Turning Back the Antitrust Clock

Nonprice Predation in Theory and Practice

Donald J. Boudreaux

Arguments that firms can acquire monopoly power by engaging in predatory pricing—that is, by pricing below cost to run rivals out of the industry—have been popular since at least the 1880s. A familiar explanation for the success and dominance of firms such as Standard Oil and the "big four" Chicago meatpackers was that such firms competed overly aggressively. These firms allegedly became monopolists by charging predatory prices—prices their rivals could not match. Although it was recognized that lower prices led to temporary consumer benefits, it was also argued that excessive price-cutting created entrenched monopolies that harmed consumers over the long run.

For almost a century, legislators, jurists, and economists accepted as an article of faith that predatory pricing was a serious problem requiring the attention of some extramarket police such as the courts. But by the 1970s the accumulation of theoretical and empirical analysis challenging the veracity of the predatory pricing doctrine caused its support to unravel. The pricing practices of Standard Oil, the Chicago meatpackers, and many other firms accused through the years of predatory pricing are now recognized as forms of healthy and vigorous competition that increased consumer welfare.

This recognition was reflected in the Supreme Court's 1986 *Matsushita* decision in which the Court rejected the claims of American electronics manufacturers that Matsushita had engaged in predatory pricing. The Court correctly noted, "Cutting prices in order to increase business often is the very essence of competition. Thus, mistaken inferences in cases such as this one are especially costly, because they chill the very conduct the antitrust laws are designed to protect."

Though predatory pricing theory is in a coma (it is not dead), it is being revived by new models of "nonprice" predation. The past two decades have witnessed economists' and lawyers' building elaborate models designed to show how firms might manipulate some variable other than price, such as advertising intensity or product quality, to prey on their rivals and thus acquire monopoly power. Nor is it only academics who fret about the nonprice activities of firms. In November 1989 FTC Chairman Janet Steiger worried aloud to the 23rd New England Antitrust Conference about the anticompetitive consequences of nonprice predation. She also hinted strongly that challenging nonprice predation will be a top priority for her agency.

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A careful critique of the new nonprice predation theories, as well as of the "raising-rivals'-costs" literature, reveals, however, that they are no more valid than the widely discarded predatory pricing stories.

Nonprice Predation

The fatal flaw in traditional predatory pricing theory is that such a strategy always requires the predator to incur larger losses than its rivals during the price war. This makes it impossible to explain why the predator expects to hurt its rivals more than it hurts itself. Rather than being deterred by predatory pricing, rival firms should welcome such behavior. Of course, scholars who believe that predatory pricing occurs made various attempts to explain away this thorny problem—arguing, for example, that if the predator had access to less costly capital than did its rivals, the predator could successfully fund a price war. But no such explanations have proved persuasive.

Nonprice predation theories initially seem to avoid this flaw. When a firm engages in nonprice predation, it need not always incur larger costs than it imposes on its rivals. For example, in a recent law review article advocating government policing of nonprice predation, Rep. Thomas Campbell, formerly a law professor at Stanford University, claimed: "Changing a product characteristic affects the rest of the market far less than across-the-board predatory price-cutting in a market of homogeneous goods. An existing firm suffers far fewer losses than its equally efficient victim, making such conduct feasible. This activity imposes social costs and makes deterrence [of rivals] credible."

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To illustrate his argument that nonprice predation is a rational business strategy, Rep. Campbell offered a hypothetical example. Suppose that Sugar Smacks, Life, and Corn Flakes are the only breakfast cereals in the market, and imagine that they are lined up along a spectrum from most sweet to least sweet. Assume further that the sweetness of cereals is the only difference that matters to consumers. Now suppose that Honeycomb, a new cereal that is between Sugar Smacks and Life on the sweetness spectrum, is introduced into the market. In Campbell's model the maker of Life can protect itself from Honeycomb's competitive challenge by altering Life so that it becomes more like Honeycomb. But Campbell assumes that Life will increase the sweetness of its product only long enough to assure that there will be no market for Honeycomb. When Honeycomb is driven from the market, Life will return to its less-sweet, preentry position. Thus, by temporarily changing the sugar content of its product the makers of Life cereal are able to shield themselves from the competition of potential rivals without having to sell their product at a predatory below-cost price. Because such predatory product changes do not require predators to incur greater losses than their prey, we finally have a theory of predation that seems plausible.

The problem with Campbell's analysis is that he makes no convincing case that such temporary predatory alterations actually occur. Campbell's hypothetical case raises two questions. First, would a sufficient number of consumers prefer a cereal with a sweetness level between Sugar Smacks and Life to create a viable market niche? Second, if a viable market niche exists, which firm can fill it most efficiently?

If the demand for a cereal sweeter than Life is insufficient to create a viable market niche, then Life need not react. Honeycomb will exit of its own accord, and Life will not have risked alienating existing customers by changing (albeit temporarily) the taste of its cereal.

If there is sufficient demand for a breakfast cereal with a sweetness level between Sugar Smacks and Life, then such a cereal will be offered. In Campbell's scenario the successful predatory incumbent will abandon the new market niche and return to its old niche once the aspiring entrant quits the scene. But Campbell has described a predatory unicorn. Such return movements by the incumbent will not occur if consumer demand is sufficient to justify production of the new cereal, for abandoning this mar-

ket merely reopens the door to potential entrants. Only the question of who will provide the new cereal—Honeycomb or Life—remains. Does the maker of Life have any particular advantage in providing this sweeter cereal than does the maker of Honeycomb?

If the incumbent has no particular cost advantage, it will have no greater power to keep Honeycomb out of this market niche than Honeycomb will have to keep Life out. If the incumbent does have a cost advantage over the entrant, the incumbent will keep the entrant out. But that is all to the good; consumer welfare is enhanced when only the most efficient producers supply consumers' needs.

Campbell's cereals story is, of course, hypothetical. FTC staffers John Hilke and Philip Nelson have argued that a real-world example of nonprice predation occurred in the 1970s when General Foods, the maker of Maxwell House coffee, sought to protect its market share in the eastern United States from Folgers. At the time, Folgers used "Mrs. Olsen" as its spokeswoman. General Foods responded by introducing "Cora" as the spokeswoman for Maxwell House, a move Hilke and Nelson classify as predatory. General Foods also created a "fighting brand" named Horizon that was intentionally designed to taste more like Folgers than did Maxwell House. In addition, General Foods took several other actions identified by Hilke and Nelson as predatory. General Foods attempted to preempt Folgers coupons (for example, by mailing a 25-cent coupon first class in August 1972 to compete with a September Folgers coupon), offered lower-price specials on larger cans of coffee (to remove consumers from the market for longer periods), increased its advertising and changed the ad copy to make Folgers' advertising less effective, and used bonus gifts, such as teddy bears, to attract customers. Folgers responded with similar strategies, experimenting with trial samples of its product in limited geographic areas, for example.

Another example of supposed nonprice predation was the FTC's "cereals case" in the 1970s in which Kelloggs, General Foods, General Mills, and Quaker were accused of monopolistically deterring entry into the ready-to-eat cereals market through "brand proliferation." This strategy was supposedly designed to fill up all the available product space so that no room remained for new entrants.

In 1982 the Sixth Circuit Court of Appeals ruled that advertising by Borden to promote the brand name of its ReaLemon product was a monopolization tactic because such advertising caused what Campbell has labelled "induced brand preference." The court was concerned that "ReaLemon's successfully differentiated brand name, extensive advertising, and ability to command a premium price also acted to some degree as a barrier to entry into the processed lemon juice market."

Economic theory arbitrarily defines "competition" as a market structure in which the number of firms is large enough to force each industry to charge a price equal to its cost. In this theoretical "competitive" market, firms compete only by lowering their prices because their products are identical.

It is not clear that nonprice predation attempts are as costless to predators as proponents of these theories assert. But for present purposes let us accept the claim that so-called nonprice predation does not require the predator to absorb larger losses than its prey. It still does not follow that such strategies are a ticket to consumer-welfare-reducing monopoly power.

Unfortunately, economic theory arbitrarily defines "competition" as a market structure in which the number of firms is large enough to force each industry member to charge a price equal to its cost. In this theoretical "competitive" market, firms compete only by lowering their prices because their products are identical. No quality differences or recognition of differences in consumer preferences (for sweet or less sweet cereal, for example) are allowed.

In the real world consumers seem to prefer markets that deviate from the economists' definition of perfect competition. Consumers benefit from product advertising and a range of choices among competing goods. Because consumers value differentiated quality, markets that exhibit such characteristics are "imperfect" only because theorists or bureaucrats define them as such. An "imperfectly competitive" market is

nothing more than a market in which producers do not limit their competitive efforts exclusively to changing prices. There is no reason to believe that such a market can be made more "competitive" without reducing consumer welfare.

The observation that innovation, advertising, and product differentiation can lead to some firms' exercising limited market power is simply a recognition that not all firms improve the quality of their products and promotions with equal speed and sensitivity to consumer tastes. Of course, successful product innovations and advertising campaigns will cause consumers to shift their expenditures from one product to another. Some firms may even gain enough advantage over their rivals to allow the successful firms to charge prices above their costs. So what? This is what making better mousetraps is all about.

For any competitive strategy to be successful, consumers must feel that they have benefitted. If consumers were not made better off by Maxwell House's efforts, they could ignore the Cora commercials, the new brand, the coupons, and the offer of free teddy bears and switch to Folgers anyway. Similarly, the practice of providing a variety of breakfast cereals can harm rivals only if consumers believe that they gain from having a large variety of cereals from which to choose. If more and different brands of cereals have little or no value to consumers, "brand proliferation" will be an unprofitable strategy. The same is true of Borden's promotion of its ReaLemon brand name. The only conceivable way a rival can be harmed by such promotion is if consumers benefit from the existence of a well-promoted brand name—which, of course, provides information and quality assurance to consumers. Advertising does not cast hypnotic spells over consumers that cause them consistently to behave irrationally. In the long run brand preferences are the result of consumer satisfaction with branded products.

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Many authors of nonprice predation theories will immediately respond that any such certainty that consumers are made better off exists only in the short run. If a firm that advertises heavily forces its rivals (or potential rivals) to abandon the market, for example, consumers will be harmed in the long run because their initial favorable response to the advertising allowed the advertiser to acquire monopoly power. Would consumers respond as positively to Cora if they knew that their increased demands for Maxwell House would eventually give Maxwell House monopoly power?

It is true that insofar as entry into markets is not instantaneous, voluntary consumer responses today might very well lead to net consumer losses in the future. But no public policy can successfully mitigate this problem. Any attempt to guard against net long-term losses would require bureaucrats and the courts to distinguish between consumers' responses that will lead to net reductions in consumer welfare and those that will not. To make such distinctions public policy authorities would first need an accurate measure of the aggregate net benefit to consumers from today's product innovations or promotional efforts. Then authorities would need to estimate both the likelihood that the nonprice competitive activities will lead to market power and the extent of the market power—its magnitude and duration. Without comparing the consumer benefits of nonprice activities (which we know to be positive) with the possible future costs of increased market power, neither bureaucrats nor the courts can hope to guard successfully against only those nonprice strategies that reduce long-term welfare rather than increase it.

The market itself actually contains a built-in policing mechanism that, if not perfect, is surely less imperfect than dependence on public officials and the courts. If a firm's nonprice strategies in a particular market are likely to lead to future monopoly power, entrepreneurs and investors have every incentive to remain in, or plan to enter, the market. Long-term monopoly is thus avoided.

Of course, real-world entrepreneurs and capital markets sometimes err in their assessments of the profitability of entering a market because they underestimate the possibility that an in-

cumbent's nonprice strategies will eventually result in monopolization. But if entrepreneurs and investors with personal financial stakes riding on their accurate readings of the markets are prone to such mistakes, what reason is there for believing that bureaucrats or the courts will be more astute at predicting future conditions in the market? It is unrealistic to suggest that courts and bureaucrats, subject as they are to political pressures, can do a better job than entrepreneurs and investors of separating potentially harmful nonprice strategies from beneficial ones.

Raising Rivals' Costs

An especially interesting theory of nonprice predation has been advanced in the "raising-rivals'-costs" literature, attributable mainly to the efforts of Steven Salop. Rather than focusing on changes in the firm's product or promotional strategies, this literature considers aspiring monopolists' attempts to gain monopoly power by interfering in input markets.

The premise of the raising-rivals'-costs theory is that firms can interfere in input markets in ways that reduce the profits of rivals. That is, by taking actions that force rivals' costs to rise by more than their own costs, predatory firms can place their competitors at a disadvantage. Suppose, for example, that Tropicana wants to get rid of its rivals in the orange juice market. It can do so, according to the raising-rivals'-costs theorists, by purchasing exclusive rights to all oranges or at least to all of the juiciest oranges.

To raise its rivals' costs successfully, the predatory firm must be able to purchase a key input (oranges for orange juice, for example) at a lower cost than its rivals must pay for the input. If this condition prevails, the firm with access to the lower-cost input source will enjoy a competitive edge over its rivals, even if the advantaged firm is no more efficient than its rivals at transforming the input into outputs.

There is no need here to explain in detail each of the four different methods theorists identify as ways to raise rivals' costs. (These methods do have catchy names, however. There is bottlenecking, real foreclosure, the cartel ringmaster technique, and the Frankenstein monster.) Common to all methods is the ability of the predatory firm to enter into exclusive contracts with lower-cost suppliers that prohibit rivals from acquiring the input (or a substitute input) at a price as low as that paid by the predator. All four methods for raising rivals' costs are subject to the same general criticisms.

"That's settled, then. We'll lower our standards to meet the competition."

Drawing by Weber: © 1989; The New Yorker Magazine, Inc.

The weakest link in these theorists' chain of reasoning is their inadequate treatment of potential counterstrategies by rivals. All methods of raising rivals' costs depend on the ability of a predator to secure contracts that exclude its rivals. Such a result requires that the predator's rivals and its suppliers remain ignorant about its intentions.

But why would suppliers of a low-cost input cooperate with a predatory firm? It is in the interest of suppliers to alert their other customers to the actions of the predator to encourage competing customers to bid up the price the suppliers receive. Thus, rivals are likely to be aware of the predator's attempt to corner the market on the low-cost input. Once the predator's rivals en-

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ter the bidding war for the low-cost input, no firm will gain a competitive advantage over the others.

Raising-rivals'-costs theorists offer three responses to this argument. First, they suggest that counterstrategies on the part of rivals will be ineffective because exclusion is generally the dominant strategy. Competition is said to be a public good. Thus, although aggregate consumer and supplier losses exceed total monopoly profits of the predator, individual consumers cannot be counted on to contribute to the effort to buy out the monopolist. Rival firms will therefore lack the resources necessary to thwart the predator. Second, these theorists assert that predatory downstream firms can indeed acquire exclusive rights to the low-cost input by paying the input producer not to produce. And third, this theory's advocates argue that even if the predatory activity merely intensifies competition for inputs (and thus raises the price of the input to all input users), consumer welfare is diminished because the cost of producing the final product is higher than it would have been. I address each of these arguments in turn.

Exclusion as the Dominant Strategy. According to leading raising-rivals'-costs theorists Thomas Krattenmaker and Steven Salop, counterbidding for the low-cost input by rivals will block the exclusion attempt only if consumers contribute to the rivals' bidding efforts. But because consumers are generally unorganized, a free-rider problem exists, and consumers will not contribute sufficiently to rivals' efforts to enable them to outbid the predator. Because rivals' losses are typically less than the predator's gains, the predator will be able to outbid its rivals for exclusive rights to the low-cost input.

In assessing exclusion as the dominant strategy, the appropriate comparison is the cost of supply contracts to the predator relative to the cost of similar contracts to rival firms.

This argument is flawed. The primary problem is that proponents of this theory implicitly assume that the low-cost input is already monopolized. The question effectively posed by these theorists is whether rivals (without the assistance of consumers) can afford to pay an existing monopolist to give up its exclusive access to the low-cost input. In such a situation no competitive firm can bribe a monopolist to sacrifice its monopoly.

But this observation is beside the point. The object of the theory of raising rivals' costs is to explain how a monopoly can be generated by the interference of downstream firms in input markets. Rivals of an aspiring monopolist do have the incentive and the ability to block monopolizing attempts by their competitor.

The appropriate comparison is the cost of supply contracts to the predator relative to the cost of similar contracts to rival firms. This comparison indicates that rivals can take effective steps to block the predatory scheme. Competition among downstream firms for exclusive supply contracts takes place in two different ways. (Note that for this theory to explain how input-market predation can generate monopoly power, it must begin by assuming that the low-cost input is supplied competitively. If the analysis begins with the assumption that the supply of the low-cost input is monopolized, then all monopoly profits will already have been extracted by the input monopolist.)

First, each of the several suppliers of the low-cost input will receive bids for supply contracts from more than one firm. This will make it difficult for any single downstream firm to obtain an exclusive-rights contract from any one of the input suppliers. If Farmers Brown, Black, and Green own orchards supplying the world's juiciest oranges, for example, then each farmer can expect to receive purchase offers from Tropicana, Minute Maid, and other orange juice makers. There is no reason to believe that any of these orchard owners will necessarily agree to sell his entire crop to a single orange juice maker.

Second, even if an input supplier finds it advantageous to deal only with one downstream firm (Farmer Brown agrees to sell all his oranges to Minute Maid, for example), it is unlikely that a single orange juice maker will outbid its rivals for the exclusive right to purchase the entire crops of all the orange growers. All firms can compete for inputs by competing for supply contracts (whether they are exclusive-dealing contracts or not) from the several low-cost input producers.

Because input suppliers are assumed to be competitive, competition among downstream firms for supply contracts is not competition for the bundle of all available units of the low-cost input. The existence of several sellers of the low-cost input, along with the existence of several competing bidders for supply contracts, suggests the difficult task faced by a single downstream firm seeking to purchase exclusive rights to all units of the input. The fact that consumers will not contribute to an effort to bid a monopoly away from a predator does not imply that equally efficient rivals will be unable to block attempts by predators to monopolize markets by purchasing exclusive supply contracts for all low-cost inputs.

The Low Costs of Exclusion. The second argument of raising-rivals'-costs theorists is that the predator can pay suppliers to exclude rivals at a price that is attractive both to the predator and to the input suppliers. Krattenmaker and Salop offer the following hypothetical example: "Suppose that competitive suppliers have been charging a rival the competitive input price (equal to marginal cost) of $200. Suppose the purchaser then offers to pay them a consideration of $50 for each unit by which they reduce their sales to the rival. Thus, the suppliers would raise their total unit price to the rival to $250, $50 for the right to buy and $200 for the input." Presumably, the predator convinces input suppliers to allow it alone to buy the input at some price lower than $250 (otherwise the predator's costs would be the same as its rivals). In this way rivals' costs are seemingly raised by $50 above the predator's costs, even though the predator pays only a fraction ($50) of the competitive price of the unused inputs to raise its rivals' costs.

Input suppliers benefit because they receive $50 for every unit of the input not sold to the predator's rivals. Assuming the cost of keeping the input unproduced or unextracted is zero, the input suppliers clear $50 for each unit not purchased by the predator and not sold to the predator's rivals. This form of predation appears to be an inexpensive way of acquiring monopoly power.

Of course, this exclusionary method will also be attractive to the predator's rivals. Nothing stops rivals from offering input suppliers $51 in return for the promise not to sell to the predator. The predator can then counter with an offer of $52, which rivals will counter with an even higher offer, and so on. The end result is that, even if a single downstream firm emerges as a monopolist, that firm will earn nothing more than normal profits. Only the owners of the low-cost input will have benefitted from this bidding war.

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The Competitive-Harm Argument. Conceding, for the sake of argument, the possibility that attempts to raise rivals' costs may ultimately prove unsuccessful because of rivals' counterstrategies, Krattenmaker and Salop assert that even unsuccessful attempts to raise rivals' costs can create a monopoly advantage for predators: "If rivals must pay the additional cost of admission to avoid cost increases from exclusion, then the admission fees themselves will serve as the cost-increasing devices. The predator would gain the power to raise price from its rivals' increased costs due to the admission fees rather than by forcing them to buy from more expensive sources of supply. Indeed, the predator would prefer this outcome, since rivals' costs would be increased at a lower cost to itself."

But why would the predator prefer this outcome? After the bidding for low-cost inputs has ended, no firm has a competitive edge over its rivals. For the predator to benefit in this situation, the predator must be able to avoid the "admission fees" that rivals pay, but there is no explanation for how the predator gains such a differential advantage over its rivals.

Concluding Thoughts

Any believable theory of private market predation must explain how predators acquire advantages over rivals when such advantages are not the result of superior efficiency. Raising-rivals'-costs and other nonprice predation theo-

ries attempt to offer such an explanation. On close scrutiny, however, proponents of these theories merely assert that if a firm can gain a non-efficiency-based advantage over rivals, then the firm will earn monopoly profits, and consumer welfare will diminish. This is true but unremarkable. Until they can offer a plausible explanation of how predatory firms can raise rivals' costs or otherwise disadvantage efficient rivals in the real world, predation theorists have not made an adequate case for government intervention.

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Where does this leave us as we begin the second century of antitrust enforcement? Quite simply, antitrust authorities and the courts should ignore predation claims. The case for active antitrust policy in this area will remain weak until someone persuasively demonstrates that bureaucrats and the courts have generally better knowledge than entrepreneurs and investors about the day-to-day workings and future possibilities of markets. There is also a need to prove that government's antitrust enforcement powers will seldom be used to protect politically influential special-interest groups. Neither statement describes reality. Consequently, there is no respectable place in our economy for government's operating as the predation police.

Selected Readings

Campbell, T.J. "Predation and Competition in Antitrust: The Case of Nonfungible Goods." *Columbia Law Review*, Vol. 87, No. 8 (1987).

Krattenmaker, T.G. and Salop, S.C. "Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price." *Yale Law Journal*, Vol. 96, No. 2 (1986).

Kwoka, J.E. and White, L.J. *The Antitrust Revolution*. Glenview, Ill.: Scott, Foresman, 1989.

Liebeler, W.J. "Exclusion and Efficiency." *Regulation*, Vol. 11, No. 3/4 (1987).

Salop, S.C. and Scheffman, D.T. "Raising Rivals' Costs." *American Economic Review*, Vol. 73, No. 2 (1983).

Sullivan, E.T. "On Nonprice Competition: An Economic and Marketing Analysis." *University of Pittsburgh Law Review*, Vol. 45, No. 4 (1984).