

Antitrust Reform: Predatory Practices and the Competitive Process

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Antitrust Reform in the 1980s

There have been some modest changes in the administration of United States antitrust policy over the past ten years. The federal antitrust regulators—and to some extent the courts—are now somewhat less concerned than previously with conglomerate and vertical mergers; with horizontal mergers within liberalized merger guidelines; with tying agreements that intend to limit “free-riding” or reduce transactions costs; with market concentration achieved through internal growth; or with nonpredatory price discrimination.

There are several reasons for this shift in antitrust attitudes and enforcement policies.¹ One important reason is the increasing professional disenchantment with the traditional “barriers to entry” doctrine.² This theory held that firms in concentrated markets erected economic barriers (such as product differentiation) that unfairly deterred the entry of rivals and allowed dominant firms to exercise “monopoly power.” Critics of this theory argued, instead, that most of these alleged economic barriers were simply market efficiencies that served to improve consumer welfare. When and if dominant firms failed to provide such improvements, rivals would inevitably enter markets and compete. Thus, superior economic performance ought not to be attacked prematurely in the name of removing “barriers” to competition.

Another reason for the decline in traditional enforcement policies is the increasing theoretical and empirical criticism of the “concentration doctrine.”³ This theory held that high market concentration encouraged business collusion, and that this was evidenced by higher-than-normal profits (accounting returns) in concentrated markets.

This notion has now been severely criticized. Some analysts have failed to substantiate any long-run empirical relationship between high profit and high concentration.⁴ Other analysts have argued that accounting profits are a poor indicator of “monopoly” or resource misallocation,⁵ while still others have argued that long-run profits could simply be a return to long-run innovation

and risk taking.⁶ Efficient firms can be expected to earn more than less efficient firms and then grow faster than less-efficient firms.⁷ If market concentration is simply the natural consequence of superior economic performance, the role of antitrust regulation (particularly merger policy) becomes ambiguous.

A final reason for the shift in antitrust attitudes is that a reexamination of some of the classic antitrust cases did not support the general rationale for traditional enforcement.⁸ In many of the classic antitrust cases, both public and private, the indicted defendant firms had lowered their prices, expanded their outputs, engaged in rapid technological change, and generally behaved in ways consistent with an efficient and rivalrous process. Indeed, it was precisely this rivalrous behavior that may have precipitated the antitrust legal action. There is now a wider recognition among antitrust specialists that competition is a *process*—not an equilibrium condition—and that antitrust (especially in the private cases) may have been employed as a legal club to thwart rivalrous behavior and protect existing market structures.⁹

Yet, despite this impressive theoretical and empirical revisionism, antitrust regulation in the middle of the 1980s is still very much alive and well. None of the antitrust laws have been abolished or even reformed. The Regan administration's modest legislative proposals to modify sections of the Clayton Act (1914) went nowhere with the Congress.¹⁰ Most economists, and even some of the most important antitrust critics, still believe that some antitrust regulation *is* necessary to promote social efficiency and control "market power." Specifically, the Antitrust Division of the Department of Justice and the Federal Trade Commission (FTC) continue to regulate large horizontal mergers, and they still forbid price-fixing and division-of-market agreements, resale-price maintenance, and so-called "predatory practices."

This is not the place to explain the survival of the antitrust paradigm or to challenge the theoretical foundations of all antitrust regulation.¹¹ Instead, I intend to examine critically the proposition that the current prohibition of predatory practices under the Sherman Act (1890) is rational and consistent with the new theoretical and policy revisionism.

Predatory Practices

Predatory price reductions imply that a leading ("dominant") firm can price its product in ways that may adversely affect smaller rivals, or potential rivals, and reduce market efficiency. A firm, for instance, might temporarily reduce the price of its product below "costs" in an attempt to eliminate a rival or in order to discourage potential entry into some market. Such a price reduction might squeeze a rival's profit margin and might even tend to put a competitor out of business. Alternatively, a dominant firm's price reduction aimed at potential entrants could "discipline" them, and create a "chilling effect"; they might

decide not to enter the market as a consequence. In antitrust jargon, trade is said to be restrained by such behavior and consumer welfare is allegedly threatened.

A nonprice predatory practice implies that a dominant firm can employ some nonprice rivalrous variable (e.g., product differentiation or advertising) in a way that might raise a rival's costs or reduce the demand for a rival's product.¹² For example, if the dominant firm is a more efficient advertiser, an increase in advertising expenditures that must be matched by a rival could raise a rival's costs. Or some dominant firm might suddenly introduce a revolutionary new industrial process or technology that cannot be duplicated by smaller rivals. The effect of these actions, it is alleged, could be to lessen competition and reduce consumer welfare.

The use of the term *predation* certainly makes such business practices appear antisocial. Those who would defend so-called predatory practices are immediately put on the defensive. Yet, despite the inappropriate jungle terminology, it will be argued shortly that predatory practices in a free market are not inefficient nor are they socially harmful. The regulatory agencies and the courts should not prohibit or attempt to regulate them.

There are several different aspects of predatory behavior that require separate examination. The first concern is the issue of "intent"; the second is whether the dominant firm prices below costs or whether the firm is able to raise, unfairly, a rival's costs; the final concern is the alleged effect that predatory behavior can have on resource allocation and on the welfare of consumers.

Intent

It is sometimes maintained that predatory behavior can be distinguished from normal rivalrous behavior by a careful examination of "intent." The issue becomes: what was the intent (intention) of the dominant seller when it reduced its prices? If the intent of the dominant firm was to eliminate some smaller rival in order to gain "market power," then the practice can be deemed predatory and a violation of antitrust law.

Economists generally have been critical of attempts to distinguish predatory behavior from competitive behavior by focusing on subjective intent. When a dominant firm lowers its prices to hold a declining market share, is that predation or is it just vigorous competition? When a large firm lowers its prices to improve its market share, is that predation or is it competition? When a dominant firm lowers its prices and expands its output in order to discourage market entry by potential suppliers, is that predation or just efficient competitive behavior? Every so-called "explicit" evidence of intent (such as written memos to "get" firm X) is open to various interpretations. Rival suppliers could always assert that the clear intent of the dominant firm's price reductions was predatory, such as the elimination of the smaller rivals (and they could always attempt

to use the antitrust laws in an attempt to stifle such activity). Dominant firms could always assert that their price reductions, given market uncertainty, were simply part and parcel of a dynamic discovery process. Thus, it should be clear that it is quite impossible to determine whether price reductions are appropriate or inappropriate by focusing on alleged intent.

An even more critical position with respect to the issue of intent is that all pricing, even so-called competitive pricing, does intend to take sales and market share away from rivals. A competitive market process implies that resources tend to shift from less efficient uses to more efficient uses, and this process may mean that some rivals do lose sales and profits. Unlike the atomistic equilibrium condition, rivals in a competitive market process *are* interdependent, and the price reductions of one firm do *aim* to affect the sales of another firm. The intent of a price reduction is to put a company in a better strategic position vis-à-vis rival sellers; the reduction intends to improve the position of a business organization relative to other business organizations. Thus, there is nothing unique about the intent associated with so-called predatory behavior, and there is no realistic way to determine the social correctness of such practices on the basis of intent.

The Debate over Predatory-Pricing Rules

The academic and legal debate concerning the appropriateness of certain price reductions has shifted to whether such reductions are below “cost.” Businessmen frequently complain that an aggressive rival is selling at prices that are “below cost” and that such pricing is unfair and even predatory. This “below-cost” charge probably implies that a rival sells at a price that is below its own (short-run) average cost.

Most analysts hold that such short-run pricing behavior is not necessarily predatory. They tend to argue that as long as market price equals at least *marginal* cost, a firm is not engaged in inefficient or predatory pricing. However, if market price were to fall below marginal cost or average variable cost, such pricing might be socially inefficient and might even be predatory.

A voluminous literature (and debate) has developed over price predation and various price–cost rules. Phillip Areeda and Donald Turner originally argued that dominant firm pricing below reasonable anticipated marginal cost (or average variable cost) was predatory and should be illegal.¹³ F.M. Scherer responded that the Areeda-Turner rule was both unrealistic and analytically incorrect.¹⁴ He argued that an examination of many other factors was required before any determination could be made that pricing below short-run marginal cost was exclusionary and inefficient. Oliver Williamson noted that the Areeda-Turner rule could still allow dominant firms to operate inefficiently and with “excess capacity.”¹⁵ He once recommended that dominant firms be prohibited

from expanding output for a specified period of time in order to encourage new entry and “competition.” The predatory price–cost discussion has continued intermittently in the journals without any definitive theoretical or policy resolution.¹⁶

A General Criticism of the Debate

There are several ways to criticize the standard form that this predatory pricing debate has taken. The most general criticism is that the debate has assumed that the equilibrium models of pure monopoly and pure competition are appropriate for predatory-price analysis. In this context, the dominant firm (for all practical purposes) is the textbook “monopolist” and its performance is compared (unfavorably) with the firm in a competitive equilibrium. Given this conventional framework, it is not surprising that dynamic pricing (and nonprice) practices on the part of a dominant firm, such as predatory practices, can be construed as resource misallocating.

The assumptions and conclusions of the standard equilibrium analysis are debatable. The textbook monopolist misallocates resources because it is assumed that there are no close substitutes for its product and because it is assumed that there can be no market entry. With the competitive *process* ruled out by definition, it is easy to demonstrate that the dominant seller can charge a price higher than marginal cost. But this allocative inefficiency is totally contrived by the strict *equilibrium* assumptions of the model.

In the real business world, a dominant firm, as distinct from a textbook monopolist, arises and operates under uncertain, disequilibrium conditions. The dominant firm gains and holds its market share by engaging successfully in a competitive market process of discovery and adjustment.¹⁷ And as a consequence of its market-coordinating skills, the dominant firm tends to grow faster than its rivals (or potential rivals) *into* a position (perhaps temporary) of market dominance.

This position of market dominance is not an equilibrium condition and the competitive process has not been extinguished. Changing tastes and technological change still must be discovered and efficiently exploited in order to maintain (or increase) market position. Economic profits will still act as an incentive for additional output, and industry resources will still tend to flow from less profitable uses to more profitable uses. Unlike the textbook monopolist, the competitive process will continue to “swirl around” the dominant firm, continuously creating incentives for efficient plan coordination.¹⁸ Price will tend toward “cost” (everything else equal) and profit incentives will drive cost curves to a minimum level. Thus, it is unreasonable to assume that the dominant firm can behave like an equilibrium “monopolist” or that it can inherently misallocate resources.

If the preceding is correct, the standard approach errs when it attempts to compare the performance of the dominant firm negatively with the performance of

firms in competition. Resources are allocated efficiently in the competitive equilibrium only because firms, in the absence of uncertainty, must charge prices equal to marginal cost. The dominant firm, on the other hand, may charge prices that are higher (or lower) than marginal cost. The standard welfare conclusion is that competitive firms are more efficient than dominant firms.

But this conclusion is fully contrived by the equilibrium assumptions of the analysis. It is assumed that the competitive process has completely *ended* in competition (that is, that price and marginal cost are equal). With tastes and technology assumed constant and market information assumed perfect, all of the important sources of market inefficiency have simply been assumed away. Prices already equal marginal cost in the competitive equilibrium; any real-world comparison with this equilibrium condition *must* appear unfavorable.¹⁹ Prices only *tend toward* cost for the dominant firm in disequilibrium. But of what possible *policy* significance is such an approach?

The economic problem to be solved by competition is emphatically *not* one of how resources would be allocated if information were perfect and consumer tastes constant; with everything known and constant, the solution to such a resource-allocation problem would be trivial. Rather, the economic problem lies in understanding how the competitive market process of discovery and adjustment works to coordinate anticipated demand with supply in a world of imperfect information. To assume away divergent expectations and change, therefore, is to assume away all the real problems associated with competition and the resource allocation process.²⁰

The irrelevance of the equilibrium paradigm for judging the efficiency and appropriateness of certain dynamic business practices (such as predatory pricing) can now be made explicit. Nothing that is truly rivalrous can occur in the static competitive equilibrium; after all, the coordinating process has been completed in equilibrium. All of the business practices that we associate with rivalrous behavior occur in a competitive disequilibrium, not in “competition.” For example, product differentiation and advertising have been seen as resource misallocating but *only* within a competitive equilibrium framework. Once competition is understood as a process of discovery and adjustment under conditions of uncertainty—and not as a static equilibrium condition—product differentiation, advertising, and all price reductions can easily be reconciled with increasing market coordination and with increasing market efficiency.

A Criticism of the Price–Cost Rules

With respect to any specific price–cost rule, it can be admitted readily that business “costs” are very difficult to define and even harder to accurately measure, especially long-run marginal costs. More importantly, however, all cost-based pricing rules for “efficient” pricing are inherently suspicious. Real-world market

prices are determined by utility and revealed preferences and not directly by accounting costs. Accounting costs may help determine market supply in some previous time period, but current demand conditions—given market supply—actually determine transactions prices. And they determine transactions prices in each successive time period.

Another fundamental objection to any cost-based pricing rule (for determining predatory practices) is that the actual costs which do affect decision making are not accounting costs at all, but are subjective opportunity costs.²¹ Opportunity costs are personal and subjective and they are known only to the decisionmaker and then only at the moment of decision. Thus, whether actual market prices are above or below specific historical accounting costs may be relatively insignificant, since the accounting costs themselves may not be the relevant costs for decision making.

Analysts are often misled on this issue because of their predilection for pricing in the competitive equilibrium. *If* the business world were purely competitive, costs could (in some sense) be said to determine market prices. But the actual business world is not, and cannot, be purely competitive, nor can it be in equilibrium. The existence of product differentiation, transactions costs, changing information, and uncertainty—both short- and long-run—all prevent the realization of any static competitive equilibria.²² And in a world of uncertainty and change, all cost-determining-price rules, based on hypothetical conditions in some static equilibrium, become irrelevant for policy purposes. Yet most of the criticisms of firm predation and of business “excess capacity” are deeply rooted in static equilibrium welfare analysis.

It is important to understand that a competitive market process does create powerful incentives for entrepreneurs to allocate resources such that market price and factor costs do *tend* toward equality, other things remaining the same. But other things (that is, market information and tastes) cannot actually remain constant. And since the market process can never be completed, the static long-run equilibrium condition can never be actually realized. (It would not be “ideal” even if it were completed.) Thus, it is a serious policy mistake to regard any divergence of price from explicit cost (average or marginal, short-run or long-run) as evidence of social inefficiency or of predatory pricing. It may only be an indication of a competitive market process at work under inevitable disequilibrium conditions.

The Shepherd Proposal

William G. Shepherd has argued that all “intent” and price-cost rules are unsatisfactory, and that the only two variables that should be relevant in determining illegal predation are market share “disparity” and “selective” action.²³ Practices are predatory and unfair if the “attacking” firm is “dominant” (in terms of its market share relative to the firm being “attacked”) and if the firm employs

“selective actions that are unavailable to its competitors.” To allow such practices, according to Shepherd, would be unwise since it would make market competition “increasingly one-sided and ineffective.”²⁴

This is a curious argument for a public policy designed, presumably, to promote efficiency and consumer welfare. Dominant firms—that is, successful firms—are not to be allowed to initiate selective price or nonprice policies unless such practices are available (at the same cost?) to rivals. The matter can be put another way. Consumers of products are not to be provided with selective advantages by successful firms unless these advantages can be provided (at the same cost) by (all?) smaller rivals. Dominant firms are not to innovate selectively unless all firms can innovate. Dominant firms are not to advertise unless everyone can advertise at the same cost. Dominant firms should not provide special (“selective”) services to specific customers unless smaller rivals are able to employ “comparable competitive actions.” One could hardly imagine a predatory legal “rule” more destructive to the competitive market process than the one envisioned by Shepherd (or Williamson).

Dominant firms have achieved their position of “dominance” in free markets by being successful. They have innovated the products and services that consumers prefer relative to rivals and potential rivals. That is why, presumably, these firms have grown faster than rivals and have become dominant. To specifically inhibit the rivalry of such business organizations *after* they have demonstrated their market efficiency does not appear consistent with a genuine concern for either efficiency or consumer welfare.

Shepherd and others appear to have fallen into a familiar theoretical antitrust trap: they have equated increased “competition” with an increasing number of business organizations or with a tendency toward more “equal” market shares. Policies that promote increasing numbers of entrants or that lower the market share of the dominant firm are simply accepted as “good.” Policies that tend to eliminate less efficient suppliers and restrict the entry of high-cost entrants are seen as “bad.” Yet, it should be obvious that the most appropriate policy from this perspective—but the worst policy for consumers—would be one where a dominant firm reduced its outputs, raised its prices, and refused to innovate. Such a policy would severely punish consumers, but it would not “threaten” any smaller rival; no smaller competitor would ever feel that it was under attack from the dominant firm. In fact, the more inefficient the dominant firm became, the better it would be from this perspective. Even government tariff protection would “help” since it would tend to foster a more “comparable competition.” It is difficult to see how any of this is compatible with a genuine concern for consumer welfare.

Raising Rivals’ Costs

A currently fashionable theory of business predation holds that a dominant firm can unfairly raise a rival’s costs and thereby lessen competition in the marketplace.

Economists Salop and Scheffman have suggested that certain business practices such as boycotts, exclusive dealing, research and development spending, and even advertising can be employed by a dominant firm to increase a rival's costs. For example, if "advertising expenditures initiated by the most efficient advertiser must be matched . . . by less efficient rivals,"²⁵ there could be a potentially predatory problem that might require an antitrust remedy.

This is a very dangerous line of "reasoning." It is distinctly reminiscent of an earlier antitrust era where every economic advantage or technical efficiency possessed by any firm was seen, incorrectly, as a pernicious barrier to entry. Annual autobody-style changes (product differentiation) on the part of the dominant auto companies made it difficult for small firms to compete because it unfairly raised the costs of competition.²⁶ Economies of scale in production, transportation, and finance, or absolute economies associated with some revolutionary technology, might limit the entry of higher-cost suppliers. The FTC argued that successful advertising by Kellogg's and the other "dominant" ready-to-eat cereal manufacturers could make it difficult for smaller cereal suppliers to gain and hold market share.²⁷

The basic error in this approach is that the overall purpose of the competitive process is forgotten. The competitive process is necessary in order to discover *what* consumers prefer and to discover *which* business organizations can supply those goods.²⁸ Consumer-approved product differentiation may well make it more costly for newer business organizations to compete, but this does not mean that the result is socially inefficient or requires any antitrust remedy.

Efficiency implies that resources should be put to uses that consumers value most highly. If consumers support annual auto-style changes, then *that* is the use to which resources should be put. Potential suppliers or existing smaller rivals can always attempt to convince consumers to support less product differentiation (or advertising)—at a lower price—or perhaps no year-to-year differentiation at all. Alternatively, potential entrants can always attempt to discover cheaper methods of production (which is what the Japanese auto companies did in the 1970s) that would allow increased rivalry with dominant firms. But, in the absence of such preference changes or discoveries, potential competitors are only "restricted" from additional production or higher market shares by the superior overall performance of the dominant companies and the revealed preferences of buyers. Performance and preference are entirely appropriate "restraints" on the entry of would-be business organizations. To describe and condemn such "barriers" as exclusionary or as predatory practices seriously misconstrues the social purpose of the market process.

Predation and Consumer Welfare

The literature on predation emphasizes that it is the predatory practices of the dominant firm that can eliminate rivals and lower consumer welfare. Yet,

predatory practices—both price and nonprice—cannot succeed at all without direct consumer/buyer support.²⁹ For example, if a dominant firm reduces its prices and prospective buyers choose to ignore these price reductions, then the price reduction cannot really be predatory. Potential consumer/buyers can decide, for instance, to preserve the number of rival suppliers by ignoring the price reduction and by continuing to purchase in the same old patterns. On the other hand, if consumer/buyers *do* alter their preferences and decide to support the price cutter, it is the buyers—and not the price cutter—that put pressure on the high-price firms, and it is the buyers—not the price cutter—that may ultimately eliminate some of the rival suppliers. But consumer/buyers can *always* eliminate certain suppliers by altering their buying preferences and choosing one product (for whatever reason) over another. Why should consumer/buyers be prevented by antitrust law from reallocating industry resources from high-price sellers to low-price sellers? How is this legal restraint in the consumers' interest?

It will not suffice to argue that such choices (to reward the price cutter) are not really in the long-run interests of buyers. No one can know (in advance) the long-run interests of buyers. Further, why are so-called long-run interests superior to short-run interests? Buyers can surely decide their *own* time preferences and then decide whether the advantages of short-run price reductions exceed the probable future disadvantages of fewer suppliers. Consumer choices are rational either way, and consumer "welfare" is only reduced when antitrust policy prevents consumers from determining the market supply structure that they apparently *do* prefer.

The same argument holds true with respect to nonprice predatory practices. Indeed, the relevant issues are exactly the same. If a dominant firm suddenly introduces some new innovation, it is up to consumers to decide whether that innovation ought to reduce the number of rivals or not. If they enthusiastically support the innovation at the expense of some rival products, then such decisions by consumers may well tend to eliminate specific suppliers. On the other hand, if consumers do *not* support the innovation, the innovation cannot threaten "competition" and cannot be predatory. In neither scenario is there a legitimate rationale for antitrust regulatory preferences to supersede the revealed preferences of buyers with respect to the pace and nature of technological change. Indeed, it would be difficult to imagine an intervention on the part of the antitrust authorities or the courts that would be as potentially dangerous or damaging to future consumer welfare as this sort of innovation regulation.³⁰

Market Structure and the Competitive Process

One implication of this discussion is that buyers in a free market may (occasionally) decide to support only one (or a few) major business organizations in

some specific line of commerce. Such an extreme supplier situation is certainly possible (although not typical) and there is no reason, from a market-process perspective, to object to *any* momentary market structure of suppliers. After all, free markets are always open to potential rivalry and entry, and dominant suppliers can attempt to maintain their market positions only by maintaining an overall efficiency advantage over potential users of resources. This efficiency advantage can be produced either by a process of rivalry or by a process of inter-firm cooperation. If dominant firms were to attempt to exercise any so-called monopoly power by reducing market output and raising market price, this behavior would tend to negate the market advantages that allowed such organizations to gain their dominant market positions in the first place. Such practices would tend to result in a severe loss of market share to alternative suppliers and, thus, create strong disincentive to attempt such practices in the first place. Government or legal restrictions on market entry might create some incentives to exercise monopoly power. But legally open markets would create continual incentives for dominant firms to be relatively more efficient than their rivals or potential rivals. Thus, *any* market structure of suppliers is compatible with an efficient market process as long as there are no legal barriers to entry.

Predatory Practices in Reality

John McGee has long been associated with the idea that predatory practices are not generally rational or efficient ways of gaining (or holding) a dominant market share.³¹ Firms that engage in predatory pricing (pricing below cost) would stand to lose a considerable amount of revenue or profit funding any predatory “war.” If the dominant firm is large, the opportunity costs (lost profit) and risks (the war spreads; the length is indeterminate) are sure to create substantial disincentives to engage in such activity. In addition, target rival firms may not easily be driven from business or, even if they are, their assets may be acquired by new business organizations that are willing to compete again as soon as the predatory price is lifted. In short, there are considerable financial risks associated with long-term price predation, and such risks create powerful disincentives for such practices, especially in industries with no legal barriers to entry.

Some laboratory and case-study evidence would appear to confirm the theoretical speculations concerning the disincentives associated with severe predatory price practices.³² There are few unambiguous examples in business history where leading firms have attempted to gain or hold dominant market positions by engaging in extensive predatory practices.³³ Even the allegedly classic examples of such practices in the nineteenth-century petroleum and tobacco industries (involving Standard Oil and American Tobacco) are either exaggerated or unfounded. Standard Oil secured its market position in petroleum

primarily through internal efficiency and merger and not through systematic predatory practices.³⁴ And while the American Tobacco Company may have occasionally employed severe price competition to gain market share—the great “snuff war” comes to mind—no generally predatory policy would have been intelligent (that is, profitable) in an industry (tobacco) with thousands of competitive suppliers and with no barriers to market entry.³⁵ Even when severe price competition did occur in the tobacco industry, consumers enjoyed these price “wars” immensely by purchasing greatly expanded volumes of tobacco products at very low prices—for years. Why antitrust should attempt to restrain such occasional practices—practices that so clearly benefit consumers directly—is not obvious.³⁶

Conclusion

This article has suggested that the general theory of predatory practices is seriously flawed. Predatory behavior cannot be logically distinguished from benign competitive behavior either by intent or by any price–cost rules. Price reductions, selective or otherwise, and various nonprice rivalrous strategies (such as advertising and innovation) are all part and parcel of a competitive market process. This process serves an important social purpose: it serves to discover the products and services that consumers prefer, and the business organizations that can provide those products and services. Antitrust regulation of this process is based on inappropriate equilibrium theorizing, and it serves only to inhibit the discovery of consumer preferences and the flow of resources from less efficient suppliers to more efficient suppliers.³⁷ Thus, the legal restriction or prohibition of any competitive practice is inappropriate and appears contrary to the newer antitrust reform attitudes.

Notes

1. James Langefeld and David Scheffman, “Evolution or Revolution: What Is the Future of Antitrust?” *Antitrust Bulletin* (summer 1986): 287–99.

2. Robert H. Bork, *The Antitrust Paradox: A Policy at War with Itself* (New York: Basic Books, 1978), chapter 16. See also Harold Demsetz, “Barriers to Entry,” *American Economic Review*, 72 (March 1982): 47–57.

3. Harold Demsetz, *The Market Concentration Doctrine*, (Dallas, Tx.: American Enterprise Institute—Hoover Institution Policy Studies, August 1973).

4. Yale Brozen, “Concentration and Profits: Does Concentration Matter?” *Antitrust Bulletin*, 19 (1974): 381–99.

5. Franklin M. Fisher and John L. McGowan, “On the Misuse of Accounting Rates of Return to Infer Monopoly Profits,” *American Economic Review*, 73 (March 1983): 82–97.

6. S.C. Littlechild, "Misleading Calculations of the Social Costs of Monopoly Power," *Economic Journal*, 91 (June 1981): 348–65.

7. Harold Demsetz, "Industry Structure, Market Rivalry, and Public Policy," *Journal of Law and Economics*, 16 (April 1973): 1–10. See also John R. Carter, "Collusion, Efficiency, and Antitrust," *Journal of Law and Economics*, 21 (October 1978): 434–44.

8. Dominick T. Armentano, *Antitrust and Monopoly: Anatomy of a Policy Failure* (New York: John Wiley & Sons, 1982).

9. William Baumol and Janusz Ordover, "Use of Antitrust to Subvert Competition," *Journal of Law and Economics*, 28 (1985): 247–65.

10. For a discussion of the Reagan antitrust proposal see *Washington Post*, January 19, 1986, pp. H1, 4, and *Washington Post*, January 20, 1986, p. E1. Also see *The Economist*, August 23, 1986, p. 25.

11. D.T. Armentano, *Antitrust Policy: The Case for Repeal* (Washington, D.C.: Cato Institute, 1986).

12. Steven Salop and David T. Scheffman, "Raising Rivals' Costs," *American Economic Review*, 73 (May 1983): 267–71.

13. Phillip Areeda and Donald Turner, "Predatory Pricing and Related Practices under Section 2 of the Sherman Act," *Harvard Law Review*, 88 (February 1975): 697–733.

14. F.M. Scherer, "Predatory Pricing and the Sherman Act: A Comment," *Harvard Law Review*, 89 (1976): 869–90.

15. Oliver E. Williamson, "Predatory Practices: A Strategic and Welfare Analysis," *Yale Law Journal*, 87 (December 1977): 284–340.

16. See, for example, Paul L. Joskow and Alvin K. Klevorick, "A Framework for Analyzing Predatory Pricing Policy," *Yale Law Journal*, 89 (December 1979): 213–70. This article is offered as a "decision-theoretic framework . . . for evaluating alternative predatory pricing rules" (p. 270). The courts have paid some attention to this debate. See *International Air Industries and Vebco, Inc. v. American Excelsior Company*, 517 F.2d 714 (1975); *O. Hommel Co. v. Ferro Corp.* 472 F. Supp. 793 (1979); and especially *Northeastern Telephone Company v. American Telephone and Telegraph et al.*, 605 F.2d 201 (1981).

17. Israel Kirzner, *Competition and Entrepreneurship* (Chicago: University of Chicago Press, 1973).

18. Joseph Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper Torchbooks, 1950).

19. Harold Demsetz, "Information and Efficiency: Another Viewpoint," *Journal of Law and Economics*, 12 (April 1969): 1–22.

20. *Antitrust Policy: The Case for Repeal*, pp. 18–19.

21. James M Buchanan, "Introduction: L.S.E. Cost Theory in Retrospect," in J.M. Buchanan and G.F. Thirlby, eds., *L.S.E. Essays on Cost* (New York: New York University Press, 1981): 14–15.

22. Gerald P. O'Driscoll, Jr., and Mario J. Rizzo, *The Economics of Time and Ignorance* (Oxford, England: Basil Blackwell, 1985).

23. William G. Shepherd, *The Economics of Industrial Organization*, 2nd ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1985), pp. 270–74.

24. *Ibid.*, p. 274.

25. "Raising Rivals' Costs," *American Economic Review*, 73 (May 1983): 267–71.

26. Franklin Fisher, Zvi Griliches, and Carl Kaysen, "The Costs of Automobile Model Changes since 1949," *Journal of Political Economy*, 70 (October 1962): 433–51.

27. *FTC v. Kellogg, General Mills, General Foods, and Quaker Oats*, Docket No. 8883 (1972). (The complaint was dismissed in 1982.) See also Richard Schmalensee, "Entry-Deterrence in the Ready-to-Eat Breakfast Cereal Industry," *Bell Journal of Economics*, 9 (1978): 305–27.

28. Israel Kirzner, *Competition and Entrepreneurship* (Chicago: University of Chicago Press, 1973).

29. *Antitrust Policy: The Case for Repeal*, pp. 42–44.

30. Betty Bock, *The Innovator as an Antitrust Target*, Conference Board Information Bulletin, no. 174 (1980).

31. John S. McGee, "Predatory Price Cutting: The Standard Oil (N.J.) Case," *Journal of Law and Economics*, 1 (October 1958): 137–69; and "Predatory Pricing Revisited," *Journal of Law and Economics* 23 (1980): 289–330.

32. R. Mark Isaac and Vernon L. Smith failed to discover any price predation in a laboratory experiment. Moreover, simulating antitrust remedies for predation (such as the Williamson output restriction) had the unintended effect of raising prices and reducing efficiency. See R. Mark Isaac and Vernon L. Smith, "In Search of Predatory Pricing," *Journal of Political Economy*, 93 (April 1985): 320–45.

33. Ronald H. Koller, "The Myth of Predatory Pricing: An Empirical Study," *Antitrust Law and Economics Review*, 4 (summer 1971): 105–23. See also Kenneth G. Elzinga, "Predatory Pricing: The Case of the Gunpowder Trust," *Journal of Law and Economics*, 13 (April 1970): 223–40.

34. *Antitrust and Monopoly*, pp. 55–73.

35. *Ibid.*, pp. 85–95.

36. Frank Easterbrook concludes, after a seminal criticism of the predation literature, that such practices (should they occur) generally enhance consumer welfare and should be *per se* legal. See Easterbrook, "Predatory Strategies and Counterstrategies," *University of Chicago Law Review*, 48 (spring 1981): 263–337.

37. There are many (mostly private) legal cases that substantiate this position. See, for instance, the classic *Utah Pie Co. v. Continental Baking Co., et al.*, 386 U.S. 685 (1967). See also *Berkey Photo, Inc., v. Eastman Kodak Company* (457 F. Supp. 404 [1978] and 603 F.2d 263 [1979]) where the plaintiff (Berkey) argued that the successful innovation of Kodak's new instamatic camera (and film) was "predatory" and hindered its ability to compete. The thrust of most of the (private) predatory legal cases is an attempt by plaintiffs to restrain the competitive rivalry of the more successful defendant firms. In short, antitrust law has been employed in an attempt to restrain trade.