

NOTES ON PREDATORY PRICING

By

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1. Traditional Theories of Predatory Pricing

The traditional theory of predatory pricing envisions two stages in carrying out the predation strategy—the predation stage and the post-predation stage.¹ In the predation stage, the predator prices its product below some measure of economic cost—typically incremental cost—with the intent of driving its prey from the market. In the post-predation stage, the prey leverages the absence of meaningful competition to price its product at *supra-competitive* levels, thereby recovering the losses incurred during the predation stage and earning monopoly profits thereafter.

The consensus view in the literature, and this is a view that has prevailed for several decades now, is that traditional predation is difficult and hence frequently irrational. Because firms will re-enter the market when the predator commences pricing at *supra-competitive* levels, recoupment of the losses incurred in the predation stage is virtually impossible. Hence, in order for the predation strategy to be successful, there must be some type of barrier to entry that precludes entry from occurring when the predator prices at *supra-competitive* levels.

Traditional predation is likely to be particularly difficult in regulated network industries due to the high-proportion of sunk costs and the fact that productive capacity typically does not leave the industry even if particular competitors should exit the market.^{2,3} In other words, productive capacity in the industry serves as a check on *supra-*

¹ See, for example, John S. McGee, “Predatory Pricing Revisited,” *Journal of Law and Economics*, Volume 23, October 1980, pp. 296-297; and Paul Joskow and Alvin Klevorick, “A Framework for Analyzing Predatory Pricing Policy,” *Yale Law Journal*, Volume 89, 1979, pp. 213-270.

² Dennis L. Weisman, “The Law and Economics of Price Floors in Regulated Industries,” *The Antitrust Bulletin*, Vol. XLVII(1), Spring 2002, p. 112.

³ Moreover, as Schmalensee points out, in markets that are “fragile” due to rapid technological advance, it is important to ask whether the alleged predator could expect to have monopoly power long enough to recoup the costs of predation? See Richard Schmalensee, “Antitrust Issues in Schumpeterian Industries,”

competitive pricing. Consequently, even if predation should succeed in driving a particular competitor from the market,⁴ the (independent) productive capacity that the competitor leaves behind continues to discipline pricing.

2. Modern Theories of Predation

Over the past 25 years, in concert with important developments in game theory, a number of modern, strategic theories of predation have emerged. These models, which include financial market predation, reputation models and cost signaling models,⁵ generally require conditions of asymmetric information. In other words, the predator has information that its prey does not, and it leverages this informational asymmetry to drive the prey from the market or to deter its expansion into new markets. The following quotation from Professor Paul Milgrom captures the essence of these “new” theories.

Thus, for example, a firm in an industry with rapid product change might cut prices sharply in answer to new entry in order to discourage the new entrant from continuing an active product development programme. Whether the entrant attributes its lack of profitability to its high costs, to weak market demand, to over-capacity in the industry, or to aggressive behaviour by its competitor, it will properly reduce its estimate of its own future profits. If its capital has other good uses, this might lead it to withdraw from the industry. If not, it may nevertheless be dissuaded from making new investments in and developing new products for the industry. At the same time, other firms may be deterred from entering the industry.

American Economic Review, Vol. 90, No. 2, May 2000, p. 193. In this context, it should be recognized that VoIP and other technological advances tend to augment this fragility.

⁴ In a recent proceeding on local forbearance in Canada, the Competition Bureau observed that:

It seems unlikely that predation is going to induce exit in cases where the rival has invested in a sunk network that is ubiquitous and exists for other reasons, not only to supply telecommunications services.

Commissioner of Competition’s Comments of 22 June 2005 in proceeding initiated by Telecom Public Notice CRTC 2005-2, *Forbearance from regulation of local exchange services* at ¶ 266.

⁵ For a review of this literature, see Jean Tirole, *The Theory of Industrial Organization*, Cambridge MA: The MIT Press, 1988, Chapter 9; and Patrick Bolton, Joseph F. Brodley and Michael H. Riordan, “Predatory Pricing: Strategic Theory and Legal Policy.” *Georgetown Law Journal*, Vol. 88, 2000, pp. 2239 - 2330.

If *any* of these things happen, the predator benefits.⁶

In the case of *Financial Market Predation*, the prey is dependent upon some source of external financing. The focus is on the relationship between the prey and its investors. “The predator seeks to manipulate that relationship and thereby drive the prey out of the market or deter its expansion into new markets.”⁷ For example, the predator may reduce prices in order to reduce the profitability of its rivals. The rival’s investors view this decrease in profitability as a signal that prospects in this market are limited and decide to decrease financial support accordingly. In this model, investors are unable to differentiate between the predation campaign and managerial incompetence.

Nor can lenders solve the financing problem by excusing default when caused by predatory pricing. The lender may be unable to determine whether the default stems from predatory pricing or from the debtor’s poor performance because the lender lacks both full information and the expertise available to a market insider.⁸

Reputation Predation Models are based on a type of signaling wherein the predator seeks to convey a reputation for “toughness” and a steadfast willingness to defend its market at virtually any cost.

In reputation effect predation the predator reduces prices in one market to induce the prey and potential entrants to believe that the predator will cut price in other markets or in the predatory market at a later time. The predator seeks to establish a reputation as a price cutter, based on some perceived special advantage or characteristic. Thus, a predator trying to establish a reputation for financial predation cuts price when it has superior financial resources (and when the other conditions for financial predation are present).⁹

In this model, the predator reduces its prices in order to signal to its rivals that it is a

⁶ Paul Milgrom, “Predatory Pricing,” in the *New Palgrave Dictionary of Economics*, Vol. 3, ed. by John Eatwell, Murray Milgate and Peter Newman, London: The Macmillan Press Limited., 1987, p. 938.

⁷ Patrick Bolton, Joseph F. Brodley and Michael H. Riordan. “Predatory Pricing: Strategic Theory and Legal Policy.” *Georgetown Law Journal*, Vol. 88, 2000, p. 54.

⁸ *Id.*, p. 57.

⁹ *Id.*, p. 74.

tough competitor and that opportunities for positive returns will be strictly limited either in other markets or in the predatory market in the future. It is important to note, however, that this theory may not be completely robust.

Although economic theory views reputation effect predation as a separate and distinct predatory strategy, a reputation effect theory based on irrational toughness may be too easy to assert and too difficult to prove.¹⁰

In the *Cost Signaling Model of Predation*, the predator wishes to signal its rivals that it is a low-cost rather than a high-cost provider. Rivals will enter the market if they believe the dominant firm is a high-cost provider, but will not enter the market or will choose to exit the market if they believe the dominant firm is a low-cost provider.

In cost signaling a predator drastically reduces prices to mislead the prey to believe that the predator has lower costs and to exit the market. More specifically, a predator trying to establish a reputation for low cost cuts price below the short run profit-maximizing level. Observing the predator's low price, the prey rationally believes that there is a least some probability that the predator has reduced costs. This lowers the prey's expected returns and causes the prey to exist.¹¹

It is important for the discussion that follows to summarize the key assumptions on which these modern theories of predation are based. First, these models require some type of asymmetric information—information in the possession of the predator that is not common knowledge. Second, these models typically assume that the predator enjoys some financial or cost advantage over its prey. If the prey is in a superior financial position or if it is known to have lower costs than the predator, there is no real prospect for predatory behavior. Third, these models are of limited relevance when the prey's presence in the predatory market is driven primarily by strategic or defensive considerations rather than financial considerations. Finally, policymakers should be

¹⁰ *Id.*, p. 75.

¹¹ *Id.*, p. 100.

cognizant of the high social cost of falsely labeling competitive behavior as predatory. When the market conditions requisite to predatory behavior are not present, allegations of predation serve only to peg prices at artificially-high levels and thereby reduce consumer welfare.

3. Public Policy and the Law

Claims of predation are not uncommon, but in many cases may amount to little more than attempts by competitors to raise their rivals' costs. As Professor William Baumol observes:

Rules that make it excessively easy to secure a conviction on charges of predation invite anticompetitive and rent-seeking litigation. Such rules tempt firms that cannot make it in the marketplace by virtue of superior products or greater efficiency and lower costs, to seek success over their more efficient rivals in the courts instead. There they can hope to constrain the vigor of rivalrous acts by competitors and to transmogrify the character of their rivals from energetic enterprise to timidity and hesitance. ... Long study of the subject has led me to the conclusion that litigation of this sort is a major handicap to the growth and competitiveness of the nation's economy.¹²

Professor Baumol further observes that “there seems to be a general consensus among informed observers that genuine cases of predation are very rare birds.”^{13, 14} The courts have decisively arrived at similar conclusions. In *Matushita v. Zenith*,¹⁵ the U.S. Supreme Court stated that “predatory pricing schemes are rarely tried and even more rarely successful.” And in *U.S. v. Eastman Kodak*,¹⁶ the Court dismissed concerns raised

¹² William J. Baumol. “Predation and the Logic of the Average Variable Cost Test.” *Journal of Law and Economics*, Vol. XXXIX, April 1996, p. 51.

¹³ *Id.*

¹⁴ See also Robert H. Bork. *The Antitrust Paradox*. New York: The Free Press, 1978, pp. 144-160; and W. Kip Viscusi, John M. Vernon and Joseph E. Harrington, Jr. *Economics of Regulation and Antitrust*. Cambridge MA: MIT Press, 1995, Chapter 9.

¹⁵ *Matushita v. Zenith*, 475 U.S. 574 (1986).

¹⁶ *U.S. v. Eastman Kodak*, 853 F. Supp. 1454 (W.D.N.Y. 1994) at 81.

by the government regarding predatory pricing in part because “the Government could not cite one modern example of successful predatory pricing.”

As Justice Lewis Powell poignantly observed in the *Matsushita* case predatory pricing case:

[C]utting 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.¹⁷

The courts have also recognized that it may be difficult in practice to differentiate between predatory pricing and a legitimate response to increased competition.

The difficulty, of course, is distinguishing highly competitive pricing from predatory pricing. A firm that cuts its prices or substantially reduces its profit margin is not necessarily engaging in predatory pricing. It may simply be responding to new competition, or to a downturn in market demand. Indeed, there is a real danger in mislabeling such practices as predatory, because consumers generally benefit from the low prices resulting from aggressive price competition.¹⁸

The courts have also explicitly recognized that pricing individual products or services below cost need not harbor predatory intent. This is particularly likely to be the case for a multi-product firm selling bundles of products and services. For example, in *American Drugs v. Walmart Stores*, the plaintiff argued that Wal-Mart was regularly selling products below cost in violation of the Arkansas Unfair Practices Act. The Arkansas Supreme Court did not concur.

We discern no proof in the record of this case that Wal-Mart specifically intended to destroy competition with regard to any one article like Crest toothpaste or Bayer Aspirin or Dilantin by selling below cost for a sustained period of time. What is evidenced is that Wal-Mart regularly would sell varying items below cost as a loss leader to entice people into its store and increase traffic, . . . That strategy of selling below the

¹⁷ *Matsushita Electric Industrial Co., Ltd. V. Zenith Corp., et al.* 106 S. Ct. 1348 (1986) at 1360.

¹⁸ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2D 227, 231 (1st Cir. 1983).

competitor's price and even below Wal-Mart's own cost, which Wal-Mart admits to, is markedly different from a sustained effort to destroy competition in one article by selling below cost over a prolonged period of time.¹⁹

Claims of predation are relatively common in the commercial aviation industry. And yet, a recent claim alleging predation on the part of American Airlines was dismissed on summary judgment.²⁰

As we have said in the Sherman Act context, predatory pricing schemes are rarely tried, and even more rarely successful, and the costs of an erroneous finding of liability are high. The mechanism by which a firm engages in predatory pricing—lowering prices—is the same mechanism by which a firm stimulates competition It would be ironic, indeed, if the standards for predatory pricing liability were so low that antitrust suits themselves became a tool for keeping prices high.²¹

The “meeting competition” defense is similar to a statutorily recognized defense to a price discrimination charge under the Robinson-Patman Act. See 15 U.S.C. s 13(b). A company should not be guilty of predatory pricing, regardless of its costs, when it reduces prices to meet lower prices already charged by its competitors. To force a company to maintain non-competitive prices would turn the antitrust laws on their head.²²

This court has previously noted that a high market share cannot be inferred as creating actual or potential monopoly power where a given market has low entry barriers and other factors rendering monopoly power unlikely.²³

4. Likelihood of Predation and the Risk of Error

In recognition of the fact that the law and economics literature finds that predatory pricing is a rare phenomenon,²⁴ there should be a presumption that prices are compensatory, that is, non-predatory, unless there is credible evidence to the contrary. In

¹⁹ *Wal-Mart Stores v. American Drugs, Inc.*, No. 94-235, Supreme Court of Arkansas, 319 Ark. 214; 891 S.W.2d 30; 1995 Ark. LEXIS I; 1995-1 Trade Cas. (CCH) P70, 853 January 8, 1995, Opinion Delivered, as Amended.

²⁰ *United States v. AMR Corp.*, 2003 U.S. App. LEXIS 13530 (10th Cir. Kans., July 3, 2003.)

²¹ *Id.*, at 151.

²² *Id.*, at 178.

²³ *Id.*, at 190.

²⁴ See, for example, Dennis L. Weisman, “The Law and Economics of Price Floors In Regulated Industries.” *The Antitrust Bulletin*, Vol. XLVII(1), Spring 2002, pp. 107-131.

this context, the term “non-predatory” means that the incumbent provider would not have an incentive to change its prices when it credibly believes that none of its rivals will exit the market.

In terms of evaluating the underlying motive for a price reduction, there is the possibility of Type I errors (labeling a price cut predatory when it is actually competitive) and Type II errors (labeling a price cut competitive when it is actually predatory).²⁵ The optimal public policy should balance the risk of error in a manner that maximizes expected consumer welfare. For example, a public policy that is more likely to result in a Type I error than a Type II error is likely to entail high social costs because it will give firms pause in lowering prices out of fear that such behavior will be condemned as being predatory.

This discussion should not be construed to suggest that predation is impossible or that it is always irrational. And yet, given the dearth of actual, confirmed cases of successful predation, policymakers should seemingly be much more concerned about mistakenly classifying competitive behavior as predatory (“Type I errors”) than mistakenly classifying predatory behavior as competitive (“Type II errors”). It necessarily follows that the burden of proof for allegations of predation should be placed on those market participants making such allegations.²⁶

²⁵ For a discussion of Type I and Type II errors as it applies to predatory pricing, see Paul Joskow and Alvin Klevorick, “A Framework for Analyzing Predatory Pricing Policy,” *Yale Law Journal*, Volume 89, 1979, pp. 213-270.

²⁶ Due to their inability to replicate predation in laboratory experiments considered favorable to its emergence, Professors Isaac and Smith observe that “we feel that they alter the burden of proof for those who would design public policy as though predation were a robust phenomenon.” R. Mark Isaac and Vernon L. Smith, “In Search of Predatory Pricing,” *Journal of Political Economy*, Volume 93, 1985, p. 321, note 1.