HOW THE CHICAGO SCHOOL OVERSHOT THE MARK

The Effect of Conservative Economic Analysis on U.S. Antitrust

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On the Foundations of Antitrust Law and Economics

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Introduction

There has been considerable debate about two related but distinct questions. First, to what extent has "conservative economics" influenced developments in the law? Second, to what extent, if any, has the influence of conservative economics influenced the public and private enforcement of the antitrust laws? I will comment briefly on the latter, but my energy will be focused on the former.

There is no clear understanding in the economics profession as to what defines conservative economics, and indeed no one individual whose perspective would necessarily be seen as inherently conservative. However, for purposes of this commentary I will presume that conservative economics is built on the following: (1) a substantial faith in the workings of the market; (2) a lack of confidence in the ability of government to successfully intervene to remedy perceived market failures; and, (3) a belief that the antitrust laws should emphasize economic efficiency (for some this means an emphasis on the welfare of producers as well as consumers), and not the interests of particular subgroups of the population (e.g., small businesses). For many, but not all, who support this perspective, aggressive intervention in cases involving price-fixing and market allocation is warranted, whereas vertical non-price restraints (e.g., exclusionary relationships with dealers) are seen as likely to be procompetitive, and attempts to target monopolizing behavior are likely to fail.

In the comments that follow, I suggest that while the influence of industrial organization economics has grown substantially over time, it would be overly simplistic to characterize that influence as having been driven solely by a group of conservative antitrust legal and/or economic scholars. I explain further that differences among antitrust economists are as likely due to the fact economists hold a range of views as to the meaning of economic efficiency, and they differ significantly in their beliefs as to the likely efficacy of government intervention. In section I, I begin with an overview of the history of antitrust policy.[194] In the process I explain how important precedents in the law have followed, albeit with a substantial lag, important developments in the economics of industrial organization that serve as important underpinnings of the law. In section II, I explain why and how economists' views of antitrust policy differ, and I make it clear how and why conservative economics has overshot the mark to some degree.

To summarize my views briefly: the influence of conservative economics has been substantial, and to a large extent positive. The state of knowledge with respect to the economic analysis of antitrust is much further along today than it was two or three decades ago. Nevertheless, conservative economics has overshot the mark in a number of ways. It has worried more about false positives (bringing the wrong case) than false negatives (failing to bring the right case). It has been too quick to dispense with troubling vertical issues (both price and non-price restraints). And, it has fostered a tendency to downplay enforcement in dynamic technological industries in which innovation issues play a significant role.

I. The Evolution of Antitrust Policy

As an empirically oriented antitrust law and economics scholar, I find it useful on occasion to think of antitrust enforcement from an empirical time-series perspective. Thinking in this vein, it is fruitful to distinguish phenomena such as private and public antitrust enforcement, that is (1) seasonal (e.g., an increase in mergers just prior to Christmas—with the hope that the enforcement agencies would prefer to enjoy the holiday season rather than investigate a merger); (2) driven by the political business cycle (e.g., whether the sitting president is a Republican or Democrat), and (3) is affected by long-run structural changes in the economy and/or in economic thinking.

Seasonable enforcement patterns appear to be apolitical—they occur in both Republican and Democratic administrations. Take merger policy as an example. Wherever the line that a particular enforcement authority is perceived to have drawn between anticompetitive actions and actions that are not anticompetitive (or not enforceable), merger parties are likely to take into account the effect of the timing of their arrangement on the likelihood of success. The role that Chicago School conservative economics has

played in driving the enforcement political cycle is one that has been hotly debated and is covered in the Baker and Shapiro article in this volume (see chapter 6). Consequently, I will leave it to others to engage in that discussion. In this commentary, I focus solely on longer-run structural changes in antitrust perspectives by the courts and by the enforcement agencies.

My sense of history is that the development of the economics of industrial organization has had a substantial affect on antitrust law and antitrust enforcement, but with a substantial lag of at least one decade and perhaps as much as two. Looking back historically, some might recall the normative analysis of the 1950s and the 1960s—a period in which the government agencies were aggressively interventionist. Economists emphasized that antitrust analyses should begin with a specification of the structure of the industry (monopoly, oligopoly, competitive market, etc.). Given a particular structure, the analysis would then move to an evaluation of the conduct of the firms in the industry, and the implications of that conduct for the economy as a whole (hence the characterization of the paradigm as "structure-conduct-performance").

The early influence of industrial organization economics was clearly not conservative, having been driven by the work of Joe Bain and others. At the core of Bain's relatively interventionist philosophy was the view that barriers to entry are often high and can be manipulated by dominant incumbent firms, and that supracompetitive monopolistic pricing is relatively prevalent. The influence of this structure-conduct-performance approach to antitrust was felt in a host of court decisions, many of which stand today.

In this early part of this era, industrial organization economists tended to see firms as shaped by their technology. As a result, practices that changed the boundaries of the firm (e.g., joint ventures) were often seen as suspect. Because the government was viewed as benign, antitrust enforcers tended to look at mergers and acquisitions with a highly critical eye. While some opinions[195] are viewed favorably by most analysts today, others that did not appear to seriously evaluate the tradeoffs between efficiencies and the potential for anticompetitive harm or put too much weight on the need to preserve small business are not.[196]

Again, consistent with past economic learning, the government has tended to take a hard look at practices of firms competing in differentiated product oligopolies. Interestingly, the possibility that exclusive dealing might be procompetitive was not given serious consideration during the 1950s and 1960s. Moreover, the economic analysis of price discrimination was not fully developed at this time. It is not surprising, therefore, that antitrust enforcers failed to appreciate the potential benefits of differential treatment (or, as some would see it, discriminatory practices) in their enforcement of the Robinson-Patman Act ,which spells out specific conditions under which price discrimination is illegal, as well as potential cost and competitive response defenses to the presumption of illegality. Views about such practices are widely different today. I attribute this not to

the influence of conservative economics, but to the substantial economic learning (in the past two decades) with respect to the behavior of firms in differentiated products markets.

The late-1960s and 1970s marked a period of substantial analysis in antitrust, motivated by structural considerations. Here, the tension between conservative economics and others was in evidence. The empirical literature on profit rates and industry structure initially showed a weak positive correlation, suggesting that high concentration was likely to be the source of anticompetitive firm behavior.[197] However, this interpretation was hotly debated by Demsetz—clearly a Chicago School protégé—among others.[198] Demsetz argued that concentration was a consequence of economies of scale and the growth of more efficient firms, and that the empirical work just cited suffered from confusion about causality. Absent more detailed analyses, one could not distinguish the possibility that high concentration led to higher prices and profitability, from the alternative possibility that high profits were the result of economies of scale, which was associated with lower costs, larger firms, and more concentrated industries. If concentrated markets led to higher industry profits, these profits were the consequence and not the cause of the superior efficiency of large firms and consistent with competitive behavior. Today, our knowledge has progressed—we view the early studies as flawed, since they omitted variables that account for research and development, advertising, and economies of scale. However, contrary to the views of Demsetz, most observers believe that there is a positive correlation between market share and profitability, representing the effects of market power in some cases, and economic efficiency in others.

All of the assumptions that underlie the tradition of the 1950s and 1960s were criticized in the 1970s, led in part by the influence of the Chicago School.[199] Those views, which relied heavily on new learning in industrial organization economics, were seen by many (but not necessarily all) to include the following beliefs: (1) Efficiencies associated with economies of scale and scope are of primary importance; (2) Most markets are competitive, including many in which relatively few firms are competing; (3) Monopoly power is not likely to be durable, since supra-competitive profits will induce entry; (4) Barriers to entry (excepting those that are government created) are likely to be less significant than previously thought; (5) Monopoly leveraging (e.g., conditioning the purchase of one "tying product" on the purchase of another "tied product") is not a sensible strategy, since there is a "single monopoly rent," i.e., the monopoly profits generated through the sale of the tying product will be such that there are no additional profits to be enjoyed through a tying strategy; and (6) Antitrust enforcement is only appropriate if there is a substantial likelihood that it will increase social welfare.

It is not surprising, given the views of the 1970s, that many contractual practices that had been seen as anticompetitive were often seen as serving

legitimate economics purposes. The Court's decision to strike down a *per se* rule limiting exclusive distribution arrangements offers a reasonable characterization of the sentiment of the Supreme Court at that time.[200] Indeed, if the Chicago School view had prevailed, such a range of vertical non-price restraints would have been deemed to be per se legal.

One might be tempted to conclude that the influence of the Chicago School has continued in unabated form to the present, with recent decisions being credited as driven entirely by those under the influence of the Chicago views just outlined.[201] From my perspective, such a characterization would be improper. It is noteworthy that many non-Chicago economists supported the move to a rule of reason based on a combination of theoretical argument and empirical evidence. Furthermore, as Einer Elhauge has recently sketched out in some detail, recent Court decisions were influenced by a wide range of scholars, many with no ties to the Chicago School.[202] The reality is that there were significant improvements in our understanding of industrial organization economics from the 1970s through the 1990s, which focused on strategic behavior rather than market structure. This new post-Chicago School perspective should be given substantial credit for its influence on courts and on the competition authorities.

The post-Chicago School approach uses game theory to examine the ways in which established firms behave strategically in relation to actual and potential rivals. The distinction between credible and noncredible threats, absent from the Chicago School literature, became important in the assessment of the ability of established firms to exclude competitors and in the evaluation of exclusionary conduct and its implications for social welfare.[203] Among other things, these theories illuminated a broader scope for predatory pricing and predatory behavior. Non-price competitive strategies that raise rivals' costs[204] are now thought by many to be quite prevalent. Indeed, a number of models of the dynamic strategic behavior of firms highlight the ability and opportunity for firms with substantial market power to engage in coordinated actions and to profit from conduct that excludes rivals.[205]

The implications of the analyses of strategic behavior continue to be hotly debated by antitrust economists and attorneys. Whatever one's particular view about these issues, however, it would be overly simplistic to view current debates as solely involving the "Chicago School" on one side and the "post-Chicago School" on the other. Consider the following two examples. First, Franklin Fisher offers a highly critical view of the power of the game-theoretic strategic models,[206] while Carl Shapiro is more supportive.[207] Neither is in any way tied to the Chicago School. Second, Ronald Coase, an important Chicago School participant, explained that nonmarket organizations could provide a viable alternative means of organizing market activities.[208] Oliver Williamson, on the other hand, has shown from a non-Chicago transactions cost perspective that contractual restraints

can improve incentives for beneficial investments in human and physical assets.[209]

In the past twenty or thirty years, rapid changes in technology have altered the nature of competition in many markets. While earlier debates centered on the supply side and economies of scale, in many dynamic high technology industries, the demand side gets most of the attention. Demand rather than supply can be the source of substantial consumer benefits as well as significant market power. As a result, debate has centered on the importance of demand-side economies of scale arising from network effects (which are present when the individuals' demand for products increase as more and more consumers are seen to utilize the products—the success of Microsoft Word is a prime example), and on the implications of scale for firms' incentives to innovate.

Because network industries such as those relating to computer software and hardware are often characterized by large sunk costs and low marginal costs, it is likely that successful firms will come to dominate markets and to persist in that dominance for a substantial period of time. While there is no assurance that a single standard will arise in network industries, it is often the case that users will move toward comparable products. The associated efficiencies have been emphasized by many with a conservative economics perspective, while others have raised the concern that the resulting increase in concentration might lead firms to adopt price and non-price policies that exclude competition, reduce, innovation, and raise prices to supracompetitive levels.[210]

Today, a more balanced normative approach to antitrust would take into account the broad set of efficiencies associated with various organizational forms and contractual relations, as well as the possibilities for anticompetitive strategic behavior in markets with or without dominant firms. It would also be open to the possibility of early intervention in dynamic industries in which innovation plays an important role.

II. Why Economists Differ

As we move through the first decade of the new millennium, we continue to see a variety of economists' perspectives on antitrust law and its enforcement. In this section, I briefly highlight a few of the key differences among economists. First, there remain differences as to whether economic efficiency should be the sole norm in antitrust or whether efficiency should be balanced against other norms such as consumer welfare and/or the promotion of small business. One interesting debate surrounding norms arises with respect to daily newspaper joint ventures and acquisitions. Allen Grunes and Maurice Stuckey, both writing at the time as attorneys in the antitrust division, argue that editorial diversity is an important and distinct norm that should be highly valued in newspaper transactions.[211] The

parties to transactions typically argue that editorial diversity should not be part of a Clayton Act, section 7 analysis.

Second, there remain differences in economists' views of the ability of courts to sort out complex legal and economic questions and the ability of the antitrust authorities to successful undertake and complete investigations accurately and in a timely manner. This is particularly the case when investigations involve dynamic network industries. One such surrounds the Antitrust Division's case, *U.S. v. Microsoft.*[212] Fisher and Rubinfeld support active intervention in this case, in part because of the significance of innovation in computer software.[213] Evans and Schmalensee argue against the case, claiming in part that intervention is unnecessary in a world of dynamic Schumpeterian competition.[214]

Third, there remain differences as to the importance of economic theory and empirical regularities—some economists place more weight on the former and some on the latter. The *Leegin* case described previously (moving vertical minimum price-fixing from *per se* to *rule of reason*) offers a prime example. A number of economists who support the decision believe as a matter of economic theory that the incentive to engage in free riding is so powerful that even a rule of reason approach to vertical minimum price-fixing goes too far (they would support per se legality). However, many economists who oppose the decision believe that there is substantial empirical evidence supporting the anticompetitive use of vertical price restrictions.

Fourth, differences remain as to the ability to the authorities and the courts to successful enforce the antitrust laws in complex cases. For those that support a reduced enforcement effort, cases are that brought by the agencies and lost in the courts are seen as evidence of overenforcement. For those who more aggressively support enforcement, a primary concern lies with the failure to bring cases against firms that are violating the antitrust laws.

My own reading of recent developments is that while conservative economics has added much to our understanding of antitrust law and economics, it has to some extent overshot the mark. As I noted earlier, I am troubled that the concern about false positives (bringing inappropriate cases) has tended to trump worries about false negatives (failing to bring appropriate cases). Losing cases or cases that are seen as inappropriate often come under visible attack, whereas one has to listen carefully to hear about cases that should be been pursued that were not. Furthermore, the move to dispense with difficult vertical issues (price and non-price restraints) may be too forceful. While many economists see great value in the use of rule of reason in the evaluation of vertical restraints, it is important to acknowledge that some restraints may on balance be anticompetitive. Per se legality is not where antitrust should be located. Finally, conservative economics has fostered a tendency to downplay enforcement in dynamic technological industries in which innovation issues play a significant role.

The economics of innovation is no doubt quite difficult, and our empirical knowledge is limited. However, innovation is too important for antitrust to use the limits of our knowledge as an excuse for failing to take action in appropriate cases.

Conclusion

If one were to take a poll of economists as to their positions on the issues I have just raised, I have no doubt that one would find a wide range of responses and a substantially less-than-perfect correlation between those responses and the association of surveyed individuals to the Chicago School. Recent decisions by the Supreme Court notwithstanding, the long-run evolution of the antitrust laws and antitrust enforcement is heavily driven (with a lag) by antitrust economics. That is not to say, however, that politics does not matter. One's views as to the likely success of particular types of antitrust enforcement may well differ over the political business cycle.

Notes

1. Two prominent examples are *Brown Shoe Co.* v. *United States,* 370 U.S. 294 (1962) and *United States* v. *Vons Grocery Co.,* 384 U.S. 270 (1966).
2. *See* Richard Schmalensee: *Thoughts on the Chicago Legacy in Antitrust, infra* Chapter 1 at 21–22.
3. J. McGee, *Commentary, in* INDUSTRIAL CONCENTRATION: THE NEW LEARNING, 104 (H. Goldschmid, H. M. Mann, & J. F. Weston, eds. Boston: Little-Brown, 1974).
4. F. M. Scherer, et al., PATENTS AND THE CORPORATION, 2d. ed., privately published (Boston 1959).
5. Robert H. Bork, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (Basic Books 1978). As its preface makes clear, most of the work on this book was done in the late 1960s and early 1970s.
6. Despite the usage of "conservative" in recent U.S. political discourse, it seems to me an inappropriate label for those seeking fundamental change, and the Chicago School did seek fundamental change in antitrust policy. Moreover, because of recent U.S. political discourse, "Chicago" carries much less emotional baggage than "conservative." On the Chicago School generally, *see* Edmund W. Kitch, *The Fire of Truth: A Remembrance of Law and Economics at Chicago: 1932–70,* 26 J. L. & ECON. 163 (1983).
7. Richard A. Posner, ANTITRUST LAW (Chicago: University of Chicago Press, 1976).
8. *Brown Shoe Co. v. United States,* 370 U.S. 294, 344 (1962).
9. *See, e.g.,* Bork, *supra* note 5, chs. 2 and 3, and Posner, *supra* note 7, ch. 2.
10. *United States v. Von's Grocery Co.,* 384 U.S. 270 (1966).

11. Ken Heyer, *Welfare Standards and Merger Analsysis: Why Not the Best?*, 2 COMP. POL. INTL. 29 (2006).

12. *Compare* Ken Heyer, *Id., with* Joseph Farrell and Michael L. Katz, *The Economics of Welfare Standards in Antitrust*, 2 COMP. POL. INTL. 3 (2006). For an interesting recent discussion, *see* Dennis W. Carlton, *Does Antitrust Need to be Modernized?*, 21 J. ECON. PERSPECTIVES 155 (2007).

13. *See* Richard Schmalensee, *Sunk Costs and Antitrust Barriers to Entry*, 94 AMER. ECON. REV. PAP. & PROC. 471 (2004).

14. *See* Richard Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925 (1979).

15. *Utah Pie Co. v. Continental Baking Co.*, 386 U.S. 685 (1967).

16. Bork, *supra* note 6, at 387.

17. The Antitrust Modernization Commission has recently called for its repeal. *See* Antitrust Modernization Commission, *Report and Recommendations*, Washington, D.C.: April 2007.

18. Carl Kaysen & Donald F. Turner, ANTITRUST POLICY (Cambridge: Harvard University Press, 1959), at 265–272.

19. *Report, Comments, and Separate Statements*, reprinted in 2 ANTITRUST L. & ECON. REV. 11 (Winter 1968–69). Dean Neal's affiliation makes it clear that "Chicago" is an imperfect label.

20. S. 3832, 92nd Congress, 2nd Session (1972) and S. 1167, 93rd Congress, 1st Session (1973). For discussion, *see* INDUSTRIAL CONCENTRATION: THE NEW LEARNING (H. Goldschmid, H. M. Mann, & J. F. Weston, eds.; Boston: Little-Brown, 1974).

21. The citation was to George J. Stigler, *A Theory of Oligopoly*, 72 J. POLIT. ECON. 44 (1964).

22. *See, e.g.*, Kitch, *supra* note 6.

23. For a survey of this literature, *see* Richard Schmalensee, *Inter-Industry Studies of Structure and Performance, in* HANDBOOK OF INDUSTRIAL ORGANIZATION, VOL. 2 951 (R. Schmalensee & R. D. Willig, eds.; Amsterdam: North-Holland, 1989).

24. Harold Demsetz, *Industry Structure, Market Rivalry, and Public Policy*, 16 J. L. & ECON. 1 (1973), and *Two Systems of Belief about Monopoly, in* Goldschmidt, Mann, & Weston, eds., *supra* note 21.

25. This turns out not to be easy to assess; *see* Richard Schmalensee, *Intra-Industry Profitability Differences in U.S. Manufacturing: 1953–1983*, 37 J. IND. ECON. 337 (1989).

26. Bork, *supra* note 5, at 105.

27. George J. Stigler, *The Economies of Scale*, 1 J. L. ECON. 54 (1958).

28. For an excellent overview, see Nancy Beaulieu, Robert Gibbons, and Rebecca Henderson, *Microeconomic Evidence of Persistent Performance Differences among Seemingly Similar Enterprises*, working paper, MIT Sloan School of Management, April 2007.

29. *United States v. Aluminum Co. of America*, 148 F.2d 416 (2d Cir. 1945).

30. *Id.* at 431.

31. *Federal Trade Commission v. Procter & Gamble Co.*, 386 U.S. 568 (1967). The merger was also condemned on that grounds that it would have removed P&G as a potential entrant into the liquid bleach market. It may

be worth noting that in the subsequent 40 years, P&G has not entered that market.

32. *Id.* at 580.

33. 1 CCH Trade Reg. Rep. ¶ 4430 (1968).

34. Section 4, p. 31, as revised April 8, 1997.

35. *Compare* Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Trade-off,* 58 Amer. Econ. Rev. 18 (1968), *with* Bork, *supra* note 6, at 124–9 and Posner, *supra* note 8, at 112–3.

36. An influential study was David J. Ravenscraft & Frederic M. Scherer, Mergers, Sell-Offs, and Economic Efficiency (Washington: Brookings, 1987).

37. The source usually cited for this quotation is Stanley Robinson, New York State Bar Association, Antitrust Symposium, 1968, 29.

38. Aaron Director and Edward H. Levi, *Law and the Future: Trade Regulation,* 51 Nw. U. L. Rev. 281 (1956).

39. *See, e.g.,* Bork, *supra* note 5, ch. 21.

40. *See, e.g.,* Antonio Cucinotta et al., eds., Post-Chicago Developments in Antitrust Law (Edward Elgar 2003).

41. *See* Jordi Gual et al., *An Economic Approach to Article 82,* 2 Comp. Pol. Intl. 111 (2006).

42. *United States v. Sealy, Inc.,* 388 U.S. 350 (1967).

43. *United States v. Topco Associates, Inc.,* 405 U.S. 596 (1972).

44. *Id.* at 608.

45. Bork, *supra* note 5, at 278.

46. *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.,* 441 U.S. 1 (1979).

47. Washington, D.C., April 2000, section 3.2

48. *Brown Shoe,* 370 U.S. at 328–29.

49. This sort of "foreclosure" does reduce the demand for the output of other manufacturers—while also reducing the supply with which they compete by an exactly equal amount. For more problems with "foreclosure" theory, see Bork, *supra* note 5, at 211–14.

50. The Non-Horizontal Merger Guidelines were initially issued as part of *U.S. Department of Justice Merger Guidelines, June 14, 1984.* The Non-Horizontal Merger Guidelines are available online at http://www.usdoj.gov/atr/public/guidelines/2614.htm.

51. *United States v. Arnold Schwinn & Co.,* 388 U.S. 365.

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

53. *Dr. Miles Medical Co. v. John D. Park & Sons Co.,* 220 U.S. 373 (1911).

54. *Albrecht v. Herald Co.,* 390 U.S. 145 (1968).

55. For a recent summary by a broad collection of economists, *see* Brief of Amici Curiae Economists in Support of Petitioner, *Leegin Creative Leather Products, Inc. v. PSKS, Inc.,* (S. Ct. 2007) (No. 06–480).

56. *State Oil v. Khan,* 527 U.S. 3 (1997).

57. *Leegin Creative Leather Products, Inc. v. PSKS, Inc.,* 127 S.Ct. 2705 (June 28, 2007).

58. *See* Bork, *supra* note 5, at 406.

59. *Standard Oil of California and Standard Stations, Inc. v. United States,* 337 U.S. 293, 305 (1949); Bork, *supra* note 6, at 367.

60. Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem,* 67 YALE L.J. 19 (1957). On recent theoretical work, see Dennis W. Carlton & Michael Waldman, *The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries,* 33 RAND J. ECON. 194 (2002).

61. *Fortner Enterprises v. United States Steel Corp.,* 394 U.S. 495 (1969); Bork, *supra* note 6, at 210.

62. *Jefferson Parish Hospital District No. 2 v. Hyde,* 466 U.S. 2 (1984)

63. *Id.* at 14.

64. *See, e.g.,* David S. Evans & Richard Schmalensee, *Some Aspects of Antitrust Analysis in Dynamically Competitive Industries, in* INNOVATION POLICY AND THE ECONOMY, VOL. 2 (A. Jaffee, J. Lerner, & S. Stern, eds.; Cambridge: MIT Press, 2002) 1, 28–31, and the references there cited.

65. Bork, *supra* note 5, at 406.

66. Posner, *supra* note 7, at 212. On the other hand, Posner did propose to use section 1 to prosecute tacit collusion. *Id.* at 71.

67. *See* Herbert Hovenkamp, THE HARVARD AND CHICAGO SCHOOLS AND THE DOMINANT FIRM, *infra* chapter 3.

68. The best statement of this position is in Robert H. Bork, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (New York: The Free Press, 1993).

69. *See Brooke Group v. Brown & Williamson Tobacco,* 509 U.S. 209 (1993).

70. John Vickers, "Abuse of Market Power," 20, notes that a dominant firm can raise rivals' costs—unduly deny scale economies to rivals—by offering price reductions that are "*conditional* on the buyer not dealing with rivals."

71. For a discussion of the anti-antitrust attitude expressed in *Trinko, see* Harvey Goldschmid, *Comment on Herbert Hovenkamp and the Dominant Firm: The Chicago School Has Made Us Too Cautious About False Positives and the Use of Section 2 of the Sherman Act, infra* Chapter 3.

72. On Director's influence, *see* Stephen Stigler, *Aaron Director Remembered,* and Sam Peltzman, *Aaron Director's Influence on Antitrust Policy,* 48 J. L. & ECON. 307–330 (October 2005). In the preface to his book, THE ANTITRUST PARADOX, ix (Basic Books: 1978), Robert Bork acknowledges the decisive role Director played in Bork's education and says that Director "has long seemed to me, as he has to many others, the seminal thinker in antitrust economics and industrial organization." Director was in residence at the University of Chicago from 1947 to 1965.

73. *See* Friedrich A. Hayek, THE ROAD TO SERFDOM (University of Chicago Press: 1944).

74. Henry C. Simons, *The Requisites of Free Competition,* 26 AM. ECON. REV.103–4 (supplement), March 1936. *See also* his ECONOMIC POLICY FOR A FREE SOCIETY, 52–9 (University of Chicago Press: 1948).

75. Report of the White House Task Force on Antitrust Policy, July 5, 1968. The text of the task force's proposed legislation is reproduced in INDUSTRIAL CONCENTRATION: THE NEW LEARNING, 449–456 (Harvey J. Goldschmid, H. Michael Mann, & J. Fred Weston, eds., Boston: Little Brown: 1974). A commentary by Dean Neal appears in the same volume at 377–383.

76. Richard A. Posner, ANTITRUST POLICY (University of Chicago Press: 1976), Chapter 4. *See also* Posner, *Oligopoly and the Antitrust Laws: A Suggested Approach,* 21 STANFORD L. REV.1562–1606 (June 1969).

77. John S. McGee, *Compound Pricing,* 25 Econ. Inquiry 315–339 (April 1987).

78. Peltzman, *supra* note 69 at 325.

79. John McGee, *Predatory Price Cutting: The Standard Oil (N.J.) Case,* 1 J. L. & Econ.137–169 (October 1958). *See also* McGee, *Predatory Pricing Revisited,* 23 J. L. & Econ. 289–330 (October 1980); and Lester G. Telser (another Chicagoan), *Cutthroat Competition and the Long Purse,* 9 J. L. & Econ. 259–277 (October 1966).

80. *Matushita Electric Industrial Corp. Ltd. et al. v. Zenith Radio Corp. et al.,* 475 U.S. 574, 589 (1986). The Court cites McGee and also Robert Bork, *supra* note 69. Bork in turn at the page of his book cited by the Court gives pride of place to McGee.

81. *See* the literature review in my text, F. M. Scherer, Industrial Market Structure and Economic Performance, 2d ed., 336–340 (Chicago: Rand McNally, 1980); David Kreps & Robert Wilson, *Reputation and Imperfect Information,* 27 J. Econ. Theory 253–279 (August 1982); and Paul Milgrom & John Roberts (not the Supreme Court Chief Justice), *Predation, Reputation, and Entry Deterrence,* 27 J. Econ.Theory 280–312 (August 1982).

82. The facts in *Matsushita* were indeed compelling. I was present at oral arguments before the Supreme Court. Although such inferences are often wrong, I believed a majority would rule for Matsushita when I heard Justice Thurgood Marshall ask counsel for Zenith, "And how was the consumer affected by the protracted low prices?" Shortly thereafter I invited a leading spear-carrier from each side of the case to present their arguments before my seminar on Japanese industrial policy (jointly taught with MITI official Ryozo Hayashi). The pro-Matsushita spokesperson clearly carried the day.

83. James A. Dalton & Louis Esposito, *Predatory Price Cutting and Standard Oil: A Re-Examination of the Trial Record,* 22 Res. L & Econ. 155–205 (2007).

84. Phillip Areeda & Donald Turner, *Predatory Pricing and Related Practices under Section 2 of the Sherman Act,* 88 Harv. L. Rev. 697–733 (February 1975). The article was cited in a subsequent IBM appeal, *California Computer Products Inc. v. International Business Machines,* 613 F.2d 727, 743 (1979). But in the same section, the appellate court cited numerous other articles disputing the Areeda-Turner theses.

85. *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.,* 509 U.S. 209, 224 (1993).

86. Citing my textbook, *supra* note 78, to support the proposition that predation to discipline price-cutting rivals is difficult, the Court failed to note one documented probable instance of such behavior.

87. Peltzman, *supra* note 69 at 325.

88. Lester G. Telser, *Why Should Manufacturers Want Fair Trade?,* 3 J. L. & Econ. 86–105 (October 1960); and Robert H. Bork, *A Reply to Professors Gould and Yamey,* 76 Yale L. J., 731 (March 1967); Bork, *Resale Price Maintenance and Consumer Welfare,* 77 Yale L. J. 950–960 (April 1968); and The Antitrust Paradox, *supra* note 68 at 295–296.

89. *Continental T.V., Inc., et al. v. GTE Sylvania, Inc.,* 433 U.S. 36, 48, 53, 54 (1977). Justice Rehnquist, who added weight to a new conservative

majority on the Court, abstained. Citing "a leading critic of vertical restraints," the Court disagreed with William S. Comanor's argument that product differentiation efforts reduce interbrand competition more than they convey socially valuable information. *Id.* at 56; *see Vertical Territorial and Customer Restrictions: White Motor and Its Aftermath,* 81 HARV. L. REV. 1419–1438 (May 1968). This is an issue that engaged (and continues to engage) scholars over a much broader ideological spectrum.

90. Richard Posner, *Antitrust Policy and the Supreme Court: An Analysis of Restricted Distribution, Horizontal Merger and Potential Competition Decisions,* 75 COLUM. L. REV. 282–293 (1975). Following the decision, Posner applauded it in *The Rule of Reason and the Economic Approach: Reflections on the* Sylvania *Decision,* 45 U. CHI. L. REV. 1–20 (Autumn 1977).

91. *See, e.g.,* Charles Ellet Jr., AN ESSAY ON THE LAWS OF TRADE IN REFERENCE TO THE WORKS OF INTERNAL IMPROVEMENT IN THE UNITED STATES (Richmond, VA: Bernard: 1839; Reprinted by Augustus Kelley, 1966). Ellet's insight can also be found in Alexander Hamilton's *Federalist Paper* No. 22. *See also* Joseph Spengler (not a Chicagoan), *Vertical Integration and Antitrust Policy,* 58 J. POL. ECON. 347–352 (August 1950).

92. *See* F. M. Scherer & David Ross, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE, 3d ed., 542–548 (Houghton-Mifflin: 1990). For a parallel proof, *see* William S. Comanor, *Vertical Price Fixing and Market Restrictions and the New Antitrust Policy,* 98 HARV. L. REV. 990–998 (March 1985).

93. *Leegin Creative Leather Products Inc. v. PSKS Inc.,* 127 S.Ct. 2705 (2007). Subsequent citations are to the slip opinion.

94. Brief of Amici Curiae Economists in Support of Petitioner, case no. 06–480 (November 3, 2006). Most of the signatories filed a later brief squarely on the merits.

95. Brief for William S. Comanor and Frederic M. Scherer as Amici Curiae Supporting Neither Party, Case no. 06–480 (undated).

96. Slip opinion section IIIB, 14.

97. Slip opinion at 17.

98. Slip opinion at 10.

99. The sources are described in F. M. Scherer, *A New Retrospective on Mergers,* 28 REV. INDUS. ORG. 328–29 (June 2006).

100. *U.S. v. Von's Grocery Co. et al.,* 384 U.S. 270, 301 (1966).

101. Henry G. Manne, *Mergers and the Market for Corporate Control,* 73 J. POL. ECON. 110–120 (April 1965). Manne's J.D. decree was from the University of Chicago in 1952.

102. *See, e.g.,* Michael Jensen, *Takeovers: Their Causes and Consequences,* 2 J. ECON. PERSP. 21–48 (Winter 1988). Jensen's Ph.D. was from the University of Chicago.

103. *A Theory of Oligopoly,* 72 J. POL. ECON. 55–59 (February 1964).

104. *Economies as an Antitrust Defense: The Welfare Tradeoffs,* 58 AM. ECON. REV. 18–36 (March 1968).

105. For what is probably the initial joining of this issue in a litigated case, *see* my *Affidavit on Efficiency Defenses in U.S. v. Archer-Daniels-Midland Co. et al.* (May 1987), *in* F. M. Scherer, COMPETITION POLICY, DOMESTIC AND INTERNATIONAL, 259–269 (Edward Elgar: 2000). The district

court decided the case on other grounds and took no position on how an efficiency defense should be tried.

106. *In the matter of Kellogg et al.,* 99 F.T.C. 8, 16, 289 (1982); *In the matter of Ethyl Corp. et al.,* 101 F.T.C. 425 (1983).

107. *Supra* note 78 at 163–164.

108. *Concentration and Structural and Market Disequilibria,* 16 ANTITRUST BULL. 244–248 (Summer 1971).

109. *Industry Structure, Market Rivalry, and Public Policy,* 16 J. L. & ECON. (April 1973); and *Two Systems of Belief About Monopoly,* in Goldschmid, ed., *supra* note 72, at 175–181.

110. Goldschmid, ed., *supra* note 72.

111. *Structure-Profit Relationships at the Line of Business and Industry Level,* 65 REV. ECON. & STAT. 22–31 (February 1983). Ravenscraft might be called a Chicagoan; he grew up in Peoria and received his Ph.D. from Northwestern University.

112. *U.S. v. American Telephone and Telegraph Co. et al.,* 524 F. Supp. 1336, 1359. Judge Greene quoted at 1362 Robert Bork's suggestion that "Predation by abuse of governmental procedures . . . presents an increasingly dangerous threat to competition . . . [with] almost limitless possibilities." Bork, *supra* note 69, at 347.

113. *Commentary, in* Goldschmid et al., eds., *supra* note 72, at 104.

114. Or the ambivalent are cited only for inferences consistent with conservative values and ignored on other points.

115. Arnold C. Harberger, *Monopoly and Resource Allocation,* 44 AM. ECON. REV. 77–87 (May 1954).

116. For a quantitative illustration, *see* Scherer & Ross, *supra* note 89, at 31.

117. F. M. Scherer, *Technological Innovation and Monopolization,* forthcoming *in* ISSUES IN COMPETITION L. & POL'Y, W. D. Collins, ed. The article analyzes "great" monopolization cases in seven major industries.

118. George J. Stigler, *The Extent and Bases of Monopoly,* 32 AM. ECON. REV. supplement, 14 (June 1942).

119. *U.S. v. Hartford-Empire Co. et al.,* 46 F. Supp. 541 (1942), 323 U.S. 386 (1944), 324 U.S. 570 (1944).

120. Marcus A. Hollabaugh & Robert Wright, *Compulsory Licensing Under Antitrust Judgments,* staff report, Subcommittee on Patents, Trademarks, and Copyrights, Senate Committee on the Judiciary, 2–5 (1960).

121. F. M. Scherer et al., PATENTS AND THE CORPORATION, 2d ed., privately published (Boston: 1959).

122. C. T. Taylor & Z. A. Silberston, THE ECONOMIC IMPACT OF THE PATENT SYSTEM (Cambridge University Press 1973). Taylor and Silberston estimated from extensive interviews that R&D expenditures in the United Kingdom would be reduced on average by 8 percent if no patent protection were available. For pharmaceuticals, however, the reduction would be 64 percent.

123. *Patents and Innovation: An Empirical Study,* 173 MGMT. SCI. 173–181 (1986). Mansfield's estimated percentage shortfalls are similar to those found by Taylor and Silberston.

124. R. C. Levin, Alvin Klevorick, Richard R. Nelson, & Sidney Winter, *Appropriating the Returns from Industrial Research and Development,* BROOKINGS PAPERS ON ECONOMIC ACTIVITY, 783–820 (1987: Microeconomics).

125. Ward Bowman, PATENT AND ANTITRUST LAW: A LEGAL AND ECONOMIC APPRAISAL (University of Chicago Press 1973), especially at 64 and 254–55.

126. Remarks by Abbott P. Lipsky Jr. before the American Bar Association November 5, 1981, reproduced in CCH TRADE REGULATION REPORTER para. 13, 129.

127. U.S. Department of Justice and Federal Trade Commission, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION (April 2007); Antitrust Modernization Commission, REPORT (2007).

128. ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS, at 1, 2. *supra* note 128.

129. *Supra* note 128.

130. Antitrust Modernization Commission, 38–40. *supra* note 128.

131. *Id.*

132. Those in the Chicago School begin with the premise that the sole goal of antitrust is the achievement of economic efficiency, and then apply price theory as the vehicle for determining efficiency effects. Entry is generally thought easy and monopoly is therefore most likely self-correcting. Efficiencies are more common than thought by others. Chicagoans are basically noninterventionist, more likely to fear harmful efficiency effects from the application of the antitrust laws. Most vertical restraints should be lawful. Antitrust therefore should focus primarily on cartels, large horizontal mergers and the erosion of market power created or protected by government. The classic statements of these views are Robert H. Bork, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (1978); Richard A. Posner, ANTITRUST LAW (1976; 2d ed. 2001); Richard A. Posner, *The Chicago School of Antitrust Analysis,* 127 U. PA. L. REV. 925 (1979).

133. For a discussion of the meaning of "consumer welfare," *see* UNITED STATES MODERNIZATION COMMISSION, REPORT AND RECOMMENDATIONS 26, n.22 (2007).

134. *See, e.g., Schor v. Abbott Laboratories,* 457 F.3d 608, 611 (7th Cir. 2006) ("if a manufacturer cannot make itself better off by injuring consumers through lower output and higher prices, there is no role for antitrust law to play").

135. Allocative inefficiency occurs when the exercise of monopoly power results in a restriction of the output that would be produced in a competitive market. The result is that fewer resources being utilized in the market than would be allocated to the same market under competitive conditions. This is suboptimal, an inefficient result.

136. Northwest Airlines has over time controlled 64 of the 86 gates, and almost 78 percent of all flights, at Detroit Metro Airport. *See Spirit Airlines, Inc. v. Northwest Airlines, Inc.,* 431 F.3d 917 (6th Cir. 2005) (summary judgment in favor of Northwest on claim of predatory pricing targeting low cost carrier reversed). *Cf. United States v. AMR Corp.,* 335 F.3d 1109 (10th Cir. 2003) (rejecting similar claims by low cost airline).

137. *See* U.S. Department of Justice Antitrust Division, Statement On the Closing of Its Investigation of Whirlpool's Acquisition of Maytag, 7 CCH TRADE REG.REP. ¶ 50, 209 (2006).

138. Broken up by a government consent decree in 1980, AT&T was purchased by SBC, originally Southwestern Bell (one of the Bell operating companies that resulted from the decree, and had previously acquired Pacific Telesis and Ameritech, two of the other regional "baby Bells"). Following its acquisition of AT&T, SBC changed its corporate name to AT&T Inc. AT&T Inc. has since acquired Bell South, another of the baby Bell operating companies, and with that acquisition acquired control of Cingular Wireless and Yellow Pages, Inc.

139. *See* Royal Caribbean Cruises, Ltd./P & O Princess Cruises p/c and Carnival Corporation/P & O Princess Cruises, CCH Trade Reg. Rep. ¶ 15,100, 2001–2005 Transfer Binder (FTC 2002) (Statement re closing of investigation of two major cruise line mergers).

140. *See* Federated/May, CCH Trade Reg. Rep. ¶ 15,790, 2001–2005 Transfer Binder (FTC 2005) (letter closing investigation of acquisition by Federated Department Stores of May Department Stores). Shortly after the consummation of the transaction the venerated Marshall Field's stores were changed to Macy's.

141. The contestable market theory asserts that even where there is a single monopoly incumbent in the market, if entry and exit are costless or virtually so, the threat of entry can prevent restricted output and monopoly prices. *See generally* William J. Baumol, J. C. Panzer, & Robert D. Willig, Contestable Market Theory of Industry Structure (1982). The theory was used throughout the analysis of airline deregulation to explain away fears of air carriers that might be the sole carriers in particular markets.

142. In rejecting a market definition of department stores in Federated/May, *supra* note 137, the Commission stressed that department stores today are in malls, and that consumers can buy virtually everything sold in a department store in other stores within the mall.

143. *FTC v. H.J. Heinz Co.*, 246 F.3d 708 (D.C. Cir. 2001) (granting FTC interim relief).

144. Robert H. Bork, The Antitrust Paradox 50–71 (1978) ("...conventional indicia of legislative intent overwhelmingly support the conclusions that the antitrust laws should be interpreted as designed for the sole purpose of forwarding consumer welfare").

145. *See, e.g.*, Richard Hofstadter, *What Happened to the Antitrust Movement, in* The Paranoid Style In American Politics and Other Essays 205–211 (1965); Herbert Hovenkamp, *Antitrust Policy After Chicago*, 84 Mich. L. Rev. 213, 249 (1985) ("The legislative histories of the various antitrust laws fail to exhibit anything resembling a dominant concern for economic efficiency."); Robert H. Lande, *Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged*, 34 Hastings L.J. 65 (1982); Robert Pitofsky, *The Political Content of Antitrust*, 127 U. Pa. L. Rev. 1051, 1051–1066 (1979).

146. *See* Herbert Hovenkamp, *supra* note 142, at 260–284.

147. *Id.* at 255–260.

148. As we shall see, actual *outcomes* in cases decided over the past twenty-five years have probably been more consistent with what Herbert Hovenkamp in this volume has characterized as the "chastised Harvard School" identified with Professors Areeda and Hovenkamp and, in my view, with Robert Pitofsky as well. The views of this "chastised" school are most clearly set forth in Herbert Hovenkamp, THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION (2005). The views of this school have now been characterized as "Chicago lite," accepting much of the structure of Chicago analysis but "more skeptical over the predictive power of theoretic models in litigation." Daniel A. Crane, *Antitrust Modesty,* 105 MICH. L. REV. 1193, 1194 (2007).

149. *See* Thomas E. Kauper, *The Antitrust Revolution and Small Business: On "The Turnpike to Efficiencyville," in* LAW AND CLASS IN AMERICA 120 (P. Carrington & T. Jones eds., 2006); Thomas E. Kauper, *The "Warren Court" and the Antitrust Laws: Of Economics, Populism and Cynicism,* 67 MICH. L. REV. 325, 331–334 (1968).

150. *United States v. Topco Associates,* 405 U.S. 596 (1972).

151. *United States v. Griffith,* 334 U.S. 100 (1948).

152. *Albrecht v. The Herald Co.,* 390 U.S. 145 (1968).

153. *Simpson v. Union Oil Co.,* 377 U.S. 13 (1964).

154. *United States v. Arnold, Schwinn & Co.,* 388 U.S. 365 (1967).

155. *United States v. Von's Grocery Co.,* 384 U.S. 270 (1966).

156. *Federal Trade Commission v. Morton Salt Co.,* 334 U.S. 37 (1948).

157. *Utah Pie Co. v. Continental Baking Co.,* 386 U.S. 685 (1967).

158. *United States v. Philadelphia National Bank,* 374 U.S. 321 (1963).

159. *Poller v. Columbia Broadcasting System,* 368 U.S. 464 (1962).

160. *See Bigelow v. RKO Radio Pictures,* 327 U.S. 251 (1946).

161. Three of the decisions referred to in the text have been expressly overruled. *See Continental T.V., Inc. v. GTE Sylvania Inc.,* 433 U.S. 36 (1971) (overruling *Schwinn*); *State Oil v. Khan,* 522 U.S. 3 (1997) (overruling *Albrecht*); *Leegin Creative Leather Products, Inc. v. PSKS, Inc.,* 127 S.Ct. 2705 (2007) (overruling *Dr. Miles*). *Utah Pie* was virtually dismissed out of hand in *Brooke v. Brown & Williamson Tobacco,* 509 U.S. 209 (1993). In the minds of many, *Topco* was implicitly overruled in *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.,* 441 U.S. 1 (1979). *See* discussion in *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.,* 792 F.2d 210, 229 (D.C. Cir. 1986). The leveraging principle of *Griffith* has been substantially modified in cases like *Alaska Airlines, Inc. v. United Airlines, Inc.,* 948 F.2d 536 (9th Cir. 1991), an outcome the Supreme Court seemed to approve in *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP,* 540 U.S. 398, 415 n.4 (2004). In view of the development of the law generally and of lower court analysis in modern merger cases, *Von's Grocery* would clearly not be followed today. *See Hospital Corporation of America v. FTC,* 807 F.2d 1381, 1386 (7th Cir. 1986). The presumption of competitive injury created in *Morton Salt* appears to have been substantially modified in *Volvo Trucks North America, Inc. v. Reeder-Simco GMC, Inc.,* 546 U.S. 164 (2006). And the basic hostility to the use of summary judgment in antitrust case

was substantially weakened in *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574 (1986).

162. As noted, *Dr. Miles* was overruled in *Leegin*, 127 S.Ct. 2705.

163. *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP, supra* note 30, at 412–416.

164. Among these appointments were three prominent Chicagoans—Robert Bork, Frank Easterbrook and Richard Posner—who were in turn able to use their judicial opinions to further influence antitrust policy.

165. *Utah Pie*, 386 U.S. 685.

166. *Arnold, Schwinn & Co.*, 388 U.S. 365.

167. The classic stinging critique of *Utah Pie* is Ward Bowman, *Restraint of Trade by the Supreme Court: The Utah Pie Case*, 77 YALE L.J. 70 (1967). The opinion of the Court in the *Continental T.V., Inc. v. GTE Sylvania Inc., supra* note 30 at 48, n.13, recites much of the criticism from a broad range of commentators attacking the decision in *Schwinn. See also* Thomas E. Kauper, *The "Warren Court" and the Antitrust Laws: Of Economics, Populism and Cynicism, supra* note 146, at 340–341.

168. The emphasis in *Sylvania* on potential efficiencies and the structural analysis relying on price theory is straight from the Chicago playbook, although the Court did not conclude that vertical non-price restrictions are per se legal.

169. *Leegin*, 127 S.Ct. 2705. The efficiency explanations used by the Court in rejecting the traditional *per se* rule against vertical price fixing are drawn directly from Bork and Posner, as well as from Herbert Hovenkamp, THE ANTITRUST ENTERPRISE 186 (2005).

170. *Broadcast Music*, 441 U.S. 1. The analysis of blanket licensing in this case closely tracks the ancillary restraint analysis set forth by Judge Taft in *United States v. Addyston Pipe & Steel Co.*, 85 F. 271 (6th Cir. 1898), *aff'd*, 175 U.S. 211 (1899), a decision characterized by Robert Bork as "one of the greatest, if not the greatest, opinion in the history of law." Robert H. Bork, THE ANTITRUST PARADOX 26 (1978).

171. *State Oil v. Khan*, 522 U.S. 3. The Court's analysis of maximum resale price maintenance was very heavily influenced by the opinion in the court below, an opinion written by Judge Richard Posner.

172. *Business Electronics Corp. v. Sharp Electronics Corp.*, 485 U.S. 717 (1988). The Court in *Business Electronics* justified the *per se* rule against vertical price fixing primarily on the ground that the practice could be used to facilitate a cartel, thus moving away from the simple vertical effects Chicagoans find benign to horizontal effects that are of concern to Chicagoans. *See* Richard A. Posner, ANTITRUST LAW 172 (2d ed. 2001). This concern is expressed, albeit minimalized, in *Leegin*.

173. The influence of the Chicago School on antitrust policy with respect to mergers in large part is the result of the utilization by the courts and enforcement agencies of the merger guidelines, initially guidelines of the Department of Justice and now guidelines of the Federal Trade Commission as well. U.S. DEPT. OF JUSTICE & FTC, HORIZONTAL MERGER GUIDELINES, as amended, http.11www.usdoj.gov/atr/public/guidelines/hmg.pdf. The current guidelines are simply a modest revision of the guidelines issued in 1982, when the principal draftsman and person primarily responsible for

their content was William Baxter, the Assistant Attorney General in charge of the Antitrust Division and a true Chicagoan.

174. *Eastman Kodak Co. v. Image Technical Servs.*, 504 U.S. 451 (1992) (rejecting argument, based on Chicago economic model, that a manufacturer could not have had monopoly power in a market for servicing its machines when its machines were sold in a competitive market).

175. Published beginning in 1978 as Philip Areeda & Donald F. Turner, ANTITRUST LAW, the multivolume treatise has been through a number of revisions with several revisers. Herbert Hovenkamp is the principal reviser, and the work is increasingly his. Most volumes today list Areeda and Hovenkamp as co-authors. It is a rare appellate court antitrust opinion that does not cite to something in the treatise. Daniel Crane, in *Antitrust Modesty, supra* note 145, at 1193 puts it this way: "As custodian of the treatise, Hovenkamp speaks with oracle-like authority on antitrust matters." The publication of Herbert Hovenkamp, THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION (2005) will further extend the influence of what Hovenkamp has called the "chastised" Harvard school.

176. *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. at 412.

177. *See supra* note 170.

178. In the small world in which we live, antitrust enforcers and judges abroad tend to be quite familiar with U.S. antitrust law developments of the last three decades. As the Chicago school has affected U.S. legal developments, those following U.S. law are also affected. For a good example, see EUROPEAN COMMISSION, GREEN PAPER ON VERTICAL RESTRAINTS IN EC COMPETITION POLICY ¶ 54 (1997). The Green Paper also illustrates the fact that antitrust analysis often begins with the Chicago position, even if some reason is ultimately given for coming to different conclusions.

179. *See, e.g.*, Harold Dermsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347 (Pap & Proc. 1967). An early influential work on the consideration of externalities in the development of property rights. More broadly, the work of Richard Posner has extended to, and had an influence upon, a number of fields. *See* Richard A. Posner, ECONOMIC ANALYSIS OF LAW (7th ed. 2007). The Chicago analysis initially developed in antitrust was in a sense a precursor of much of what we think of today as the whole law and economics movement.

180. Thomas E. Kauper, *Review of Richard A. Posner, Antitrust Law: An Economic Perspective*, 75 MICH. L. REV. 768, 771 (1977).

181. *Id.* I further noted that while such cathedrals are a great human achievement, they also have a sense of unreality about them, that "they do not seem to speak to the world in which most of us live and work."

182. Except where adverse effect is directly proven, as in *National Collegiate Athletic Association v. Board of Regents of University of Oklahoma*, 468 U.S. 85 (1984), it is now simply given that plaintiffs in section 1 rule of reason cases must establish that defendant has (or had) market power. *See, e.g., Republic Tobacco Co. v. North Atlantic Trading Co., Inc.*, 381 F.3d 717 (7th Cir. 2004); *K.M.B. Warehouse Distributors, Inc.*, 61 F.3d 123 (2d Cir. 1995).

183. One recent commentator puts it this way (defining the "new" Harvard school):

> It accepts the essential theoretic insights of the Chicago School but acts cautiously in applying them to real cases because of skepticism over the predictive power of theoretic models in litigation. Hovenkamp readily admits that the main differences between the new Harvard and Chicago schools "lies in details."
>
> Daniel A. Crane, *supra* note 145, at 1194.

184. *See* Andrew I. Gavil, William E. Kovacic, & Jonathan B. Baker, ANTITRUST LAW IN PERSPECTIVE CASES, CONCEPTS AND PROBLEMS IN COMPETITION POLICY 68 (2002) ("Post-Chicago commentators generally propose qualifying rather than supplanting Chicago views...both schools rely on formal arguments from microeconomics and the post-Chicago school does not propose to demonstrate the logical fallacies of the Chicago school."). *Eastman Kodak,* 504 U.S. 451, is a good illustration of starting with a Chicago model and examining exceptions and reasons why the teaching of the model does not apply.

185. *Eastman Kodak,* 504 U.S. 451.

186. In *Southern Motor Carriers Rate Conference v. United States,* 471 U.S. 48 (1985), the Court rejected the implication in *Cantor v. Detroit Edison Co.,* 428 U.S. 579 (1976) that in order to assert protection from the federal antitrust laws for conduct taken in accord with state law the conduct at issue would need to have been *compelled* by the state; it is sufficient that it be authorized by the state. In *Columbia v. Omni Outdoor Advertising, Inc.,* 499 U.S. 365 (1991), the Court further expanded the state action immunity by rejecting a conspiracy exemption, declining to examine whether there were faults in the authorization process as a matter of state law and denying that the immunity would be lost even if officials were bribed. But in *Ticor Title Ins.Co. v. FTC,* 504 U.S. 621 (1992), the Court curtailed the immunity by requiring evidence that the state took active steps to supervise the allegedly immune conduct. The Chicago view here is somewhat ambivalent, as Chicagoans have also tended to be strong believers in permitting the states, in the name of federalism, some latitude to impose regulatory regimes within their authority. *See, e.g.,* Bork, *supra* note 167 at 350.

187. *Eastern Railroads Presidents Conference v. Noerr Motor Freight, Inc.,* 365 U.S. 127 (1961) creates a broad immunity from antitrust liability for petitioning government bodies to take action that are on their face anticompetitive. Litigation is generally within the protection of *Noerr.*

188. *See Professional Real Estate Investors, Inc. v. Columbia Pictures Industries, Inc.,* 508 U.S. 49 (1993) (imposing very high standards that must be met in order to remove the *Noerr* immunity from litigation targeted at rivals).

189. Bork, *supra* note 167 at 347–364 (entire chapter entitled "Predation Through Government Process," with particular emphasis on misuse of litigation).

190. *Trinko,* 540 U.S. at 414.

191. As far back as 1955, the Act was criticized in U.S. DEPARTMENT OF JUSTICE, REPORT OF THE ATTORNEY GENERAL'S NATIONAL COMMITTEE TO STUDY THE

ANTITRUST LAWS 132 (1955). The Neal Report urged a major overhaul. Philip C. Neal, et al., *Report of the White House Task Force on Antitrust Policy,* reprinted in 2 ANTITRUST L. & ECON. REV. 11, 41 (1968–69). Repeal was suggested in U.S. DEPARTMENT OF JUSTICE, REPORT ON THE ROBINSON-PATMAN ACT 260 (1977). The latest to tilt at this windmill is the Antitrust Modernization Commission. *See* U.S. ANTITRUST MODERNIZATION COMMISSION, REPORT AND RECOMMENDATIONS 317 (2007).

192. *Leegin,* 127 S.Ct. 2705 (2007).

193. *Continental T.V., Inc. v. GTE Sylvania, Inc.,* 433 U.S. 36, 51, n.18 (1977).

194. For a more complete discussion, *see* Daniel Rubinfeld, *Antitrust Policy, in* INTERNATIONAL ENCYCLOPEDIA OF THE SOCIAL AND BEHAVIORAL SCIENCES (2001), *available at* www.iesbs.com.

195. *United States v. Aluminum Co of America,* 377 U.S. 271 (1964)

196. *See, e.g., United States v. Von's Grocery Co.,* 384 U.S. 270 (1966).

197. *See, e.g.,* Leonard Weiss, *The Concentration-Profits Relationship and Antitrust Law, in* H. Goldschmid , H. M. Mann, & J. F. Weston (eds.), INDUSTRIAL CONCENTRATION: THE NEW LEARNING, 184–232 (Little Brown, Boston: 1974).

198. H. Demsetz, *Two Systems of Belief About Monopoly, in* Goldschmid, Mann, Weston (eds.) Industrial Concentration: The New Learning, 164–183 (Little Brown, Boston: 1974).

199. *See, e.g.,* Richard Posner, *The Chicago School of Antitrust Analysis,* 127 U. PA. L. REV. 925 (1979); Frank Easterbrook, *The Limits of Antitrust,* 63 TEX. L. REV. 1 (1984).

200. *GTE Sylvania, Inc., v. Continental TV, Inc.,* 433 U.S. 36 (1977).

201. *See, e.g., Leegin Creative Leather Products v. TSKS, Inc.,* 127 S. Ct. 2705 (2007) (overturning a prior decision making vertical minimum price fixing or "resale price maintenance" per se illegal).

202. Einer Elhauge, *Harvard Not Chicago: Which Antitrust School Drives Recent Supreme Court Decisions?,* 3 COMPETITION POL'Y INT'L., No. 2, Autumn, (2007) forthcoming.

203. Avanash Dixit, *A Model of Duopoly Suggesting a Theory of Entry Barriers,* 10 BELL J. ECON. 20 (1979).

204. Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price,* 96 YALE L.J. 209 (Dec. 1986); Janusz A. Ordover, Garth Saloner, & Steven C. Salop, *Equilibrium Vertical Foreclosure,* 80 AM. ECON. REV. 127 (1990).

205. David M. Kreps & Robert Wilson, *Reputation and Imperfect Information,* 27 J. ECON.THEORY 253 (1982); Paul Milgrom & John Roberts, *Predation, Reputation and Entry Deterrence,* 27 J. ECON.THEORY 280 (1982).

206. Franklin M. Fisher, *Games Economists Play: A Noncooperative View,* 20 RAND J. ECON. 113 (1989).

207. Carl Shapiro, *The Theory of Business Strategy,* 20 RAND J. ECON. 125 (1989).

208. Ronald Coase, *The Nature of the Firm,* 4 ECONOMICA 380 (1937).

209. Oliver Williamson, THE ECONOMIC INSTITUTIONS OF CAPITALISM (Free Press, New York: 1985).

210. Daniel Rubinfeld, *Antitrust Enforcement in Dynamic Network Industries,* ANTITRUST BULL., Fall-Winter, 859–882 (1998).

211. Allen Grunes & Maurice E. Stuckey, *Antitrust and the Marketplace of Ideas,* 69 ANTITRUST L.J., No. 1, 249–302 (2001).

212. *U.S. v. Microsoft,* 253 F.3d 34 (D.C. Cir. 2001).

213. Franklin M. Fisher & Daniel L. Rubinfeld, *United States v. Microsoft: An Economic Analysis,* 1–44, in Evans, Fisher, Rubinfeld, & Schmalensee, DID MICROSOFT HARM CONSUMERS? TWO OPPOSING VIEWS, AEI-Brookings Joint Center for Regulatory Studies (2000).

214. Evans and Schmalensee, *Be Nice to Your Rivals: How the Government Is Selling an Antitrust Case without Consumer Harm in* United States v. Microsoft," 45–86, *in* Evans, Fisher, Rubinfeld, & Schmalensee, DID MICROSOFT HARM CONSUMERS? TWO OPPOSING VIEWS, AEI-Brookings Joint Center for Regulatory Studies (2000).

Bibliography

Bain, Joseph. *Industrial Organization.* New York: Wiley, 1968.

Coase, Ronald. "The Nature of the Firm," 4 *Economica* (1937): 380–405.

Demsetz, H. "Two systems of belief about monopoly," in Goldschmid H., Mann H. M., Weston, J. F. (eds.) *Industrial Concentration: The New Learning.* Boston: Little Brown, 1974, 164–83.

Dixit, Avanash. "A Model of Duopoly Suggesting a Theory of Entry Barriers," 10 *Bell Journal of Economics* (1979): 20–32.

Easterbrook, Frank. "The Limits of Antitrust," 63 *Texas Law Review* (1984): 1–40.

Elhauge, Einer. "Harvard Not Chicago: Which Antitrust School Drives Recent Supreme Court Decisions?" 3 *Competition Policy International,* No. 2, Autumn 2007, forthcoming.

David Evans and Richard Schmalensee. "Be Nice to Your Rivals: How the Government Is Selling an Antitrust Case without Consumer Harm in *United States v. Microsoft,*" in Evans, Fisher, Rubinfeld, and Schmalensee, *Did Microsoft Harm Consumers? Two Opposing Views,* AEI-Brookings Joint Center for Regulatory Studies, 2000, 45–86.

Fisher, Franklin M. "Games Economists Play: A Noncooperative View," 20 *Rand Journal of Economics* (1989): 113–124.

Fisher, Franklin M. and Daniel L. Rubinfeld. "United States v. Microsoft: An Economic Analysis" (with Franklin M. Fisher), in Evans, Fisher, Rubinfeld, and Schmalensee, *Did Microsoft Harm Consumers? Two Opposing Views,* AEI-Brookings Joint Center for Regulatory Studies, 2000, 1–44.

Grunes, Allen and Maurice E. Stuckey. "Antitrust and the Marketplace of Ideas," 69 *Antitrust Law Journal* No. 1 (2001): 249–302.

Kauper, Thomas. "Influence of Conservative Economic Analysis on the Development of the Law of Antitrust," in this volume.

Kreps, David M. and Robert Wilson. "Reputation and Imperfect Information." 27 *Journal of Economic Theory* (1982): 253–279.

Milgrom, Paul and John Roberts. "Predation, Reputation and Entry Deterrence." 27 *Journal of Economic Theory* (1982): 280–312.

Posner, Richard."The Chicago School of Antitrust Analysis" 127 *University of Pennsylvania Law Review* (1979): 925–948.

Rubinfeld, Daniel. "Antitrust Enforcement in Dynamic Network Industries." *The Antitrust Bulletin* Fall-Winter (1998): 859–882.

———. "Antitrust Policy." *International Encyclopedia of the Social and Behavioral Sciences* (2001), www.iesbs.com.

Ordover, Janusz A., Garth Saloner, and Steven C. Salop. "Equilibrium Vertical Foreclosure." 80 *American Economic Review* (1990):127–142.

Schmalensee, Richard. "Thoughts on the Chicago Legacy in Antitrust," in this volume.

Shapiro, Carl. "The Theory of Business Strategy." 20 *Rand Journal of Economics* (1989): 125–137.

Weiss, Leonard. "The Concentration-Profits Relationship and Antitrust Law," in Goldschmid H., Mann H. M., Weston J. F., eds., *Industrial Concentration: The New Learning*. Boston: Little Brown, 1974, 184–232.

Williamson, Oliver. *The Economic Institutions of Capitalism*. New York: Free Press, 1985.

Cases

GTE Sylvania, Inc., v. Continental TV, Inc., 433 U.S. 36 (1977).

Leegin Creative Leather Products v. PSKS, Inc., 127 S. Ct. 2705 (2007).

U.S. v. Arnold, Schwinn & Co., 388 U.S. 365 (1907).

U.S. v. Von's Grocery Co., 384 U.S. 270 (1966).