclusive dealing, might have to advance various credible threats in order to make the fabricators believe that de facto exclusive dealing was in their best interests. Since the fabricator's plants are already built, the threat to refuse to deal with a fabricator who bought from a competitor, and then to build a manufacturer-owned fabrication plant nearby, plus the well-publicized

286. The evidence in *Bonjorno* indicated that the defendant used a pricing formula for independent fabricators tagged to the costs of its wholly owned fabricators. The formula generated a markup sufficient to cover "direct costs" of production, but insufficient to cover "corporate overhead." *Bonjorno*, 752 F.2d at 809-10. That language, while somewhat ambiguous about the economic costs at issue, suggests that the formula gave the plaintiff enough revenue to cover variable costs, but not enough to cover fixed costs as well.

287. See Klein, Crawford & Alchian, *supra* note 247.

termination of one fabricator who failed to get the message, could certainly be effective.²⁸⁸ This would be particularly true if the supplying manufacturer were better placed to supply the independent fabricator than other manufacturers were. For example, if Kaiser is closer to Bonjorno's fabrication plant than any other aluminum manufacturer, Bonjorno should know that its own costs will go up if it can no longer purchase aluminum sheet and coil from Kaiser. More to the point, Bonjorno could not compete with a Kaiser-owned fabricator close by if the Kaiser-owned fabricator had the advantages of both any economies created by manufacturer ownership *and* a better-placed supplier (Kaiser) than Bonjorno had. Moreover, once Kaiser had built its own plant nearby, Bonjorno would be unable to recover the costs of its plant, except for the salvage value. Bonjorno would realize that its own interests required taking Kaiser's threat seriously and deal only with Kaiser.

2. Raising Rivals' Costs

An important kind of strategic behavior generally overlooked in antitrust literature, although recently addressed in economic writing, has been most aptly described as "raising rivals' costs."²⁸⁹ This behavior is generally initiated by the dominant firm or group of firms and directed against smaller firms. It is designed to force upon the smaller firms higher costs than it imposes on the strategizing firm, although the behavior may raise the costs of the strategizing firm as well. The result is that the profit-maximizing output of the victims is decreased, and the strategist can reap the benefit in higher prices or enlarged output. Importantly, the strategist can earn monopoly profits *during* the period in which such strategic behavior occurs — in fact, often it will earn them only during the period in which the strategic behavior occurs. As a result, such behavior is profitable even if it lasts indefinitely.

Since a relatively small amount of scholarship and virtually no litigation has been devoted expressly to the problem of raising rivals' costs, it is difficult to say how often the strategy is pursued by dominant firms or groups of firms, or what its welfare effects are. It is quite plausible, however, that the strategy is both common and quite harmful to consumer welfare.²⁹⁰ In that case it should be an antitrust

288. Kaiser might also build its own fabricating plant if Bonjorno's plant became obsolete or was nearing the end of its useful life.

289. See Salop & Scheffman, *supra* note 23.

290. That is, the strategy results in reduced output and higher prices. Salop and Scheffman offer a few generalizations about the welfare effects. *Id.* at 270.

concern.

There is an intuitive reason for thinking that strategic raising of rivals' costs is more common than predatory pricing. As a strategy, raising rivals' costs can be both more profitable and less risky than predation, and it can occur in a wider variety of markets.²⁹¹ Under traditional theories of predatory pricing²⁹² a dominant firm attempts to dispatch a rival from the market by undergoing an indefinite period of below-cost selling in the hope that the victim will leave the market before the predator's resources are exhausted. Not only is this strategy very expensive at the onset, but it is also seldom likely to be successful. Even if the victim is forced into bankruptcy by the predatory pricing, it will sell its assets at a low price to a new firm who will maintain the victim's productive capacity on the market.

Raising rivals' costs, on the other hand, does not involve an initial term of loss selling to be followed by the mere likelihood of monopoly profits. The monopoly profits may flow in immediately. Furthermore, the strategy need not involve any event as cataclysmic (and therefore calculated to invite antitrust litigation) as the exit of a firm from the market. The market may look quite "normal," with relatively stable market shares and competitive profits earned by smaller firms, although dominant firms will earn more.²⁹³ In fact, one of the greatest advantages of pursuing a strategy of raising rivals' costs is its subtlety. For all these reasons, but particularly because they are more likely to be successful, threats to raise rivals' costs may be more credible than threats to engage in predatory pricing.²⁹⁴

Finally, in many cases a strategy of raising rivals' costs will be profitable even if the market is not monopolized or not particularly conducive to monopolization or tacit price collusion. Tacit collusion with respect to activities that raise rivals' costs may be easier to

291. There is general agreement that predatory pricing will work only in concentrated markets containing high barriers to entry and in which the predator is a dominant firm. See H. HOVENKAMP, *supra* note 17, at 179-84.

292. It should be noted, however, that a substantial "predatory pricing" literature deals with nontraditional forms of predatory pricing — such as the strategic construction of excess capacity in industries subject to economies of scale, which facilitates so-called "limit pricing." In such cases the victims of the predatory pricing are generally firms that would like to enter the predator's market, but have not yet done so. See Salop, *supra* note 23; Williamson, *Predatory Pricing*, *supra* note 23. Other scholarship is summarized in H. HOVENKAMP, *supra* note 17, at 175-79.

293. Evidence that dominant firms are earning higher profits than fringe firms can be found in a variety of markets. Such evidence may imply no more than that the market is subject to economies of scale, although it generally suggests a certain amount of collusion, whether express or tacit, on the part of the dominant firms. See Weiss, *The Structure-Conduct-Performance Paradigm and Antitrust*, 127 U. PA. L. REV. 1104, 1115-19 (1979).

294. See Salop & Scheffman, *supra* note 23, at 267.

achieve than tacit collusion respecting price or output. Furthermore, such tacit collusion may work quite well in markets that do not have natural entry barriers that make them conducive to tacit collusion. In fact, one effect of raising rivals' costs may be to create artificial entry barriers.

For example, an industry dominated by three or four firms and containing a competitive fringe might be in a position either to engage in self-regulation or to petition the government for certain forms of regulation.²⁹⁵ In that case the dominant firms might easily reach a tacit understanding regarding their support for a regulation, compliance with which is subject to economies of scale. Each dominant firm acting alone will know that the effect of the regulation will be to leave its position unchanged vis-à-vis the other larger firms but will disproportionately raise the costs of fringe firms and perhaps the entry costs for potential rivals.

The notion that dominant firms can strategically manipulate the costs of rivals may change some of our ideas about price behavior in concentrated markets.²⁹⁶ Within the classical theory of oligopoly the "price leader" is generally a dominant firm in the market. A fringe firm would not make a good price leader because it would be unable to make credible threats against other fringe firms who cut price. Such threats are unnecessary, however, if no fringe firms are likely to cut price because their own costs are higher than those of the dominant firm. In that case it may work to the advantage of a dominant firm to permit one or more fringe firms to be the price leader(s). The high cost fringe firms will set a price sufficient to cover their costs, and the low cost dominant firm can earn monopoly profits and retain its market share simply by matching the fringe firm's pricing.

Consider the following strategies:

(1) The dominant firm files litigation against a nondominant competitor. This could be patent or other intellectual property litigation, regulatory litigation, or litigation of virtually any other kind. The litigation forces the two firms to spend roughly equal amounts, but it is much more costly to the smaller firm, for the costs are distributed over a smaller output.²⁹⁷

(2) The dominant firm or group of firms petitions the government

295. See text at notes 298-302 *infra*.

296. For the traditional Chicago School theory, see R. BORK, *supra* note 6, at 179-96; R. POSNER, *supra* note 19, at 42-47.

297. See, e.g., *MCI Communications v. American Tel. & Tel. Co.*, 708 F.2d 1081 (7th Cir.), *cert. denied*, 464 U.S. 891 (1983); *National Cash Register Corp. v. Arnett*, 554 F. Supp. 1176 (D. Colo. 1983). Other cases are discussed in Annot., 71 A.L.R. FED. 723 (1985).

or a regulatory agency for a procedure or fee that will cost both dominant and nondominant firms the same absolute amount to implement. The effect is that the compliance cost per unit is higher for the nondominant firm. Importantly, the petition need not be for a requirement that will have an impact only on the nondominant firm (as when a railroad petitions the government for stricter regulations for truckers).²⁹⁸ A large trucker might petition the government for stricter regulations for all truckers, including itself. It might profit from the adoption of such a rule if compliance is cheaper per unit of output for large firms than it is for small firms. Today it is well established that substantial economies of scale obtain for compliance with certain types of regulation.²⁹⁹ A dominant firm would do well to campaign for such regulation, for the result would be to impose disproportionately higher costs on smaller firms.

(3) Alternatively, a trade association that engages in self-regulation or self-evaluation of products and that is dominated by a few large firms might adopt a product standard compliance with which is subject to substantial economies of scale. The result is that the smaller firms' costs rise disproportionately to those of the larger firms. Once again, such a standard need not be "discriminatory."³⁰⁰ The standard will raise the costs of smaller firms disproportionately even though it is applied uniformly to all members of the trade association. This activity, unlike the petitioning activity described above, is not sheltered by an antitrust "exemption" for strategic use of governmental processes.³⁰¹ Such discrimination against smaller firms may be com-

298. See *Eastern R.R. Presidents Conference v. Noerr Motor Freight, Inc.*, 365 U.S. 127 (1961); *Session Tank Liners, Inc. v. Joor Mfg.*, [Current] ANTITRUST & TRADE REG. REP. (BNA) No. 1250, at 185 (C.D. Cal. Jan. 17, 1986); see also *Reaemco, Inc. v. Allegheny Airlines*, 496 F. Supp. 546 (S.D.N.Y. 1980) (dismissing a complaint that the defendant airline had petitioned Congress to deny favorable federal loans to the plaintiff competitor).

299. The literature on the relationship between firm or plant size and the costs of regulatory compliance is quite extensive. See Curtis, *Trade Policy to Promote Entry with Scale Economies, Product Variety, and Export Potential*, 16 CANADIAN J. ECON. 109 (1983); Hovenkamp & Mackerron, *Municipal Regulation and Federal Antitrust Policy*, 32 UCLA L. REV. 719 (1985); Maloney & McCormick, *A Positive Theory of Environmental Quality Regulation*, 25 J. L. & ECON. 99 (1982); Neumann & Nelson, *Safety Regulation and Firm Size: Effects of the Coal Mine Health and Safety Act of 1969*, 25 J. L. & ECON. 183 (1982); Pashigian, *The Effect of Environmental Regulation on Optimal Plant Size and Factor Shares*, 27 J. L. & ECON. 1 (1984); see also Bartel & Thomas, *Direct and Indirect Effects of Regulation: A New Look at OSHA's Impact*, 28 J. L. & ECON. 1 (1985) (finding economies of scale in OSHA compliance).

300. Many complaints involving alleged refusals to deal or boycotts by trade associations engaged in standard setting have charged that the association discriminated against the plaintiff in the creation or application of the standards. See, e.g., *Radiant Burners, Inc. v. Peoples Gas Light & Coke Co.*, 364 U.S. 656 (1961). Likewise, most courts have identified the absence of such discrimination as a basis for dismissing the complaint. See, e.g., *Eliason Corp. v. National Sanitation Found.*, 614 F.2d 126 (6th Cir.), cert. denied, 449 U.S. 826 (1980).

301. See *United Mine Workers v. Pennington*, 381 U.S. 657, 669-72 (1965) (even anticompetitive petitioning of the government is exempt from antitrust scrutiny); *Eastern R.R.*

mon within trade associations. Several cases, some quite recent, suggest that precisely this has been occurring.³⁰²

(4) The dominant firm engages in a form of advertising that must be met by the smaller firms. In order to preserve their market shares each of the smaller firms must engage in a similar amount of advertising, which will give each of them the same amount of advertising expense as the large firm. However, for the smaller firms the expenses will be distributed over a much smaller amount of output.³⁰³

(5) A dominant firm researching a new product and knowing that it will be the first entrant, intentionally selects a technology in which economies of scale are substantial, knowing that the fringe firms will have to follow along.³⁰⁴

At this time someone — particularly someone from the Chicago School — might object that many if not all of the illustrations given above show nothing more than economies of scale. Furthermore, economies of scale are efficient — they result in higher output and lower prices.

As a general rule economies of scale *are* efficient and ought to be encouraged; however, it is now well established that scale economies can be used strategically for inefficient purposes. In fact, a large part of the strategic entry deterrence/predatory pricing literature is dedi-

Presidents Conference v. Noerr Motor Freight, 365 U.S. 127 (1961) (same). See generally P. AREEDA & H. HOVENKAMP, *supra* note 55, at ch. 2; Annot., 71 A.L.R. FED. 723 (1985) (discussing cases dealing with the so-called "sham" exception to the *Noerr-Pennington* doctrine).

302. The existence of economies of scale in compliance with the rules of a trade association has not been an issue in such antitrust cases. As a result, reported opinions do not generally provide information concerning such economies. Nevertheless, it is possible to infer such discrimination against smaller firms in *Structural Laminates, Inc. v. Douglas Fir Plywood Assn.*, 261 F. Supp. 154 (D. Ore. 1966), *aff'd*, 399 F.2d 155 (9th Cir. 1968), *cert. denied*, 393 U.S. 1024 (1969). Other possible examples include *Moore v. Boating Indus. Assns.*, 754 F.2d 698 (7th Cir.), *vacated*, 106 S. Ct. 218 (1985), where the administrative "runaround" given a small firm in the association seemed calculated to injure smaller firms; and *United States v. Realty Multi-List, Inc.*, 629 F.2d 1351 (5th Cir. 1980), which involved a real estate multiple listing service operated for member realtors. See also *American Socy. of Mechanical Engrs. v. Hydrolevel Corp.*, 456 U.S. 556 (1982) (involving a firm that had brought suit against its competitors and against a 90,000-member professional society).

A related instance of strategic raising of the costs of rivals is discussed in Williamson, *Wage Rates as a Barrier to Entry: The Pennington Case in Perspective*, 82 Q. J. ECON. 85 (1968), concerning the litigation in *United Mine Workers v. Pennington*, 381 U.S. 657 (1965). Williamson argues that in this case dominant, capital-intensive firms sought or approved a wage contract calling for higher wages, knowing that the competitive fringe was more labor intensive and would feel the consequences of such a contract much more sharply.

303. Salop & Scheffman, *supra* note 23, at 268.

304. This may have happened in *E.I. du Pont de Nemours & Co.*, 96 F.T.C. 653 (1980).

Salop & Scheffman, *supra* note 23, at 268, also argue that the vertical price "squeeze" discussed at notes 265-88 *supra* could be used by a vertically integrated firm to raise the costs of an unintegrated rival, although they do not specify precisely how this might occur. However, such a squeeze could be used to decrease the unintegrated rival's price/cost margin, at least where the rival's sunk costs are substantial.

cated to this phenomenon.³⁰⁵

Furthermore, to concentrate on economies of scale in the above examples misses the point. A cost is a cost, no matter how efficient the firm that pays it. In the above cases the market would be more competitive if the cost at issue did not have to be encountered *at all*. That is, the relevant issue is not who is the most efficient payer of these particular costs, but whether the costs would exist at all in a competitive market.

For example, the creation by trade associations of regulations, compliance with which is subject to economies of scale, is inefficient not because of the existence of the scale economies, but because the regulation itself is inefficient. It has been adopted by the dominant firms in the association because although it will raise *everyone's* costs, it will raise the unit costs of smaller rivals more than it raises their own.³⁰⁶

An antitrust policy effective against strategic raising of rivals' costs has yet to be designed. Certain barriers, such as the constitutional protection given to firms to petition the government for inefficient regulation,³⁰⁷ appear to be insurmountable in some areas. However, in most areas conduct alleged to raise rivals' costs in order to facilitate supracompetitive pricing should be subject to traditional rule-of-reason analysis. There are some problems, however, particularly if a court is asked to determine whether an ambiguous act is efficient. For example, if a trade association is charged with intentionally adopting a regulation subject to compliance economies of scale in order to raise rivals' costs, the obvious defense in marginal cases (i.e., where the regulation is not clearly unreasonable) is that the regulation itself is efficient. The court would then need to determine whether the regulatory goal could be achieved in a less anticompetitive way. If the answer to that question is no, the court still may have to determine whether any efficiencies obtained from the regulation are greater than the offsetting

305. See, e.g., Baumol, *supra* note 234; Salop, *supra* note 23; Williamson, *Predatory Pricing*, *supra* note 23.

306. The Chicago School position that all truthful advertising is efficient misses this point as well. See R. BORK, *supra* note 6, at 314-20. Advertising is subject to substantial economies of scale, because the costs of reaching a given number of potential consumers in a given media are fairly constant, and therefore must be divided over the output of the firm doing the advertising. (For example, a thirty-second prime time television commercial costs General Motors and American Motors the same amount, even though General Motors' output is five times higher.) As a result, if a large firm faces a smaller rival and the smaller firm must meet the larger firm's advertising in order to maintain its own market share, the larger firm will choose a rate of advertising larger than it would if its rival were the same size. The result will be to give the rival higher per unit costs. Robert Bork's argument, *id.* at 315, considers only excessive advertising that he regards as "predatory" — that is, as imposing immediate losses on the firm engaged in it.

307. See note 301 *supra* and accompanying text.

losses. Judicial analysis of such allegations may require resort to evidence of the defendants' intent.

3. *Strategic Manipulation of Shared Markets: The Aspen Case*

*Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*³⁰⁸ illustrates a variation of the problem of strategic behavior by a monopolist, calculated to raise its rival's costs. The plaintiff (Highlands) and the defendant (Ski Company) operated skiing facilities at the four skiing mountains in Aspen, Colorado, a popular ski resort. The defendant operated three of the mountains and the plaintiff operated the fourth. For many years the defendant and plaintiff had engaged in a joint venture under which they marketed a lift ticket that a purchaser could use at all four of Aspen's mountains. Initially, revenue from the joint tickets was divided on the basis of actual use of the slopes, with the plaintiff's share of the revenues averaging about sixteen percent.³⁰⁹ Later, the defendant refused to participate in the joint scheme unless the plaintiff agreed to accept a fixed percentage of ticket revenues that was lower than the percentage reflecting actual use of the plaintiff's mountain. After a few years of controversy over how revenues should be divided, the defendant refused to participate any longer in the joint scheme. After that, the plaintiff attempted to market its single-slope lift ticket separately, but its market share steadily declined.³¹⁰

The plaintiff sued, alleging that the defendant had illegally monopolized the market for downhill skiing services at Aspen. The specific exclusionary practices alleged were that the defendant: (1) used its dominant market share to impose a fixed revenue percentage under the joint ticket scheme that was lower than the percentage of the market actually controlled by the plaintiff; (2) refused to participate further in the joint venture with the intent or knowledge that the plaintiff would be injured thereby; (3) subsequently marketed and advertised its own three slopes in such a way as to create the impression that the Aspen area contained only the defendant's three slopes; (4) agreed with various tour operators to sell its tickets to the exclusion of plaintiff's tickets; and (5) refused to accept the plaintiff's ticket coupons in exchange for customer access to the defendant's slopes.

In affirming a judgment against the defendant, the Supreme Court observed that entry into the market for skiing services at Aspen was

308. 105 S. Ct. 2847 (1985).

309. 105 S. Ct. at 2847.

310. 105 S. Ct. at 2851.

restricted by both geography and regulatory obstacles.³¹¹ As a result, future growth in the Aspen market was unlikely. Second, most skiers strongly preferred a multi-slope lift ticket to a single-slope ticket. Furthermore, most preferred a four-slope ticket to a three-slope ticket.³¹²

This latter fact is important, for it indicates that market demand under the joint venture was greater than it was when each firm was selling its ski lift tickets separately — i.e., *assuming that the relative market shares of the two firms remained constant*, both firms would have benefitted from the selling of a joint lift ticket covering all four slopes. The effect of Ski Company's refusal to participate in the joint venture was twofold: (1) *overall* demand in the market dropped, because the best deal available in the market was a three-slope ticket instead of a four-slope ticket; and (2) Ski Company's share of the market increased, because it offered a three-slope ticket, which was far more attractive to skiers than Highland's single-slope ticket.³¹³

Since the total market for Aspen skiing would be larger under the joint venture, why did Ski Company refuse to participate? There are two likely answers.³¹⁴ First, Ski Company may have thought that demand for its three-slope ticket would be sufficiently greater than demand for the plaintiff's single-slope ticket that the plaintiff would be driven out of business. More likely, however, Ski Company believed it would make more money even though total market demand was declining, because its share of that market would increase substantially.

311. 105 S. Ct. at 2850. There is good reason to believe, however, that the market was defined too narrowly. See P. AREEDA & H. HOVENKAMP, *supra* note 55, at ¶ 534.1.

312. This is simply another way of saying that the demand curve for a four-slope ticket was to the right of the demand curve for a three-slope ticket, which was in turn to the right of the demand curve for a single-slope ticket. See *Aspen*, 105 S. Ct. at 2859-60.

The evidence in the *Aspen* case suggests, although it does not fully establish, that the market for Aspen skiing was a natural monopoly, assuming that it was a relevant market at all. A natural monopoly is a market in which costs decline as output increases all the way to the point that demand in the market is saturated when price equals marginal cost. As a result, a firm that controlled 100% of the market would encounter lower costs than any firm that controlled less than 100%. There is no evidence that the costs of administering the Aspen slopes declined as the number of slopes controlled by a single firm increased. However, the evidence does indicate that a firm that *marketed* the four slopes together faced lower marketing costs in proportion to the number of buyers than any firm that marketed fewer than four slopes. A natural monopoly controlled by a single firm will generally yield monopoly pricing unless it is regulated. The unattractiveness of those two alternatives — monopoly pricing or price regulation — suggests that the most efficient way to run the market for Aspen skiing would be to permit multiple firms to operate the slopes, but permit a joint venture that would market the four slopes together. However, the market would then have to be watched carefully because of its obvious potential for collusion.

313. 105 S. Ct. at 2853.

314. The defendant raised a third possibility: an antitrust action that had been filed against the two companies alleging that the joint venture was collusive. However, at the time of this litigation the companies had signed a consent decree which expressly permitted the joint venture. 105 S. Ct. at 2851 n.9.

This prediction turned out to be correct: Highland's share of the market declined substantially after the joint venture fell apart and the defendant's share increased.³¹⁵

The *Aspen* case is an example of strategic behavior that both raised a rival's costs disproportionately to those of the defendant³¹⁶ and reduced the relative attractiveness of the rival's market offering while simultaneously producing no efficiency gains to the defendant. In fact, the defendant's offering also became less attractive than it was prior to the strategic behavior, but not by as wide a margin as the plaintiff's. The conduct was "predatory;" however, its success did not require the defendant to sustain short-term losses in order to receive long-term gains. The gains accrued almost immediately.

The difficult problem raised by the *Aspen* case is how a court is to determine when behavior that raises a rival's cost, or that reduces the relative attractiveness of a rival's market offering, is anticompetitive and worthy of condemnation under the antitrust laws. The Supreme Court cited two convincing pieces of objective evidence: (1) contrary to the defendant's representations, the joint venture scheme was relatively easy to administer;³¹⁷ and (2) participation in the joint venture *would* have been the more profitable alternative for the defendant,³¹⁸ *except* on the premise that refusal to participate would increase the defendant's relative market share at the expense of the plaintiff's.

The Supreme Court held that the jury was entitled to find from these facts that the defendant had intended to monopolize the market. In fact, one of the most significant features of the decision is the increased weight that the Supreme Court assigned to the jury's fact finding, particularly to the jury's ability to infer anticompetitive intent in monopolization cases.

Unfortunately, the facts of the *Aspen* case made the decision too easy, and probably exaggerate a court's ability to determine whether inefficient monopolizing conduct has occurred without using evidence of intent. In a monopolization case the plaintiff must show that the defendant had monopoly power and that it engaged in one or more

315. 105 S. Ct. at 2853.

316. More accurately, the defendant's actions reduced the spread between the plaintiff's costs and the demand curve that it faced. Its costs were undoubtedly raised absolutely as well — for example, Highlands probably had to engage in more advertising in order to keep its market share from falling even faster than it did. Strictly speaking, actions that raise a rival's costs move its average cost curve (or perhaps marginal cost curve) upward; in this case, the actions moved the rival's demand curve downward. The effect in any case is the same: reduced output by the rival.

317. 105 S. Ct. at 2860-61.

318. 105 S. Ct. at 2859.

inefficient "exclusionary practices."³¹⁹ Many of a monopolist's practices are exclusionary; however, they may also be efficient. For example, the monopolist's research and development that yields a new product is exclusionary, because it injures the monopolist's rivals. At the same time, such conduct is legal because it makes consumers better off.³²⁰

An important difference between efficient and inefficient exclusionary practices in monopolization cases is that the former enlarge total market output, while the latter reduce it.³²¹ Both, however, enlarge the market share of the monopolist at the expense of its rivals. The *Aspen* case is a rare instance in which the Supreme Court was able to determine that the monopolist's conduct reduced overall market demand without committing the static market fallacy. In most cases the conduct's effect on the market is likely to be ambiguous, and evidence of intent may be essential.³²²

The strategic manipulation of the market that occurred in *Aspen*, like strategic raising of rivals' costs and taking advantage of competitors' sunk costs, illustrates the inadequacy of Chicago School theory to account for important real-world behavior. That firms can engage in such behavior to extract monopoly profits undermines the reliance placed on the market by Chicago School antitrust theory and suggests that antitrust policy based on that theory will fail to achieve efficient results.

CONCLUSION

The Chicago School of antitrust analysis has made an important and lasting contribution to antitrust policy. The School has placed an emphasis on economic analysis in antitrust jurisprudence that will likely never disappear. At the same time, however, the Chicago

319. *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966); see also *Aspen*, 105 S. Ct. at 2854 n.19.

320. See, e.g., *California Computer Prod. v. IBM Corp.*, 613 F.2d 727, 744 (9th Cir. 1979) (refusing to condemn technological innovation by a monopolist); *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263 (2d Cir. 1979), cert. denied, 444 U.S. 1093 (1980) (same).

321. For example, efficient research and development by the monopolist either improves a product, thus shifting its demand curve to the right, or else reduces its costs. In both cases the effect is higher total market output. However, all the increases in market output accrue to the monopolist, in addition to sales that the monopolist steals from competitors. On the other hand, inefficient exclusionary conduct — for example, obtaining a patent by means of fraud — neither improves the product nor reduces its costs. The only result is that competitors are excluded. Total market output declines when the monopolist increases price.

322. That is, in a real world market a court could not consider whether a monopolist's alleged exclusionary practice increased or decreased total market demand, for the relevant information would not be available. See the discussion of the static market fallacy at notes 201-20 *supra*.

School's approach to antitrust is defective for two important reasons. First of all, the notion that public policymaking should be guided exclusively by a notion of efficiency based on the neoclassical market efficiency model is naive. That notion both overstates the ability of the policymaker to apply such a model to real world affairs and understates the complexity of the process by which the policymaker must select among competing policy values.

Second, the neoclassical market efficiency model is itself too simple to account for or to predict business firm behavior in the real world. The model has proved to be particularly inept at identifying many forms of strategic behavior. In large part this is so because the market efficiency model is static and dwells too much on long-run effects. In the real world, short-run considerations are critical to business planning. Furthermore, the short run can be a very long time. In many industries a monopoly that lasts only for the short run can inflict great economic loss on society. By ignoring the short run, the market efficiency model fails to appreciate the social cost of many forms of monopolistic behavior.

The willingness to take short-run, strategic behavior seriously comes with a price, however. An economic theory that includes such behavior becomes far more complex than the neoclassical model. Under more complex models information becomes more ambiguous and more difficult to interpret. When that happens, the value of economic models begins to diminish in relative importance. In short, once the model becomes more complex, the policymaker necessarily relies on values that lie outside the model. The result is an antitrust policy that will always have a noneconomic, or political, content.