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## Economic Analysis to Guide Antitrust Enforcement: Prospects for Section 2

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## ECONOMIC ANALYSIS TO GUIDE ANTITRUST ENFORCEMENT: PROSPECTS FOR SECTION 2\*

WILLIAM G. SHEPHERD\*\*

The Sherman Act's centennial is oddly timed. It occurs at a time when the economic analysis underlying antitrust policies in the United States has undergone more than a decade of disorder. Since 1970, "new I.O."<sup>1</sup> analysts have offered theories which would justify eliminating most antitrust enforcement. During the 1980s, Reagan administration officials installed the new Chicago-UCLA and "contestability"<sup>2</sup> theories in antitrust-agency practice.<sup>3</sup> The agencies were cut in half, and their enforcement activities were reduced even more sharply.<sup>4</sup> But the doctrines

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\*\* Professor of Economics, University of Massachusetts. I am indebted to Eleanor M. Fox, Harold Demsetz, William J. Baumol, John S. Heywood, Henry W. de Jong, Takeo Nakao, Harry M. Trebing, Donald J. Dewey, and seminar participants at numerous conferences and universities, for advice about the ideas in this article.

1. "New I.O."—or "new industrial organization"—theory goes beyond the traditional "industrial organization" approach, which analyzes an industry through the relation of its structure to its performance. "New I.O." theory relies on abstract modelling of isolated elements of market conditions. This and other relatively recent neoclassical approaches toward antitrust enforcement, in addition to mainstream analyses, are given expanded treatment throughout this article.

Recent commentaries on "new I.O." theory include E. FOX & L. SULLIVAN, *CASES AND MATERIALS ON ANTITRUST* 208 (1989); A. JACQUEMIN, *THE NEW INDUSTRIAL ORGANIZATION* (1987); J. STIGLITZ & G. MATHEWSON, *NEW DEVELOPMENTS IN THE ANALYSIS OF MARKET STRUCTURE* (1986); J. TIROLE, *THE THEORY OF INDUSTRIAL ORGANIZATION* (1988).

For reviews of this and other approaches, see F. SCHERER & D. ROSS, *INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE* (3d ed. 1990); W. SHEPHERD, *THE ECONOMICS OF INDUSTRIAL ORGANIZATION* (3d ed. 1990); Shepherd, *Three "Efficiency School" Hypotheses About Market Power*, 33 *ANTITRUST BULL.* 395 (1988).

2. "A contestable market is one in which the positions of incumbents are easily contested by entrants"; it is a market "in which entry is completely free, from which exit is costless, in which entrants and incumbents compete on completely symmetric terms, and entry is not impeded by fear of retaliatory price alterations." W. BAUMOL, J. PANZAR & R. WILLIG, *CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE* 349 (1982) [hereinafter *CONTESTABLE MARKETS*].

3. E. FOX & L. SULLIVAN, *supra* note 1, at 112.

4. For a detailed review of the Reagan administration's attempts to curtail antitrust enforcement, see Fox & Sullivan, *Antitrust—Retrospective and Prospective: Where Are We Coming From? Where Are We Going?*, 62 *N.Y.U. L. REV.* 936, 947-54 (1987).

involved are vacuous and poorly supported. Economic power remains an important hazard for economic performance, as well as for larger social values. The case for active antitrust is sound.

My specific points in this article will include the following:<sup>5</sup>

(1) The Chicago-UCLA and "new I.O." analyses have tightened the standards for judging the benefits and costs of policy actions;

(2) These analyses, however, have not provided a true revolution. Instead, in addition to assertions that monopoly is benign, there has simply been a boom in game-theoretic analysis and a coup in the federal antitrust agencies;<sup>6</sup>

(3) The Chicago-UCLA and "contestability" theories contain logical inconsistencies and lack a convincing empirical basis;

(4) Market dominance involves ineffective competition, and there is no valid presumption that it usually reflects superior efficiency;

(5) The AT&T case<sup>7</sup> has reaffirmed the effectiveness of section 2 of the Sherman Antitrust Act,<sup>8</sup> even in "big" cases;

(6) A number of significant dominant-firm candidates remain or are emerging; and

(7) Section 2 (or alternative instruments) must be applied with special creativity, rather than by simple litigation in the traditional style.

These points do not merely reflect an old-fashioned "structuralism," a neglect of "new I.O." theory, or a reflexive commitment to antitrust enforcement. Nor am I nostalgic for the 1960s period of research and policy. But the following review of recent doctrines and methods will note the limits of recent analysis, as judged by scientific standards of validity.

Market power *does* have harmful effects, especially on innovation, and its supposed benefits are usually dubious. We need to think beyond the framework of static-efficiency, game-theoretic analysis, so as to reassert the importance of innovation and the competitive process, as well as fairness and larger social values. Monopoly can have deep impacts throughout society. Adam Smith knew that, as did John Stuart Mill, Alfred Marshall, Henry Carter Adams, and the original Chicago School, including Frank Knight and Henry Simons. The import of these effects is often lost in the honing of tight little models.

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5. Fuller coverage of the ideas in this article is provided in W. SHEPHERD, *supra* note 1, and W. SHEPHERD, *PUBLIC POLICIES TOWARD BUSINESS* (8th ed. 1991).

This article reflects ideas I have been offering in a variety of settings. In particular, it draws on Shepherd, *The Treatment of Market Dominance*, 5 REV. INDUS. ORG. 127 (1990).

6. For a view that the changes have been radical, see THE ANTITRUST REVOLUTION 5 (J. Kwoka & L. White eds. 1989) (documenting "the economic revolution that has overtaken antitrust policy" through antitrust case studies).

7. *United States v. American Tel. & Tel.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom.* *Maryland v. United States*, 460 U.S. 1001 (1983).

8. 15 U.S.C. § 2 (1988).

In that light, this article reviews the economic foundations for antitrust policies, with a focus on section 2 actions. Part I considers antitrust as a topic for cost-benefit analysis, in order to clarify the monopoly-accepting shift that "new I.O." thinking has caused. Part II briefly discusses the logical and empirical validity of the core Chicago-UCLA "efficient-structure" hypotheses and of the "contestability" theory.

Even if balanced economic criteria are carefully applied, the section 2 policy instrument might now be too slow and weak to yield net benefits in future cases. Part III of this article reviews some possible candidates: leading dominant firms which are not natural monopolies. These turn out to constitute a significant but limited group, presenting a number of special features that require some novel antitrust methods.

## I. EFFICIENT CHOICES

To begin, a comparison of the conceptual basis of mainstream research with Chicago-UCLA and "new I.O." theory is necessary.

### A. *Mainstream Research*

The performance goals of mainstream research begin with static allocation and the maximizing of consumer surplus, but there is much more. Internal business efficiency is also to be maximized. Most importantly, innovation is to be rapid. Innovation's benefits grow in an exponential fashion, and they can quickly swamp the niceties of mere static allocation.<sup>9</sup> Other traditional goals include fairness, the competitive process itself, and larger social values, including the basis for stable democratic processes.

The primary lessons of mainstream research, reflecting many decades of study and controversy,<sup>10</sup> are as follows. First, effective competition requires a sufficient number of competitors—commonly at least six, and preferably over ten—to avoid single-firm dominance or tight-oligopoly collusion. There must also be a reasonable degree of competitive parity among these numerous rivals so that they have comparable resources and

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9. See generally J. SCHUMPETER, *CAPITALISM, SOCIALISM AND DEMOCRACY* (1976) (discussing the relationship between capitalism's constant goal of market expansion and the competitive process).

10. For summaries and recent contributions, see *THE ECONOMICS OF MARKET DOMINANCE* (D. Hay & J. Vickers eds. 1987) (collection of essays appraising traditional monopoly analysis and suggesting implications for the principles and practice of policy toward dominant firms); D. MUELLER, *PROFITS IN THE LONG RUN* (1986) (examining whether there were persistent differences in profitability across firms and what accounted for these differences if they existed, by using data for the 1000 largest U.S. manufacturing firms in 1950 and 1972, and concluding that chronic differences in profitability and market power prevailed among large U.S. companies); F. SCHERER & D. ROSS, *supra* note 1 (systematic exploration of the field of economics known as industrial organization).

access to strategic methods. They then can apply strong mutual pressure to enhance performance. Parity is especially important when the rivals are few in number. Otherwise, single-firm dominance among asymmetric rivals will tend to persist (with higher degrees of market power).<sup>11</sup>

Structure usually has a significant influence on performance, particularly when the degree of dominance is high.<sup>12</sup> Causation flows mainly from structure to performance, reflecting the effects of market imperfections. Only when imperfections are entirely absent would the causation be mutual or reversed, so that dominance might be credited solely to superior efficiency.

Many important markets do contain substantial imperfections. They range from lags in adjustment, asymmetric information, consumer malleability, and uncertainties, to a range of strategic actions. Such imperfections permit dominance to emerge when a firm's total efficiency is only average or inferior.

Competition is a process with a series of episodes.<sup>13</sup> There must be sufficient parity and numbers of firms at each episode in order for effective competition to continue. Otherwise, the process of effective competition ceases and is replaced by dominance.

Market dominance (generally, a market share over fifty percent with no close rival) commonly involves ineffective competition.<sup>14</sup> In such

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11. The higher market power of dominance is suggested by the Hirschman-Herfindahl index of concentration (HHI). A single firm with 70% of the market has an HHI value of 70<sup>2</sup> or 4900. Two 35% market share duopolists have a combined HHI value of two times 35<sup>2</sup>, which at 2450 is only one-half the value of the dominant firm. HHI calculations are at the core of the "new" analysis followed by the Antitrust Division and the Federal Trade Commission in evaluating market power. See Antitrust Div., U.S. Dep't of Justice, Revised Merger Guidelines, 49 Fed. Reg. 26,823 (1984); U.S. FED. TRADE COMM'N, STATEMENT CONCERNING HORIZONTAL MERGERS (1982); see also Fox & Sullivan, *supra* note 4, at 947-51; Leddy, *Recent Merger Cases Reflect Revolution in Antitrust Policy*, LEGAL TIMES, Nov. 3, 1986, at 17.

12. Nevertheless, labeling mainstream specialists as "structuralists" is a superficial error. The mainstream approach has never rigidly held that structure is a tight determinant, as students of the Chicago-UCLA school frequently assert. The study of structure was never as uniform nor remotely as extreme as "new I.O." theorists now say. Nor did the interest in using structure as a partial indicator of market power ever achieve the tight grip on the antitrust agencies that Chicago-UCLA doctrine has held in the 1980s.

13. Joseph Schumpeter has stressed that competition is a *process*. See J. SCHUMPETER, *supra* note 9, at 82. Alfred Marshall, too, believed that economics is concerned mainly with general conditions and tendencies, and as a rule evolved slowly. See A. MARSHALL, *INDUSTRY AND TRADE* 5-7 (1920); A. MARSHALL, *PRINCIPLES OF ECONOMICS* 4-10 (8th ed. 1920). Mainstream researchers have generally regarded the process as important, though during each episode the current structure is likely to have some influence.

14. See D. MUELLER, *supra* note 10, at 49 (noting the existence of "an inherent stickiness in market shares and market leadership positions that reflects an attenuated working of the competitive process"); F. SCHERER & D. ROSS, *supra* note 1, at 18-29 (describing the efficiency of competitive markets versus the inefficiency of monopoly

situations, reasonable parity is absent; firms are mismatched. Disparities in resources, devices, and risks are often great enough to tilt the playing field.

Actual competition among existing firms within the market is generally more important than potential competition from possible entrants. Exceptions may occur, but firms usually expect sharper impacts and gains in contending with their existing rivals.

### B. Chicago-UCLA and "New I.O." Theory

The post-1950 Chicago-UCLA doctrines began with the unorthodox extremes of Morris Adelman, Aaron Director, and George Stigler, but emerged in a more axiomatic form after 1970.<sup>15</sup> "New I.O." theory<sup>16</sup>

pricing); W. SHEPHERD, *supra* note 1, at chs. 1-3 & 10; Geroski, *Do Dominant Firms Decline?*, in *THE ECONOMICS OF MARKET DOMINANCE*, *supra* note 10, at 143 (citing econometric estimates suggesting that market share of the dominant firms is indeed likely to decline, but only at an extremely lethargic pace, and citing difficulties with the hypothesis of "optimally managed decline"); Shepherd, *Assessing "Predatory" Actions by Market Shares and Selectivity*, 31 ANTITRUST BULL. 1, 3-18 (1986) (dominant firms can use selective tactics small firms cannot employ, resulting in ineffective competition).

15. Leading writings in this area include Y. BROZEN, *CONCENTRATION, MERGERS, AND PUBLIC POLICY* (1982); J. MCGEE, *IN DEFENSE OF INDUSTRIAL CONCENTRATION* (1971); G. STIGLER, *THE ORGANIZATION OF INDUSTRY* (1968); Brozen, *Concentration and Profits: Does Concentration Matter?*, 19 ANTITRUST BULL. 381, 381-92 (1974) [hereinafter Brozen, *Concentration and Profits*]; Brozen, *The Antitrust Task Force Deconcentration Recommendation*, 13 J.L. & ECON. 279 (1970) [hereinafter Brozen, *The Antitrust Task Force*]; Demsetz, *Industry Structure, Market Rivalry, and Public Policy*, 16 J.L. & ECON. 1 (1973) [hereinafter Demsetz, *Industry Structure*]; Demsetz, *Two Systems of Belief About Monopoly*, in *INDUSTRIAL CONCENTRATION: THE NEW LEARNING* 164 (H. Goldschmid, H. Mann & J. Weston eds. 1974) [hereinafter Demsetz, *Two Systems*]; see also Peltzman, *The Gains and Losses from Industrial Concentration*, 20 J.L. & ECON. 229 (1977) (concluding that industrial concentration mainly reflects efficiency); Posner, *Antitrust Policy and the Supreme Court: An Analysis of the Restricted Distribution, Horizontal Merger and Potential Competition Decisions*, 75 COLUM. L. REV. 282 (1975) (appraising the performance of the Supreme Court in the antitrust field and concluding that the Court's decisions are "unsatisfactory" because they are inconsistent with the purposes of the law and with each other); Posner, *The Social Costs of Monopoly and Regulation*, 83 J. POL. ECON. 807 (1975) (arguing that public regulation is possibly a larger source of social costs than is private monopoly).

The more extreme views can be found in D. ARMENTANO, *ANTITRUST AND MONOPOLY: ANATOMY OF A POLICY FAILURE* (1982); R. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 90-106 (1978); Johnson, *Can Economic Analysis Give Better Guidance to Antitrust Policy?*, 21 ECON. INQUIRY 1 (1983).

For related issues, see F. FISHER, J. MCGOWAN & J. GREENWOOD, *FOLDED, SPINDLED AND MUTILATED: ECONOMIC ANALYSIS AND U.S. vs. IBM* (1983) [hereinafter *FOLDED, SPINDLED AND MUTILATED*]; Fisher, *On the Misuse of Accounting Rates of Return to Infer Monopoly Profits*, 73 AM. ECON. REV. 82 (1983).

16. See *supra* note 1.

emerged after 1975, along with "contestability" theory.<sup>17</sup> This method of analysis is focused on static allocation, often in a two-firm game situation.<sup>18</sup> The other performance values (innovation, X-inefficiency, competition, equity, etc.) are left aside, and the conclusions usually involve only the maximizing of consumer and producer surplus.<sup>19</sup> The market's competitiveness can become irrelevant and dispensable if monopoly gives surpluses as large as competition would.

The assumptions of the analysis are often too extreme to relate to important real markets. Game theory involves the odd assumption that firms rigorously avoid collusion. The absurdity of such reasoning is apparent: the task is to understand possible collusion, yet the analysis starts by assuming it away!

Chicago-UCLA analysis involves three factual claims plus four hypotheses. The factual claims assert that actual market power in the United States economy is (1) rare in extent, (2) weak in negative effects, and (3) subject to rapid erosion.

The first of the four hypotheses posits that dominance arises from superior efficiency. Dominance delivers benefits; to that extent, a company's performance determines its market share. Causation therefore runs from performance to structure, rather than the reverse.

Accordingly, the second hypothesis is that collusion is the only source of "real" market power. By delivering good results, monopoly is equivalent to competition. The only remaining monopolizing actions that matter are ones "facilitating collusion," a claim that is widely made. Meanwhile, collusion is in turn only weak and transient, because internal conflicts and cheating cause it to collapse quickly.

Hypothesis three states that monopoly profits are dissipated in advance, by the firms' efforts to attain monopoly. Once the dominance is attained, the firm is able to obtain only economic rent (from superior efficiency) rather than monopoly profits.

Lastly, according to hypothesis four, the supra-normal rewards that dominant firms may obtain are a necessary, efficient inducement for superior performance.<sup>20</sup> Any constraint on dominance and/or its rewards (i.e., by section 2 or alternative actions) will chill incentives for superiority.

"Contestability" theory adds the possibility of "hit and run" entry, which can nullify even pure monopoly.<sup>21</sup> If entry-plus-exit is perfectly

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17. See *supra* note 2.

18. See R. BORK, *supra* note 15, at 94-95; Demsetz, *Industry Structure*, *supra* note 15, at 4-9; Demsetz, *Two Systems*, *supra* note 15, at 165-74.

19. See, e.g., Fox & Sullivan, *supra* note 4, at 946-47 ("[a]ccording to the Chicagoans, if consumers lose but producers win more than consumers lose, 'consumer welfare' has been increased").

20. For a summary and critique of this hypothesis and an evaluation of five leading cases reflecting it, see Shepherd, *Efficient Profits vs. Unlimited Capture, As a Reward for Superior Performance: Analysis and Cases*, 34 ANTITRUST BULL. 121 (1989).

21. See CONTESTABLE MARKETS, *supra* note 2, at 222 ("freedom of entry, indeed the

free (or almost so, as with "near-contestability"), then monopoly and/or mergers to achieve it can have no effects.<sup>22</sup> But assumptions of the "contestability" model are strict. They include: (1) total replacement of the incumbent, (2) absolute entry, ousting the incumbent before it can retaliate by cutting price, and (3) perfectly reversible entry, with no sunk cost.<sup>23</sup> As a result, the entrant can "hit and run," always profiting.

To avoid its periodic (or permanent) elimination from the market by an entrant, the monopolist must set price strictly at efficient levels. Moreover, these theorists claim, an efficient structure results, with only as much concentration as is required by the economies of scale.

### C. Criteria Applied to Section 2

The 1980s witnessed a shift from the mainstream basis to the "new I.O." theory criteria.<sup>24</sup> As Robert Bork urged,<sup>25</sup> policies were chosen primarily for their expected effects on consumer and producer surplus.

In the late 1970s, the margin of section 2 enforcement was roughly at a market share of sixty percent,<sup>26</sup> reflecting the consensus of research<sup>27</sup> and the familiar dictum of Judge Hand in *United States v. Alcoa*.<sup>28</sup> Firms with shares below sixty percent were free from the possibility of being investigated or sued. Those above sixty percent elicited some degree of

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mere threat of incursions by entrants into the market, may effectively discipline the monopolist, *even if entry is unsuccessful*"); see also Baumol & Willig, *Contestability: Developments Since the Book*, in STRATEGIC BEHAVIOUR AND INDUSTRIAL COMPETITION 9, 9 (D. Morris, P. Sinclair, M. Slater & J. Vickers eds. 1986) (specifically adding that "[c]ontestability theory does not, and was not intended to, lend support to those who believe (or almost seem to believe) that the unrestrained market automatically solves all economic problems and that virtually all regulation and antitrust activity constitutes a pointless and costly source of economic inefficiency").

22. William Baumol has offered such categorical conclusions in testimony in a number of actual cases, such as the CSX-American Commercial Lines merger in 1984. See CSX Corporation-Control-American Commercial Lines, Inc., 2 I.C.C. 2d 490, 544 (1984).

23. For an in-depth discussion of contestability theory, see CONTESTABLE MARKETS, *supra* note 2, at 1-14.

24. See E. FOX & L. SULLIVAN, *supra* note 1, at 112.

25. See R. BORK, *supra* note 15, at 107-15.

26. F. SCHERER & D. ROSS, *supra* note 1, at 479-80.

27. See 4 P. AREEDA & D. TURNER, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION, ¶ 910d, at 59 & n.8 (1980); W. SHEPHERD, THE TREATMENT OF MARKET POWER 198 (1975).

28. See *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 424 (2d Cir. 1945) (on certificate from the United States Supreme Court for want of a quorum of six Justices qualified to hear the case) ("over ninety [percent] . . . is enough to constitute a monopoly; it is doubtful whether sixty or sixty-four percent would be enough; and certainly thirty-three percent is not").



response, but actions and outcomes were uncertain. Since 1980, however, the margin of enforcement has increased to at least eighty percent, and there are apparently no important cases in preparation.

These choices reflect comparisons of costs and benefits, even if only implicit and intuitive ones.<sup>29</sup> Specifically, the framework of evaluation compares (1) benefits from preventing the costs, allocational inefficiency, retardation of innovation, and unfairness that monopolies cause in varying degree, with (2) costs of enforcement and the transition to enhanced competition *plus* the loss of any efficiency benefits (e.g., scale economies) the market power may have provided.<sup>30</sup>

Evaluations such as these have interesting properties of time-discounting, sequencing of costs and benefits, differing degrees of uncertainty about the values of benefits and costs, asymmetries of information, and burdens of proof. Significant biases in these values have been identified, which may shift the margin of enforcement away from efficient levels. For example, slanted burdens of proof, the advantage of "having time on your side," and unequal access to critical information by public agencies have probably caused predictable biases in the enforcement choices for section 2, as well as in other antitrust and regulatory policies.

#### D. *The Rationale for Easing Section 2 Enforcement*

Three aspects of the choice variables have been decisive in the cessation of section 2 actions. The first is the "efficient-structure" hypothesis, which regards dominance as a reflection of superior efficiency, under assumed "Chicago-world" conditions. If it is valid, the hypothesis adds to the expected *costs* of section 2 actions, which would destroy efficiency. But monopoly still has restrictive effects, even if its origins involve some benefits. The second aspect is that those effects are negligible because monopoly is weak. The third projects a rapid rate of decline in the monopoly's dominance, unless the firm retains superior efficiency. Hence, the expected benefits of policy actions are low and their costs are high. Section 2 actions are regarded as slow and costly, lagging behind the natural rate at which monopoly power recedes.

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29. Even if cost-benefit analysis is not employed explicitly, it invariably is present in the basic comparisons made in reaching decisions. It is preferable, of course, to make the comparisons explicit, so they can be assessed for logical and factual soundness and, if appropriate, revised. Cost-benefit analysis has certain basic weaknesses, including the possibility that relevant cost and benefit categories will be excluded from the assessments. Also, the parties who bear the costs may be different from those who gain the benefits. Therefore, the analysis must be used with care and even then will commonly be controversial. Discussion of the elements involved can clarify the choices.

30. For a formal statement of the cost-benefit basis for antitrust choices, see W. SHEPHERD, *PUBLIC POLICIES TOWARD BUSINESS* 58-64 (6th ed. 1979). I am not aware of other explicit discussions of these elements, though the topic urgently needs expanding.

In addition, "contestability" theory reinforces these estimations.<sup>31</sup> The power of entry/exit is hypothesized as absolute and instantaneous,<sup>32</sup> and this further shrinks the expected net benefits of reducing dominance. These elements eliminate virtually all candidates for section 2 treatment except those created by state actions. Because dominance reflects superiority, interference with it cancels the incentives of all firms to succeed by superior performance. The recent policy choices reflect a shift in cost-benefit valuations, within the continuing (not "revolutionary") framework. The economic question is the accuracy of those valuations.

## II. DEDUCTIVE AND INDUCTIVE VALIDITY

As previously discussed, the Chicago-UCLA doctrines involve four hypotheses,<sup>33</sup> which were first suggested between 1974 and 1976, and then converted into axioms.<sup>34</sup> I will merely mention the various deductive and empirical weaknesses of these hypotheses.

### A. *Deductive Problems*

The four hypotheses are only insights into possible conditions. They would hold true for most or all cases only under "Chicago-world" perfect market conditions: reliable knowledge and instant, frictionless adjustment, ideal capital markets, and so on. But they are incompatible with the presence of any market imperfections, including those shown by mainstream research over many decades. Accordingly, the hypotheses take the form of tautologies: instead of testing whether dominant firms have been superior, the Chicago-UCLA analysis assumes away the alternative, nonfavorable sources.

Also, on strictly deductive grounds, hypothesis one contains a fallacy, which also infects hypothesis two. Superiority is the exclusive source of dominance only if superiority is sustained long enough for the firm to expand to its dominant position (e.g., expand from ten percent to over fifty percent of the market, while other firms remain at small shares). But that expansion will take time, whereas the Chicago-world perfect market conditions quickly remove the elements that provide exclusive superiority. Especially under Chicago-world conditions, competition bids up the price of superior factors or hires them away. Rivals rapidly adopt any superior innovations.

Only if there are imperfections in the instantaneous market processes can superiority be sustained, so as to create dominance.<sup>35</sup> Yet the

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31. See *CONTESTABLE MARKETS*, *supra* note 2, at 347-66; see also Baumol & Willig, *supra* note 21.

32. See *supra* note 2.

33. See *supra* p. 922-23.

34. See, e.g., R. BORK, *supra* note 15, at 405-07.

35. For example, the superior managers may be irrationally loyal to the firm, rather

assumptions of the hypothesis rule out such imperfections. Efficient-structure theory is therefore either a mere tautology or internally contradictory. It follows that hypothesis two no longer holds (except as a tautology); market power of both types—dominance and collusion—can reflect imperfections and can be socially costly.

As for hypothesis three, an advance dissipation of precisely all monopoly profits would be a fluke. Some pre-spending may occur, but its size is a matter for empirical research.

Hypothesis four would justify unlimited excess profits—including windfalls and returns gained solely by exploiting imperfections—as necessary for inducing superiority. Such a claim invites a comparison with alternative criteria, particularly *competitive* profit levels.<sup>36</sup> Firms under competitive pressures commonly maximize their performance even though they have only the prospect, and usually the result, of bare competitive returns. Adjusted for risk, the rewards are finite rather than open-ended. Moreover, competitive profits avoid the subsequent deadening of performance that often occurs in secure dominant firms lacking the pressures of effective competition.

As for the logic of “contestability,” this theory also rests on mutually incompatible assumptions, specifically in dealing with market dominance. In the model, entry must be enormous and quick in order to replace the incumbent totally.<sup>37</sup> But the game-theoretic analysis assumes that the incumbent will anticipate that entry will be negligible.<sup>38</sup>

Such opposite assumptions cannot be reconciled. Therefore, the showpiece “nullified-monopoly” result appears to be vacuous. “Contestability” theory adds little to established competitive theory, which is known to be robust over wide ranges of “almost-competitive” and “not-so-competitive” conditions.

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than extracting their rent or leaving, the firm's innovations may be protected by patent grants, or rival firms may be blocked from copying innovations by ignorance or lack of capital. All such conditions are imperfections, which clash with the Chicago-UCLA assumptions.

36. See Shepherd, *supra* note 20, at 122-36.

37. New entrants to the market

can, without restriction, serve the same market demands and use the same productive techniques as those available to the incumbent firms. . . . [T]he entrants nevertheless assume that if they undercut incumbents' prices they can sell as much of the corresponding good as the quantity demanded by the market at their own prices.

CONTESTABLE MARKETS, *supra* note 2, at 5.

38. *Id.* at 11 (“if an entrant's output is ‘small’ relative to that of the industry, the magnitude of these required adjustments may also be ‘small’ and hence it may be justifiable for the [incumbent] to ignore them”).

### B. Empirical Evaluation of Efficiency Doctrines

Of course, dominance sometimes derives from superior efficiency in actual cases, for at least a period of time. Mainstream researchers have always recognized that. Examples include Polaroid and Xerox (with innovations) and some dominant newspapers (with technical economies of scale).<sup>39</sup> But can superior efficiency explain all cases, or nearly all of them? Are the efficiency doctrines supported by econometric research, case studies or broad industrial experience?

On the whole, the answer is no. Bork-style axiomatic assertions have little basis in research. Professor Demsetz's 1973 paper is cited most frequently, but it offered only crude and unpersuasive comparisons of the accounting-profit rates among larger and smaller firms within industries.<sup>40</sup> He concluded that in the more concentrated industries, the larger firms tended to earn higher profits.<sup>41</sup> That finding parallels other and more extensive research showing that market shares and profit rates are closely related in structural models commonly using much more precise individual-firm data from at least 130 firms.<sup>42</sup> Demsetz merely asserted that his simple pattern reflected superior efficiency in leading firms without offering tests to show that market power was not the real cause. Professor

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39. See, e.g., Scherer, *Antitrust, Efficiency, and Progress*, 62 N.Y.U. L. REV. 998, 1016 (1987) (Xerox rose to prominence through development of a major innovation; however, over the years, Xerox's vast portfolio of patents created a thicket difficult for competitors to penetrate).

40. See Demsetz, *Industry Structure*, *supra* note 15. Professor Demsetz offered raw census data grouped by relatively few classes of size and concentration. Unfortunately, the data were of questionable precision. They were based on three-digit industry groups, which bear little relation to properly defined relevant markets that generally are closer to five-digit product groups. Demsetz also used raw census concentration ratios. The rising pattern of profit rates among large firms is seen only in the single category of three high-concentration industries. Over the range of concentration below that, profit variations are virtually random rather than systematic.

Professor Brozen conducted similar studies, but they involved crude comparisons, based partly on uncorrected concentration data. See Brozen, *Concentration and Profits*, *supra* note 15; Brozen, *The Antitrust Task Force*, *supra* note 15.

41. See Demsetz, *Industry Structure*, *supra* note 15, at 7.

42. See D. MUELLER, *supra* note 10, at 33-49 (using an examination of 551 companies); Shepherd, *The Elements of Market Structure*, 54 REV. ECON. & STATISTICS 25 (1972) [hereinafter Shepherd, *Market Structure*] (presenting empirical analysis of data on a panel of 231 large United States industrial firms from 1960 to 1969); Shepherd, *Tobin's q and the Structure-Performance Relationship: Comment*, 76 AM. ECON. REV. 1205, 1205 (1986) [hereinafter Shepherd, *Tobin's q*] (drawing from a 1972 panel of 132 firms).

Peltzman's test in 1977 was no more successful.<sup>43</sup> It too could not discriminate between efficiency and nonefficiency causation.

Chicago-UCLA analysts also assert that econometric market-share/profit-rate relationships merely reflect the superior-performance hypothesis at work.<sup>44</sup> They suggest that the (much weaker) partial correlation of *concentration ratios* with profitability embodies the only "real" monopoly power (i.e., from collusion).<sup>45</sup> Apparently, evidence "shows" superior performance to be a strong factor, while market power is weak. Thus, all variation in returns is attributed to superior efficiency.<sup>46</sup>

But again, the relationships do not discriminate among market power, efficiency, and other possible causes (such as random processes and life cycles). Dominant firms commonly encounter the usual variations in success that mark all organizations, and some of them have had mediocre X-efficiency<sup>47</sup> and innovation, even while gaining and holding dominance. Yet an "efficient-structure" approach requires them to have strong superiority at all times.

Leading actual dominant firms include IBM, Eastman Kodak, Campbell Soup, Procter & Gamble, and Kellogg. Their dominance has lasted at least four decades, and in some cases nearly a century. Yet there are strong indications that their efficiency and innovation have often been moderate and uneven, rather than the high sustained superiority the hypothesis requires.<sup>48</sup>

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43. See Peltzman, *supra* note 15 (concluding from a statistical analysis covering 165 manufacturing industries that increases in concentration between 1947 and 1967 brought unit cost reductions that far outweighed the price-raising effects associated with enhanced monopoly power). For a rejection of Professor Peltzman's evidence, see F. SCHERER, *INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE* 289-90 (2d ed. 1980) (criticizing Peltzman for failing to "look behind the numbers," thus missing the "real-world point"); Scherer, *The Causes and Consequences of Rising Industrial Concentration*, 22 J.L. & ECON. 191 (1979) (suggesting that Peltzman was incorrect in his interpretation of the causal link between concentration and unit cost changes).

44. For perhaps the most ambitious empirical claims in this direction, see Smirlock, Gilligan & Marshall, *Tobin's q and the Structure-Performance Relationship*, 74 AM. ECON. REV. 1051, 1055-58 (1984).

45. See discussion of hypothesis two, *supra* p. 922.

46. For doubts about this approach, see Shepherd, *Tobin's q*, *supra* note 42, at 1206 ("[p]ersuasive support for their view would require concrete evidence about specific firms, proving that most or all of their high profits reflect superior efficiency").

47. "X-efficiency" is often used to describe efficient management within a firm such that no slackness or mistakes occur. See, e.g., W. SHEPHERD, *supra* note 30, at 5.

48. For a review of data on these firms, see W. SHEPHERD, *supra* note 1, at ch. 5. For analyses of IBM, see G. BROCK, *THE U.S. COMPUTER INDUSTRY* (1975); R. DELAMATER, *BIG BLUE: IBM'S USE AND ABUSE OF POWER* (1986); W. SHEPHERD, *MARKET POWER AND ECONOMIC WELFARE* 223-32 (1970). IBM has been described as "a giant, calcified institution in deep need of modernization," with "one of the world's most luxuriantly thick

Recently, variance analysis has been used in attempts to estimate the relative importance of industry-focus and market-share effects on profitability.<sup>49</sup> But the results are exploratory and debatable, and the method used seems too primitive to fit the complexity of the patterns.<sup>50</sup> At the least, more careful testing is needed. Furthermore, commentators have recently reaffirmed that market dominance (either single-firm or several-firm) causes higher prices in a wide array of industries.<sup>51</sup> Other research confirms that the mainstream focus on market structure is important.<sup>52</sup>

To summarize the analysis of the Chicago-UCLA hypotheses: the issues remain largely as they stood before the onset of Chicago-UCLA and "new I.O." theory revisionism. The profit yields of market share may reflect market power and/or efficiency in varying degrees. Only through careful, direct research can we hope to determine the actual proportions.

bureaucracies" and "bad habits and inefficient processes that have taken root over seven decades." Miller & Carroll, *Akers's Drive to Mend IBM Is Shaking Up Its Vaunted Traditions*, Wall St. J., Nov. 11, 1988, at A1, col. 2.

For a closer look at Eastman Kodak, see D. WALDMAN, ANTITRUST ACTION AND MARKET STRUCTURE 143-50 (1978) (discussing the history of Eastman Kodak, particularly the effects of the 1954 consent decree that effectively separated Kodak film from Kodak film processing); Brock, *Structural Monopoly, Technological Performance, and Predatory Innovation: Relevant Standards Under Section 2 of the Sherman Act*, 21 AM. BUS. L. J. 291, 294-306 (1983). In *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263 (2d Cir. 1979), cert. denied, 444 U.S. 1093 (1980), Kodak's own expert witness conceded that the firm's dominance did not stem from superior innovation. *Id.* at 307-08.

49. See Schmalensee, *Do Markets Differ Much?*, 75 AM. ECON. REV. 341 (1985) (showing that accounting rates of return at the business-unit level are strongly influenced by industry effects, only unimportantly influenced by market-share effects, and not influenced by firm effects); Wernerfelt & Montgomery, *Tobin's q and the Importance of Focus in Firm Performance*, 78 AM. ECON. REV. 246 (1988) (confirming Schmalensee's finding that industry effects are the major determinants of firm success, but also finding that narrowly diversified firms do better than widely diversified firms).

50. The method is indirect, applying a rather crude way of estimating conditions that vary within industries in complex ways. The results—that industry-specific conditions explain much variation among firms' profits—are doubtful. Professor Kessides has shown that the results are sharply affected by a few outliers. See I. Kessides, *Do Markets Matter Much?: Comment* (1989) (unpublished manuscript). When reestimated by Kessides to avoid dominance by a few outliers, the patterns suggest that market share is important.

Also, profitability is known to vary directly with market shares in typical industries. These *intra-industry* patterns coexist with some *inter-industry* variation in profits, reflecting differing industry characteristics. Mainstream research suggests instead that the *intra-industry* variation is at least as strong as *inter-industry* differences.

51. See generally CONCENTRATION AND PRICE (L. Weiss ed. 1989) (applying a systematic set of direct test to the concentration-price hypothesis and concluding that concentration does indeed tend to raise price).

52. See Z. ACS & D. AUDRETSCH, INNOVATION AND SMALL FIRMS (1990).

Moreover, there has been no significant research to confirm the fourth Chicago-UCLA hypothesis—that supra-competitive rates of return are necessary for generating the pursuit of excellence.

### III. FUTURE CANDIDATES AND ACTIONS

Policy choices based on Chicago-UCLA and “contestability” analysis have departed from a neutral evaluation. There should be no presumption of leading-firm superiority, because substantial imperfections may exist. A broad set of performance goals, including the value of competition itself, is appropriate. A variety of anticompetitive actions must be considered, rather than only predation, cross-subsidies, and raising rivals’ costs or other game-theoretic possibilities.<sup>53</sup>

Evidence, not just hypotheses, is needed. The realistic economics of dominance can be compared with the realistic properties of section 2 and alternative instruments. The task is to identify possible cases and to select the most efficient approaches (e.g., among structural and conduct remedies).

#### A. Possible Candidates

In order to form meaningful ideas about the prospects for section 2 actions, we must begin with reality; that is, the range and types of possible candidates for treatment. As the United States economy grew more competitive between 1960 and 1980, the scope of market dominance dwindled.<sup>54</sup> Yet a number of important potential cases remain. Table 1 lists many of the leading known candidates.<sup>55</sup> While such a listing is partly arbitrary and even risky to venture, it reflects the main conditions of market dominance.

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53. These specific concepts are important, but they are only subsets of the much larger range of anticompetitive and/or nonefficiency actions that can create and maintain dominance. See F. SCHERER & D. ROSS, *supra* note 1, at 411-47 (discussing various market structures that can lead to monopolistic conduct); Shepherd, *supra* note 14, at 3-18 (policy based on market share and covering all selective actions would be more effective than one limited to pricing or other subsets of the entire problem).

54. Shepherd, *Causes of Increased Competition in the U.S. Economy, 1939-1980*, 64 REV. ECON. & STATISTICS 613, 613-26 (1982).

55. Table 1 reflects complex issues of market definition. For earlier periods, see W. SHEPHERD, *supra* note 27, at 164-227 (outlining general features of U.S. policies toward mergers and collusion). For a discussion of several of the cases, see W. SHEPHERD, *supra* note 1. On electricity, see P. JOSKOW & R. SCHMALENSEE, *MARKETS FOR ELECTRICITY: AN ANALYSIS OF ELECTRICAL UTILITY DEREGULATION* (1983).

POSSIBLE CANDIDATES FOR SECTION 2 TREATMENT, 1990			
Name of Company	Approximate Market Share and Duration	Actions Affecting Competition	Superior Efficiency?
Airlines* (fortress hubs at major airports)	50%+	Pricing, controls	No (most large airlines have higher costs)
AT&T* (long-distance)	70%+ (indefinite)	Price discrimination	Origins in monopoly franchise
Dominant Newspapers in many cities	80%+ (since 1970s)	Advertising	Scale economies (?)
Electric Utilities (bulk)* in many areas	50-100% ("always")	Exclusion from access to power	Possible
IBM (computers)	30-75% (since 1955)		Unlikely
Eastman Kodak (film)	80%+ (since 1910)		Unlikely
Campbell Soup (canned soup)	75%+ (since 1920)		Unlikely
Gillette (razor blades)	60%+ (since 1910)		Unlikely; possible scale economies
Boeing (aircraft)	55%+ (since 1965)		Possible, but military purchases have helped
Federal Express (fast delivery)	55%+ (since 1975)		Originally; questionable now
Procter & Gamble (detergents)	50% (since 1950)		Doubtful
*Dominance derives at least partly from government grants or actions.			

Table 1<sup>56</sup>56. Taken from W. SHEPHERD, *supra* note 1, at 68-72.



Note first that these cases are relatively few, occur in a limited set of industries, and represent a very small share of the economy. Moreover, the natural tendency of dominant firms toward reduced efficiency tends to make dominance self-correcting as it undergoes possible inroads by rivals, entrants, and import competition.

Yet newspaper dominance is widespread and growing, and most of the cases in Table 1 appear to be firmly set. In fact, most of these cases are of long duration, particularly Eastman Kodak and Campbell Soup, and erosion can be very slow or absent. By contrast, other dominant firms have faded rapidly, including Xerox between 1976 and 1978,<sup>57</sup> and General Motors between 1979 and 1989.<sup>58</sup>

The Table 1 cases probably cause significant economic losses, but there are important uncertainties about their efficiency, impacts, and prospects. Moreover, each case has distinctive features requiring complex study and treatment. Boeing, for example, differs sharply from local newspapers and airline fortress hubs. Moreover, the dominance of some of these firms appears to be undergoing erosion. The 1990s may apply erosive forces (particularly foreign competition and shrinking economies of scale) that have been absent or weak in previous periods.

### B. *Properties of Section 2 and Alternative Methods*

It is generally agreed that most of the past section 2 cases were efficient in economic terms, but little research has been done on the net effects. In 1975, I offered cost-benefit estimates of some leading cases.<sup>59</sup> These estimates have not been challenged or revised in subsequent antitrust literature. Though they are speculative, the indicated net yields have generally been high, well over 2 to 1.<sup>60</sup>

It can be argued that past section 2 actions and natural market forces have cured the most acute cases, while recent case actions may have moved to the remaining marginal candidates, which offer lower yields. Also, the instrument itself seemed to deteriorate between 1920 and 1980. Even before 1970, section 2 appeared to be losing effectiveness, suffering from fallible judicial processes, a frequent bloating of case preparation, and delay (often caused by defendants' stalling techniques).<sup>61</sup>

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57. See Taub, *Will Xerox Keep on Fading?*, FIN. WORLD, Feb. 15, 1983, at 14 (after Xerox lost its patents following the consent decree with the government, its market share slipped from 80% in the mid-1970s to less than 50% in 1982).

58. See Bock, *Man in the Hot Seat*, TIME, Nov. 14, 1988, at 48 (GM's market share, which was once 52%, dropped to 46% in 1984 and 36% in 1988).

59. See W. SHEPHERD, *supra* note 27, at 188.

60. *Id.*

61. 3 P. AREEDA & D. TURNER, *ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION* ¶ 833d, at 342 (1978).

The government's large-scale case against IBM fit that picture in size, stalling, and eventual loss of focus.<sup>62</sup> Yet some of IBM's own executives appear to have believed that the case had solid merit.<sup>63</sup> IBM has continued its dominance of mainframe computers to the present,<sup>64</sup> despite the inferiority of its internal efficiency.<sup>65</sup> IBM won the lawsuit through the tactics of its tenacious, street-smart lawyers from Cravath, Swaine & Moore,<sup>66</sup> who stalled the case until William Baxter could save them by dismissing it.<sup>67</sup>

The AT&T litigation, however, provided the opposite lesson. In one stroke it rehabilitated section 2 as an effective antitrust instrument.<sup>68</sup> AT&T was not a promising case. Dealing with the world's largest firm, in a complex sector with many submarkets, the case was suffused with difficult issues of relative efficiency and seemingly superior innovation. Yet the outcome was a massive restructuring with positive results. A divestiture that seemed quite impossible by 1960s conditions was in fact rather briskly accomplished. The case's efficiency results, particularly in enhancing the flow of innovation, are probably large. That can be credited partly to the presiding judge, Harold Greene, who was remarkably effective in moving the case to its result.<sup>69</sup> But there are many other talented judges, equally capable of managing important section 2 actions. Speaking approximately, the candidates listed in Table 1 may present less complex and difficult cases than AT&T did.

In particular, well-managed section 2 treatments can be much swifter than has been supposed. A firm facing a convincing case may be induced to accept a meaningful settlement before trial is completed. With good handling, the trial of a typical case might begin within three years of

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62. The case was brought in January 1969 and went to trial in 1975, with the trial on liability lasting more than six years. In January 1982, the parties agreed to a complete dismissal of the case. *FOLDED, SPINDLED AND MUTILATED*, *supra* note 15, at 1. For a negative appraisal of the IBM case, see *id.* at 346. ("[t]he IBM case was a disaster"); see also R. DELAMARTER, *supra* note 48, at 331-35 (asserting that U.S. antitrust laws have failed against large high-tech companies such as IBM).

63. See R. DELAMARTER, *supra* note 48, at 177.

64. See Schlender, *Ganging Up on IBM*, *FORTUNE*, Oct. 8, 1990, at 13; Stein, *Manufacturers, Look Out—Users Are Taking the Initiative*, *ELEC. LIGHT & POWER*, Nov. 1990, at 35.

65. See *supra* note 48.

66. See R. DELAMARTER, *supra* note 48, at 25.

67. *Id.*; *FOLDED, SPINDLED AND MUTILATED*, *supra* note 15, at 1.

68. For background on the case against AT&T, including AT&T's elimination of competition, and analysis of the economic theories underpinning the case, see *BREAKING UP BELL: ESSAYS ON INDUSTRIAL ORGANIZATION AND REGULATION* (D. Evans ed. 1983); P. TEMIN, *THE FALL OF THE BELL SYSTEM: A STUDY IN PRICES AND POLITICS* (1987).

69. See P. TEMIN, *supra* note 68, at 202, 249. For an extended account of Judge Greene's efforts, see generally *id.*

initiating action, and settlement might come soon after. Moreover, a firm may modify its own actions as soon as it faces the serious prospect of a suit. And a robust section 2 policy could discourage the emergence of nonsuperior positions of dominance.

However, the possibilities are limited by the peculiar standards traditionally applied in section 2 cases including: (1) dominance, as shown by at least a sixty-percent share of a reasonably well-defined market, (2) monopolizing actions of some sort, which show an intent to monopolize and a degree of abusiveness, (3) high profitability, (4) inefficiency rather than innovation, (5) a feasible basis for a significant remedy (otherwise, judges are reluctant to find against a firm because there is little prospective cure), and (6) extensive grass-roots political support for the case, often including numerous state-level investigations and suits.<sup>70</sup>

The dominant firm can influence some of these conditions itself so as to frustrate action. It can sacrifice market share, reduce profits, accelerate innovation, change its organization to forestall restructuring, mobilize political support, and so on. We could expect maximum efforts if suits were filed against any of the firms in Table 1, particularly the newspapers. Actual treatment could therefore be less effective than the AT&T case.

Turning to the candidates, it is apparent that each requires complex study. The dominant positions of the airlines, AT&T (in long-distance service), and bulk electricity providers are derived from state actions of some kind, so they lack Chicago-UCLA efficiency justification. These three cases would require regulatory and/or legislative actions rather than simple implementation of section 2. Airlines have now developed single-firm dominance in the form of a series of fortress hubs—each airline controlling its own hub airport.<sup>71</sup> The control provided by the hubs is reinforced by airline-sponsored frequent-flyer programs, whose rebates tie customers to their local dominant airline.<sup>72</sup> The computer reservations systems of American and United Airlines add the advantages of encouraging travel agents to favor their flights and of obtaining higher fees than their competitors.<sup>73</sup> By permitting major mergers in the airline industry between 1985 and 1989, along with extensive price discrimination by dominant airlines, Reagan-Bush officials have tolerated the remonopolizing of much of the industry.<sup>74</sup>

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70. See E. FOX & L. SULLIVAN, *supra* note 1, at 99-281; W. SHEPHERD, *supra* note 5, at 131-35.

71. See Shepherd, *The Airline Industry*, in *THE STRUCTURE OF AMERICAN INDUSTRY* 217, 219 (W. Adams ed. 1990).

72. *Id.* at 230. Smaller airlines cannot provide such benefits, although some have entered into arrangements to pool mileage for their own programs. *Id.*

73. *Id.* at 226-27.

74. *Id.* at 228, 238-39. As a result, the industry is now a tight oligopoly of about six airlines, plagued by consistently severe price retaliation which has helped drive maverick airlines from the market.

This dominance is protected by the scarcity of airport loading gates and time slots, which permit the dominant carriers to bar entry to their hubs.<sup>75</sup> Perhaps the cleanest solution to this situation would be to limit any given airline's capacity to no more than forty percent in the larger airports. Those airlines currently holding more would simply have to sell their excess capacity rights. Attempting to expand the capacity would take too long, and the dominant firms would be able to control the allocation of new gates and slots to their advantage.

Also, complete divestiture of the computer reservations systems would help. The airlines have already partly sold off the systems, and a complete break would not be disruptive. A prohibition on frequent-flyer programs would also reduce the advantages of dominance. It has been reported that the airlines would welcome the chance to terminate those programs.<sup>76</sup>

In short, effective cures are available, if the authorities have the will to apply them. Instead, they have been busy spreading dubious statistics claiming that there is no problem. That is, unfortunately, the Chicago-UCLA line that Reagan-Bush officials have adopted: monopoly does not exist, except when it is superior.

AT&T's continuing dominance of long-distance service also presents a major antitrust problem.<sup>77</sup> Although AT&T's market share slipped continually from 1984 to 1989,<sup>78</sup> the fall was caused in large part by the continuing regulation of the company.<sup>79</sup> For example, the regulatory constraints limited AT&T's ability to offer pinpoint price discrimination in order to pull large customers away from its rivals, MCI and US Sprint.<sup>80</sup>

In 1990, the Federal Communications Commission effectively removed those constraints, giving AT&T wide latitude to adopt virtually unrestricted price discrimination under a "price caps" approach.<sup>81</sup> By late 1990, AT&T had struck special discount deals with scores of its major customers, and its market share stopped eroding.<sup>82</sup> The FCC's price caps

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75. *Id.* at 228-30.

76. See Arrendell, *The Frequent Mileage Dilemma: Just Whose Coupons Are They?*, TRAVEL WEEKLY, Oct. 20, 1988, at 8; Hamilton, *Clipping Frequent Flier Plans' Wings: Airlines Contemplate Trimming Generous Programs*, Wash. Post, Apr. 1, 1988, at C1, col. 5.

77. See Shepherd & Graniere, *Dominance, Non-Dominance, and Contestability in a Telecommunications Market: A Critical Assessment*, 1990 NAT'L REG. RES. INST. 1, 25.

78. *Id.* at 20, 25; *What's a Point Worth? A Lot to AT&T*, 19 DATA COMM., Apr. 1990, at 46.

79. Shepherd & Graniere, *supra* note 77, at 25.

80. *Id.* at 56-57; Keller, *The Long Distance Wars Get Hotter*, BUS. WK., Mar. 23, 1987, at 50, 50.

81. See Shepherd & Graniere, *supra* note 77, at 56-57; Taff, *Users Question FCC Praise of Price Caps*, NETWORK WORLD, Oct. 29, 1990, at 11; *FCC Decides to Ease Some Rules on AT&T*, Chicago Tribune, Mar. 9, 1990, at C3, col. 3.

82. Coy & Lewyn, *AT&T Bares Its Teeth*, BUS. WK., Dec 17, 1990, at 24 (discussing

were challenged by a court decision in late 1990,<sup>83</sup> but AT&T is still free to adopt strategic pricing. Only if AT&T's pinpoint pricing is restrained will effective competition come to this market. The cure is therefore relatively direct, but current officials are unwilling to adopt it.

The other potential cases (Eastman Kodak, IBM, Campbell Soup, and Gillette) are more in the classic section 2 style. Each case would be controversial and each firm would point to the difficulties and competitive challenges they face. Yet these firms have continued to dominate for at least forty years, and creative actions might design suits and remedies that would gain compliance.

The newspaper industry seems to pose the most difficult case of all.<sup>84</sup> The degree of dominance is very high in many cities.<sup>85</sup> Moreover, in about twenty cities, two competing newspapers have come to be jointly operated, and competition between them has actually ceased.<sup>86</sup> Advertising rates, for example, closely approximate pure-monopoly levels in many of those cities.<sup>87</sup> On top of that degree of monopoly, large newspaper chains own many of the newspapers in the middle-sized and smaller cities,<sup>88</sup> probably adding to the degree of monopoly power by raising entry barriers.

The impact of monopoly on news content and the diversity of views may far exceed the price-raising effects in, for example, detergents and film. Yet policies have done nothing to reverse the trend toward dominance in this industry. Rather, the policies embody an acceptance of the newspapers' claims that dominance reflects technical economies of scale. Hence, the Newspaper Preservation Act<sup>89</sup> permits the newspapers to merge under joint-operating agreements, rather than requiring them to maintain competition.<sup>90</sup>

Yet the underlying "economies" may actually be much smaller than claimed by the merging newspapers, and they appear to arise primarily from advertising factors rather than from economies of production and distribution. A number of smaller cities, such as Little Rock, Arkansas,

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discount deals which have won back accounts such as Aetna Life & Casualty, Metropolitan Life Insurance, and Chevron).

83. *MCI Telecomm. Corp. v. F.C.C.*, 917 F.2d 30 (D.C. Cir. 1990).

84. See generally B. BAGDIKIAN, *THE MEDIA MONOPOLY* (1987) (discussing concentrated control of the media by fifty large corporations).

85. *Id.* at 74, 119.

86. *Id.* at 124.

87. *Id.* at 83.

88. *Id.*

89. 15 U.S.C. §§ 1801-04 (1988).

90. *Id.* at § 1801.

manage to retain vigorous newspaper competition,<sup>91</sup> even though newspapers in much larger cities claim that monopoly is inevitable.<sup>92</sup>

The industry is ripe for objective study and possibly a reversal of 1970s policy, plus some action to reduce the chain ownership of smaller newspaper monopolies. Section 2 does not appear to be a promising tool for this, especially in trying to undo the past mergers. At the least, there should be a critical study done of the claims for economies of scale and of the impacts of monopoly on prices, diversity, and news content.

Boeing and Federal Express may present cases of virtuous dominant firms whose dominance may merely reflect better products and innovations. But that, too, warrants investigation. Similarly, Procter & Gamble's dominance of the detergent market poses questions about the role of advertising, which were first raised in the 1960s but were not pursued.<sup>93</sup>

Such specific difficulties do not reduce the value of a general rehabilitation of the content of section 2. It is a major element of U.S. industrial policy, requiring that lasting dominance at least be subject to thorough investigation. Structural remedies are only one possible set of outcomes. Even if adopted, they would not lead to the "atomizing" of markets—a red herring often recited by Chicago-UCLA analysts.

#### IV. CONCLUSION

The difficulties involved in section 2 enforcement reinforce the mainstream lesson that prevention of dominance is critical. The lapse in horizontal-merger policy in the 1980s has been particularly costly, because it has permitted concentration to rise in the airline industry and several others.

Because section 2 is a limited instrument, the possible alternatives in each case require careful thought. A specialized "commission" to study and apply cures to leading dominance cases would probably not improve on section 2 treatment.<sup>94</sup> Had a commission been created in the 1970s, it may have been neutralized as fully in the 1980s as the antitrust agencies

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91. See B. BAGDIKIAN, *supra* note 84, at 124.

92. See *id.* at 118-33.

93. See, e.g., W. COMANOR & T. WILSON, ADVERTISING AND MARKET POWER 39-40, 131-32 (1974) (asserting that where consumers have high degree of ignorance about products, and costs of obtaining "objective" information are high, consumers may be influenced by advertising; in these markets, heavy advertising may create barriers to entry of new firms).

94. Senator Hart proposed the establishment of such a commission in the early 1970s, but, despite extensive hearings held by the Senate, the proposal was never politically viable. See generally *The Industrial Reorganization Act: Hearings on S. 1167 Before the Subcomm. on Antitrust and Monopoly of the Senate Comm. on the Judiciary*, 93d Cong., 1st Sess., pt. 1, at 3-34 (1973) (text of Industrial Reorganization Act).

were. Moreover, an inactive commission would lend even greater implicit legitimacy to existing dominance.

Stricter enforcement against specific anticompetitive actions is probably the only other workable policy instrument in the U.S. context. Such enforcement would seek to prevent nonefficient dominance-creating and dominance-defending actions to reduce the role of market imperfections. Genuinely superior-efficient conditions would not be touched because no direct structural remedies would be involved.

I am not hopeful about this behavior-directed approach because, as the literature on predation and cross-subsidy has shown since 1975<sup>95</sup>, the issues can be made to appear very complex. While relatively simple criteria might be suitable, the advocacy process appears to proliferate complexities sufficient to frustrate enforcement. Moreover, the successful treatment of each specific action merely tends to breed new forms that accomplish virtually the same effects.

A combination of several policy elements—renewed horizontal-merger restraints, study, possible suits under section 2, and enforcement steps to prevent anticompetitive actions—is still the best course in an imperfect world. The economic research content of section 2 can be revived through the intermediate inducements that are applied by thorough study and the possibility of having to defend dominance explicitly.

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95. See, e.g., Areeda & Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697 (1975); Brodley & Hay, *Predatory Pricing: Competing Economic Theories and the Evolution of Legal Standards*, 66 CORNELL L. REV. 738 (1981); Hurwitz & Kovacic, *Judicial Analysis of Predation: The Emerging Trends*, 35 VAND. L. REV. 63 (1982); Joskow & Klevorick, *A Framework for Analyzing Predatory Pricing Policy*, 89 YALE L.J. 213 (1979); Scherer, *Predatory Pricing and the Sherman Act: A Comment*, 89 HARV. L. REV. 869 (1976); Williamson, *Predatory Pricing: A Strategic and Welfare Analysis*, 87 YALE L.J. 284 (1977).