Predatory Pricing after Brooke Group: An Economic Perspective

Jonathan Baker
PREDATORY PRICING AFTER BROOKE GROUP: AN ECONOMIC PERSPECTIVE

JONATHAN B. BAKER*

The past year began as one of anticipation for antitrust. For the first time in more than a decade, the Democrats took over the White House and changed the leadership of the Antitrust Division. The Supreme Court’s recent antitrust decision in Kodak1 seemed pregnant with possibilities for changing course.2 In part as a result of Kodak, commentators were paying increasing attention to “post-Chicago” economic theories that promise a solid academic grounding for a more interventionist interpretation of the antitrust laws.3

Halfway through the year of anticipation, the Supreme Court decided Brooke Group,4 a predatory pricing case. Price predation occurs when a firm sets a low price, below an appropriate measure of its own costs, in order to eliminate or reduce competition and thereby gain or preserve the ability to exercise market power.5 This article considers whether the Court, in Brooke Group, changed course in its analysis of predatory pricing by adopting a “post-Chicago” view of the practice. The first two sections describe the competing Chicago and post-Chicago perspectives on price

* Senior Economist, Council of Economic Advisers, and U.S. Department of Justice. The views expressed are not necessarily those of the Council of Economic Advisers, any of its members, or the Justice Department. The author is indebted to Stephen Calkins, Ronald Davis, Robert Hammond, William Kovacic, Mary Jean Moltenbrey, Steven Salop, Peter Woodward, a referee, and the Robinson-Patman Act and Sherman Act Section 2 Committees of the American Bar Association’s Section of Antitrust Law.

3 “The strategic oligopoly models [from which post-Chicago antitrust law and economics derives] are typically richer and more complex than the standard Chicago models of either perfect competition or monopoly . . . [and] suggest a greater scope for antitrust intervention . . . .” Salop, supra note 2, at 1. For a survey of post-Chicago economics, see Jonathan Baker, Recent Developments in Economics that Challenge Chicago School Views, 58 ANTITRUST L.J. 645 (1989).
5 Id. at 2587–89.
predation. Section III examines *Brooke Group* against this background, and concludes that *Brooke Group* neither rejected nor embraced the new perspective. By deferring its choice between the two approaches, the Court has left the door open to a more activist antitrust analysis of predatory pricing grounded in post-Chicago economics.

I. THE CHICAGO SCHOOL VIEW OF PRICE PREDATION

The Chicago School view of predatory pricing was perhaps best captured by a 1987 dispute between two FTC Commissioners over the aptness of a metaphor: the animal that best represents price predation. For one Commissioner, predatory pricing was a "white tiger," an extremely rare creature. For the other Commissioner, price predation more closely resembled a "unicorn," a complete myth. The narrow spectrum of views between a white tiger and a unicorn fairly reflects the Chicago School view that predatory pricing is almost always irrational, and so is unlikely actually to occur.

Chicago commentators consider below-cost pricing irrational largely on the ground that a predator cannot reasonably expect to recoup its initial losses through later price increases, after it induces its victim or victims to exit, acquiesce to a takeover, or otherwise disappear as a competitive threat. Recoupment appears implausible because the profits expected to follow the exit of the prey must substantially exceed the certain losses that come from below-cost pricing, given both the time value of money and the risk that the future profits will not be achieved.

Future profits are uncertain for two reasons. A predator risks failure because its low price may not induce its rival(s) to exit or otherwise stop competing aggressively. In addition, in the event the victims do exit, the predator's scheme will not have been worthwhile unless the subsequent monopoly price is high enough for long enough to generate profits sufficient to cover the initial losses. Yet that prospect is far from certain. Before recoupment is complete, the predator's product may become

---


obsolete or less desirable to buyers, or the subsequent monopoly price may induce new entry.  

Recoupment appears even less plausible if the predator is an oligopoly rather than a single firm. In addition to overcoming the above problems, a predatory oligopoly must find a way both to coordinate a collective reduction in price in order to drive out the targeted rivals, and to coordinate a stable cartel in the event the predation is successful in reducing competition. In some circumstances, it may be possible for the firms to solve this problem in a simple way. In principle, for example, a predatory oligopoly might tacitly or expressly delegate most of the output expansion necessary to engender a reduction in price to a subset of its members. The designated firms might be willing to accept this role, even though the role requires that they pay a disproportionate fraction of the costs of predation, if they expect to gain the most from the exit of the prey. But even under the most favorable circumstances, these coordination problems create an additional difficulty for a predatory oligopoly beyond those facing a predatory monopolist.

To Chicago School scholars, episodes in which price appears to be less than cost almost always reflect either errors in the measurement of cost or competition, not price predation. 11 This perspective properly highlights the difficulties that hinder the measurement of cost and the many reasons that a competitive firm might price a product below short-run variable cost.

If cost is measured incorrectly, a firm pricing at or above cost might nevertheless appear to price below cost. 12 This possibility cannot be dismissed, given the difficult conceptual and measurement issues sur-

---

10 For example, if the prey is driven to exit from the market, the purchaser of its assets may be a plausible candidate for supplying new competition. Similarly, a large customer, fearing that successful predation would lead to an increase in the price of a product it buys, could sign a long-term contract with the prey at a price above the predatory price in order to preserve future competition.

11 Hence, if predatory pricing ever were to occur, Chicago commentators believe that it would do more harm than good to attack the predation under the antitrust laws. Any good accomplished in doing so would be far outweighed by the harm arising from deterring procompetitive price reductions throughout the economy by firms that fear that aggressive competition might be mislabeled as predatory.

12 In some appellate circuits, fact-finders are instructed to compare price with marginal (incremental) cost, and to employ (short-term) average variable cost as a proxy for marginal cost in doing so. Other circuits require triers of fact to compare price with a measure of average total cost. See generally ABA ANTITRUST SECTION, ANTITRUST LAW DEVELOPMENTS 227-34 (3d ed. 1992); infra at text accompanying note 35 (Brooke Group does not resolve this conflict). An average total cost standard is often poorly defined because it frequently requires arbitrary allocations of fixed, or common (joint), costs across products or regions.
rounding the definition of cost. For example, it is frequently difficult to determine cost while the alleged predator is making substantial investments in acquiring physical capital, research and development, or developing a brand reputation (as through advertising). If accountants record such investments as expenses in the period they are made, it is possible that revenues will fall short of accounting expenses during that period, and, in consequence, that average revenue (price) will be less than some measure of cost. Such expenditures are not an appropriate basis for an antitrust violation, even if accounting practice suggests that price is less than cost during the investment period, unless the investments themselves harm competition.

Moreover, a competitive firm's investments might include investments in market share, undertaken through temporary or permanent price reductions. Indeed, economic theory suggests that a competitive firm may price a product below its stand-alone short-run variable cost, with no intention of engaging in price predation, when it obtains offsetting benefits in the production or sale of other products (or in the production or sale of the same product at a future time).

Some hypothetical examples will illustrate this point. Competing spark plug manufacturers might price sales to automobile manufacturers (for inclusion in new cars) below cost in order to attract buyers of replacement spark plugs if many replacement buyers stick with the original brand even when charged a price above cost. Competing copier manufacturers

Accounting definitions of cost can diverge substantially from the economic concepts that are relevant to an analysis of the rationality of firm strategies. For example, difficulties in measuring reductions in the value of a firm's capital stock from depreciation often make accounting measures of cost deviate from the corresponding economic concepts. See Franklin Fisher & John McGowan, On the Misuse of Accounting Rates of Return to Infer Monopoly Profits, 73 Am. Econ. Rev. 82 (1983).

The contemporary (post-Chicago) economic literature describes ways firms can employ nonprice investments strategically to make rivals behave less aggressively (e.g., by "raising rivals' costs") or to deter entry. Thomas Krattenmaker & Steven Salop, Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price, 96 Yale L.J. 209 (1986); Steven Salop, Strategic Entry Deterrence, 69 Am. Econ. Rev. 335 (Papers & Proceedings 1979). Under appropriate circumstances, for example, investments in production capacity, brand reputation, product design, or test marketing; contractual arrangements with distributors or key input suppliers; or lobbying the government for beneficial regulatory treatment could be employed as methods of "nonprice predation."


The term "competitive firm" is used here in the sense of a firm unable to earn monopoly profits because entry is easy. Such a firm may face a downward-sloping demand curve for some of its products or have some ability to discriminate in price.

This example is suggested by Stitt Spark Plug Co. v. Champion Spark Plug Co., 840 F.2d 1253 (5th Cir.), cert. denied, 488 U.S. 890 (1988).
might price copiers below cost in order to attract buyers who can later be charged above-cost prices for parts and service. Competing firms producing both cameras and film might set camera prices below cost in order to sell more film at high price-cost margins. Competing sellers of some types of computer software might price their product below cost when high switching costs inhibit migration of the installed base to rival software, in order to increase the number of customers to whom they can later sell high-margin upgrades. Competing truckers might price certain freight movements below their stand-alone cost when those movements permit the trucker to obtain high-margin back-haul business.Competing computer manufacturers might price a new product below its initial variable cost, in order to generate, through increased production and sales, the scale economies and cost reductions from learning-by-doing that would justify the low price. In all these cases, the reduction of price below cost may reflect a procompetitive investment in future competition, not price predation.

Price predation is almost always irrational, according to the Chicago School, because recoupment is almost always implausible. Hence, episodes of apparent below-cost pricing almost invariably reflect competition rather than predation. Either below-cost pricing is a rational competitive strategy or cost has been measured incorrectly. Thus, in the Chicago zoological taxonomy, predatory pricing is a rare white tiger or a mythical unicorn.

II. PRICE PREDATION IN POST-CHICAGO ECONOMICS

Post-Chicago economics provides a new theory of recoupment based on the insight that if predation occurs in one market, recoupment can occur rapidly and profitably in many other markets. A firm exercising market power (through some means other than predatory pricing) might also price one product low in order to benefit from cross-market or intertemporal linkages that permit it to price another product high. For example, a copier manufacturer exercising market power might price original equipment low relative to cost (perhaps even below cost), and price parts and service well above cost. By exercising market power, the firm can obtain a higher price for parts and service than it would receive through competition. Kodak, 112 S. Ct. at 2085–88.

One leading Chicago commentator anticipated this post-Chicago insight, recognizing that the costs of predation "may generate greater deterrence benefits in other markets." Richard Posner, Antitrust Law 186 (1976). However, this part of Posner's analysis appears to have little influence on his Chicago School colleagues.
nomics also challenges the Chicago view that recoupment is never plausi-
ble in the traditional single-market predation story. These two theoretical
developments imply that predatory pricing may be more plausible than
the unicorn and white tiger metaphors would suggest. To be sure, it is
too early to tell whether many instances of predation have been over-
looked by those who view firm behavior through Chicago School lenses.
An answer to this question must await empirical studies and litigation
framed by the new economic models. 21

The new recoupment theory is suggested by the following hypothetical
eexample of price predation with multimarket recoupment. Suppose a
chain store faces a non-chain rival in each of a large number of towns. 22
The chain cuts its prices drastically in a few towns. When the chain's
rivals in those towns either exit or begin to compete less aggressively
with the chain, the price war ends and high prices are restored. In
addition, the chain store's rivals in all the other towns, in which the chain
did not cut prices, also respond by avoiding aggressive competition with
the chain. As a result, prices also increase in the towns in which predation
did not occur. 23

In this hypothetical example of price predation with multimarket re-
coupment, the firm developed a reputation as a predator 24 by reducing
price in a small number of markets. 25 It in effect engaged in selective
predation. The rivals in the markets in which predation occurred may
have ended up crippled or destroyed, as the traditional predatory pricing
story would have it. But rivals competing against the predator in markets
in which predation did not occur were not injured directly. Most of
the victimized rivals never experienced a price war but were merely

21 For one empirical example consistent with the new perspective, see Malcolm Burns,
Predatory Pricing and the Acquisition Costs of Competitors, 94 J. Pol. Econ. 266 (1986).
22 The towns are separate geographic markets (defined from a demand-side perspective):
consumers will not travel from one to another for their shopping in order to avoid a small
but significant price increase. 1992 Department of Justice and Federal Trade Commission
Horizontal Merger Guidelines § 1.2, reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13,104 (geo-
graphic market definition).
23 The example also assumes that new firms would not compete away supracompetitive
prices. For example, potential competitors may be deterred from entry for the same reason
that existing rivals are deterred from aggressive competition.
24 In order for the firm to develop a reputation as a predator, the economic models
require that the predator's rivals have imperfect information about some important variable
affecting firm strategies, such as the predator's costs or market demand. In a full informa-
tion setting, in contrast, a rival would have nothing to learn about the likelihood of predation
against it from the predator's behavior in other markets. Hence, the chain would find it
necessary to predate in each market in order to induce its rival in that market to exit (or
otherwise lessen competition).
25 In the example, the other markets involved different geographic areas; a similar story
could be told involving different product markets.
intimidated by the threat of a price war into engaging in less aggressive behavior than they would otherwise have found most profitable.26

Post-Chicago economics is also more sympathetic than the Chicago School to the traditional single-market predatory pricing story—the unicorn or white tiger previously discussed. If imperfections in the market for capital cause the prey to have less access to financial capital than the predator, then the predator may reasonably expect to use its “deep pockets” in the traditional way to drive the prey to exit.27 In addition, if high prices following the exit of the prey are unlikely to be eroded by new competition (because of entry barriers), predatory pricing with single-market recoupment may no longer be an irrational strategy.

Post-Chicago economics also suggests that price-cost tests can be misleading, even if cost is measured correctly. Chicago School scholars pointed out that “false positives” (competitive behavior incorrectly termed predatory) will arise if competitive firms price less than marginal cost.28 But post-Chicago economics recognizes that the potential errors go in both directions: “false negatives” (anticompetitive predation that does not lower price below the cost standard) may also occur.29 A firm can deter aggressive competition with a low price, even if the low price exceeds the price-cutter’s average cost, so long as the price is sufficiently low relative to its rivals’ costs.30 Hence, it is possible that competition can be harmed by low prices even if those prices are not below the price-cutter’s costs.31

26 In the hypothetical example, these firms refrained from cutting price below the price the predator preferred, and they refrained from taking a larger market share than the predator permitted them to have. In other cases, the indirectly victimized rivals might refrain from soliciting the predator’s customers, not expand into other markets, or agree to be acquired at a low price.

27 For example, a firm in financial distress may have difficulty demonstrating to prospective lenders its prospects for future success or have difficulty convincing lenders that it would actually use borrowed funds the way it proposes. If so, a predator with access to significant internal funds might be able to withstand a price war longer than would a victim that must borrow to stay in business. Recognizing that the prey may have difficulty withstanding a price war commenced by the predator, a prospective predator might not be deterred from cutting price below cost.

28 Supra at text accompanying notes 16–18.

29 The possibility of false negatives was not overlooked by early critics of price-cost tests not associated with the Chicago School. See Kenneth G. Elzinga & David E. Mills, Trumping the Areeda-Turner Test: The Recoupment Standard in Brooke Group, 62 ANTITRUST L.J. 559 (1994).

30 For example, current or prospective rivals may be deterred from competing aggressively when the predator charges a price sufficiently low as to make it impossible for the rivals to earn revenues that cover both their variable costs and their avoidable fixed costs.

31 Yet the possibility of false negatives does not necessarily call into question antitrust’s traditional use of a price-cost comparison as a screen for identifying possible instances of price predation or the Chicago view that it is better to err on the side of allowing false negatives. Infra at text accompanying notes 34–38.
Thus, post-Chicago economics refuses to rule out the possibility that successful predatory tigers may lurk in the marketplace jungle. The primary new theoretical development is the identification of a new type of predator, which cuts price in a handful of markets and creates a reputation as an aggressive competitor. This type of predator recoups the costs of predation not merely in the markets in which it engaged in a price war, but also in other markets to which its reputation has spread, by intimidating rivals in those markets to act less aggressively toward it. Post-Chicago economic theory also suggests that a search for white tigers—deep pocket predators—should be concentrated in industries in which potential victims have constrained access to new financing as a result of capital market imperfections, and in which entry by new competitors is unlikely. But it remains to be seen how many new predators plaintiffs, prosecutors, and empirical economists can find in these previously unexplored areas.

III. BROOKE GROUP

The Supreme Court decided Brooke Group against the backdrop of these contemporary developments in the economics of price predation. From this perspective, the decision is disappointing: It does not grapple with the post-Chicago challenge to the Chicago point of view. The Court's opinion will be discussed with respect to five issues. The record evidence will be viewed throughout in the light most favorable to plaintiff Liggett, as the Court was obliged to do.

A. PRICE-COST COMPARISONS

In asserting that the offense of price predation requires proof of pricing below cost, the Court was neither accepting nor rejecting post-Chicago views. The majority stated that a plaintiff seeking to demonstrate predatory pricing must show that the defendant charged a price "below an appropriate measure of [defendant's] cost."

Although the Court expressly "decline[d] to resolve the conflict among the lower courts over the appropriate measure of cost," its discussion of the issue appeared sympathetic to setting the cost standard at a low

33 The Supreme Court was obliged to construe the facts to benefit Liggett because judgment as a matter of law was awarded against the plaintiff. Id. at 2582, 2599 n.3.
34 Id. at 2587.
35 Id. at 2587 n.1. The cost standard was not in dispute in Brooke Group, as the plaintiff did not contest the district court's view that a predatory price must be below average variable cost. Petitioner's Reply Brief at 9 n.10, Brooke Group.
level, such as incremental cost.\textsuperscript{36} Doing so would likely be applauded by Chicago-oriented commentators concerned that antitrust avoid wrongly targeting some instances of competition for attack as predatory. Yet the use of a cost screen to define the offense of price predation,\textsuperscript{37} and the choice of a low cost level for that screen, could also be consistent with a post-Chicago perspective on predation—even though the new view recognizes that a low cost standard could allow some instances of predation to escape enforcement.

A cost standard set at a low level may continue to be justified under the post-Chicago view that recognizes the possibility of false negatives as well as false positives. The reason is that the cost standard should be set to minimize the aggregate social costs of the errors that the standard allows. If competitive firms would frequently have an incentive to price some products below cost and the social costs of deterring such competitive pricing are large, then a cost standard set at a low level would be justified—unless the frequency and social costs of anticompetitive predation that does not involve price below the cost standard are also large. From a post-Chicago perspective, therefore, the Court’s continued reliance on a cost screen to define predatory pricing and its sympathy to raising a hurdle to predatory pricing allegations by setting that screen at a low level of cost merely represent an empirical judgment about the relative incidence and harm of false negatives and false positives.\textsuperscript{38} If predatory conduct turns out to be more common and costly than the Court now believes, its current judgment about the appropriate level of the cost standard would then be called into question.

\textbf{B. RECOUPEMENT AS AN ELEMENT OF THE OFFENSE}

The Court made it abundantly clear, if it was not already obvious after its opinions in \textit{Matsushita}\textsuperscript{39} and \textit{Cargill},\textsuperscript{40} that the likelihood of recoupment is an element of the offense of predatory pricing.\textsuperscript{41} To prove price

\textsuperscript{36} 113 S. Ct. at 2588.


\textsuperscript{38} The majority opinion emphasized that unless the cost standard was set at a low level, the prohibition against price predation could chill aggressive and legitimate price competition by encouraging unwarranted and expensive predatory pricing litigation. 113 S. Ct. at 2588.


\textsuperscript{40} Cargill, Inc. v. Monfort of Colorado, Inc., 479 U.S. 104, 121 n.17 (1986).

\textsuperscript{41} In the wake of \textit{Brooke Group}, defendants are likely to accept the Court’s invitation to argue for summary judgment when the market’s structure following exit of the prey would not be congenial to the exercise of market power. 113 S. Ct. at 2599; Denger & Herfort, \textit{supra} note 15.
predation, a plaintiff must demonstrate that the predator had a "reasonable prospect" (the Robinson-Patman Act standard for primary-line price discrimination) or "dangerous probability" (the Sherman Act Section 2 standard for attempted monopolization) of recouping the costs of predation.\textsuperscript{42} This requirement is consistent with both Chicago School and post-Chicago economics; the two economic approaches differ on the plausibility of certain potential mechanisms for recoupment, not on the necessity for recoupment.\textsuperscript{43}

C. Recoupment by an Oligopoly

The Court refused, as a matter of law, to rule out the possibility that recoupment would take place through supracompetitive oligopoly prices.\textsuperscript{44} This holding rejects the Chicago view that in the unlikely event that price predation is successful, the predator must be a single firm rather than a group of firms.\textsuperscript{45} This issue was raised in \textit{Brooke Group} because the defendant's (Brown & Williamson's) market share never exceeded 12 percent.\textsuperscript{46}

Here, the Court's position is consistent with the post-Chicago view that predatory pricing can occur in appropriate factual settings. In this

\textsuperscript{42} 113 S. Ct. at 2588. Although the Court discussed the Sherman Act test, the predatory pricing claim was evaluated under the Robinson-Patman Act standard. In its reference to the Sherman Act § 2 test, the Court presumably meant that plaintiff must demonstrate a dangerous probability of success in achieving monopoly power (not recoupment), and that it must show a likelihood of recoupment in order to prove a dangerous probability of achieving monopoly power. Stephen Calkins, \textit{The Supreme Court Term in Antitrust: More Objectivity than Ever}, 62 \textit{Antitrust L.J.} 327, 399 n.384 (1994).

\textsuperscript{43} The dissent proposed inferring the likelihood of recoupment from the fact of below-cost pricing, on the ground that below-cost pricing is otherwise irrational. 113 S. Ct. at 2605. The proposed inference requires ruling out both errors in measuring cost and reasons why competitive firms might charge a price below cost (i.e., a legitimate business justification for the practice). Although the dissent appeared to believe that the jury did so, \textit{id.} at 2604, infirmities in the jury instructions call that view into question. See Calkins, \textit{supra} note 42, at 381. The dissent also would have inferred the likelihood of recoupment from defendant's contemporaneous belief, reflected in its planning documents, that the firm would eventually recoup the costs of lowering price. 113 S. Ct. at 2600, 2606.

\textsuperscript{44} 113 S. Ct. at 2591. Moreover, the Court accepted the possibility of recoupment through coordinated oligopoly pricing, notwithstanding the fact that plaintiff did not allege express coordination among the cigarette oligopolists. See \textit{id.} at 2590.

\textsuperscript{45} Although defendant Brown & Williamson insisted that it did not claim oligopolistic predation was impossible as a matter of law, Calkins, \textit{see supra} note 42, at 383 & n.298, it nevertheless came very close to endorsing that proposition, \textit{id.} at 385 n.307, and the Court read the appellate opinion it affirmed as so holding. 113 S. Ct. at 2591.

\textsuperscript{46} 113 S. Ct. at 2583. Because Brown & Williamson was the only member of the oligopoly competing directly with Liggett in the generic segment, \textit{infra} at text accompanying notes 47–48, and because generic and branded cigarettes are not perfect substitutes, Brown & Williamson probably bore more of the costs of the alleged scheme to influence Liggett through low generic prices than did any other member of the oligopoly. For this reason,
respect, the Court has moved away from the Chicago idea, suggested by
the unicorn or white tiger metaphors, that predatory pricing is almost
invariably irrational.

D. Multimarket Recoupment

The *Brooke Group* Court did not address the post-Chicago idea that
recoupment may occur in a product or geographic market different
from the market in which the alleged predation took place. This issue
was not reached because the plaintiff’s predatory pricing allegation was
closer to the deep pocket, white tiger story than to the chain store hypo-
thesical. The post-Chicago multimarket recoupment theory was not
squarely presented on the facts of the case.

As the Court described the facts the cigarette market has two relevant
segments: a low-priced generic segment and a high-priced branded seg-
ment. Plaintiff Liggett created the generic segment and had a significant
share of generic sales. However, its presence in the branded segment
was minor. Accordingly, at the time of the events giving rise to the
litigation, it was mainly a seller of generics. In contrast, at the time of
the alleged predation, defendant Brown & Williamson was a significant
player in both branded and generic cigarettes. The other leading ciga-
rette producers were primarily sellers of branded products. The generic
segment accounted for 4 percent of total domestic cigarette sales in 1984,
when the eighteen-month generic price war giving rise to the litigation
began, and rose to 15 percent of sales in 1989.

By stipulation of the parties, the Court depicted the two types of
cigarettes as separate segments of a cigarette market, but not as separate
markets. At the relative prices of brandeds and generics observed dur-
ing the relevant period, the two segments were sufficiently close demand
substitutes as to make it impossible for branded cigarettes to remain

---

if it was plausible that Brown & Williamson would recoup the costs of predation, recoup-
ment was also likely plausible for all the other firms in the industry.

47 In 1984, when Liggett accounted for 5% of the cigarette market, its generic cigarettes
accounted for more than 4% of the market. 113 S. Ct. at 2582–83.

48 However, R.J. Reynolds, a large producer of branded cigarettes, sold one of its many
branded products (Doral) at low prices comparable to those of generics. Id. at 2583. At
such prices, Doral was likely a closer substitute for generics than were most branded
cigarettes.

49 Id. at 2585.

50 Respondent’s Brief on the Merits at 10–11, *Brooke Group*.

51 113 S. Ct. at 2583.
insulated for long from the effect of a low price of generics.\textsuperscript{52} For this reason, the inevitable consequence of Liggett's aggressive competition in generics—pricing generics at a low level relative to the price of branded cigarettes—would have been to force down the price of brandeds.

Plaintiff Liggett's theory of the case was that defendant Brown & Williamson responded predatorily to Liggett's aggressive marketing of generics when Brown & Williamson introduced its own generic line and cut the price of generics dramatically. Liggett argued that Brown & Williamson predated in generics but expected to recoup the costs of predation primarily in brandeds,\textsuperscript{53} a much larger segment of the market. If Brown & Williamson could induce Liggett to raise the price of generics, Brown & Williamson would avoid the otherwise inevitable loss of profits in brandeds, thereby recouping the cost of cutting price in the smaller (generic) segment.\textsuperscript{54}

Here, predation occurs in one market segment—generics—while recoupment occurs primarily in another segment—brandeds. Were the two segments different markets, the allegation might be interpreted as a post-Chicago theory of multimarket recoupment. But because generics and brandeds are part of the same market, Liggett's theory is best understood as alleging deep pocket predation, in which both predation and recoupment took place in the same market: the market for cigarettes.\textsuperscript{55}

\textsuperscript{52} Id. at 2583 ("In general, the growth of generics came at the expense of the other firms' profitable sales of branded cigarettes."). The relationship between demand substitution and market definition is discussed in the 1992 Merger Guidelines, supra note 22, §1.

\textsuperscript{53} Petitioner's Reply Brief at 6-7 & n.7, Brooke Group.

\textsuperscript{54} 113 S. Ct. at 2592 (according to Liggett, higher list prices on generics would reduce "cannibalization of branded sales and their associated supracompetitive profits"). The language in the Court's opinion may admit of an alternative reading, under which the Court was troubled only about recoupment in the generic segment, the same segment in which the alleged predation took place. Calkins, supra note 42, at 390. However, this interpretation is difficult to rationalize with (1) a product market that includes both generics and brandeds (suggesting that a price rise induced by predatory conduct could not be limited to generics), and (2) defendant Brown & Williamson's primary reliance on brandeds rather than generics for sales and profits (suggesting that if the alleged predatory scheme were successful, Brown & Williamson would benefit largely by virtue of stopping the decrease in branded prices). The majority found it unnecessary to articulate clearly where recoupment was expected to occur because it held that the plaintiff had failed to demonstrate that the price of generics would rise sufficiently. Infra at text accompanying notes 58-60. An increase in the price of generics forms a crucial factual predicate for recoupment regardless of whether recoupment would be expected to occur primarily in generics or in brandeds.

\textsuperscript{55} Liggett's deep pocket predation story has one novel twist: because the victim participated in only one segment of the market, the predator's price-cutting was not uniform throughout the market. Instead, the price war was directed at the segment in which the victim participated. Liggett alleged that Brown & Williamson sought to induce Liggett to back off from aggressive competition in generics in order to avoid an otherwise inevitable price reduction in brandeds. Because generics are not perfect substitutes for brandeds
For this reason, the *Brooke Group* opinion did not address the plausibility of multimarket recoupment, an important new idea in the post-Chicago economic literature on price predation.

Nor did the Court see the case as presenting a post-Chicago deep-pocket predation story. The Court recognized that the jury could have found that Liggett was unwilling to sustain losses imposed by Brown & Williamson's below-cost pricing of generics, "given [Liggett's] corporate parent's efforts to locate a buyer for the company." It is possible that a post-Chicago deep-pocket predation theory could be constructed consistent with this finding, in concert with record evidence that Brown & Williamson believed it could take advantage of Liggett's limited financial resources. Although it was obliged to interpret the record in the light most favorable to Liggett, the Court did not investigate the possibility of a capital market imperfection hobbling Liggett's access to financing relative to that of Brown & Williamson.

Even if Liggett's claim could reasonably be construed as alleging multimarket recoupment, the Court did not reach the question of whether recoupment could occur in a different market segment from the segment in which predation occurred. Instead the Court correctly observed that Liggett's theory of the case required that Brown & Williamson's predation in generics would, in the first instance, lead Liggett to raise the price of generics and through that mechanism stop the otherwise inevitable loss of supracompetitive profits in brandeds. An increase in the price of generics sufficient to preserve a supracompetitive price for brandeds, thus formed the "linchpin" of the predatory scheme alleged by Liggett.

(even at the price differential created by the alleged predation), and because Liggett's business was concentrated in generics while Brown & Williamson's business was concentrated in brandeds, a predation strategy lowering prices more for generics than brandeds would likely minimize Brown & Williamson's losses from below-cost pricing without reducing the costs the low prices would impose on Liggett.


*The Court writes as though recoupment would require a "supracompetitive" price for generics. 113 S. Ct. at 2592-93. In fact, because recoupment would occur primarily in branded cigarettes, see supra at notes 53-54 and accompanying text, recoupment requires no more than that the generic price increase enough to allow a sufficiently high (and supracompetitive) branded price to be sustained. It is therefore possible that a generic price rise short of raising the generic price above the competitive level would be sufficient to allow Brown & Williamson to recoup its losses from predation. It is also possible that some supracompetitive generic prices would not be sufficiently high to permit recoupment.*

*113 S. Ct. at 2593.*
After extensive analysis, the Court found that the evidence was insufficient to allow a jury to find that the price of generics had a reasonable prospect of rising enough as a result of Brown & Williamson's predation to make recoupment possible. The Court did not reach the issue of whether recoupment could occur in products different from those alleged to have been the subject of the predation, because it did not need to in order to decide the case.

E. Judgment as a Matter of Law

The *Brooke Group* Court boldly decided to award judgment as a matter of law and overrule the jury. The Court's crucial factual determination was that the record evidence, examined in the light most favorable to plaintiff, would not support the conclusion that the alleged predation had a reasonable prospect of causing the price of generics to rise sufficiently to permit recoupment. Yet the Court took the case from the jury to award judgment to the defendant when the record on this key question of fact, construed favorably to plaintiff, arguably supported plaintiff's position. Although the best explanation for this outcome is that the Court reviewed the record through Chicago School lenses that presume the implausibility of predatory pricing, in doing so the Court did not reject a post-Chicago perspective because it was not asked to view the record with post-Chicago economic developments in mind.

In reaching the conclusion that the price of generics had no reasonable prospect of rising sufficiently as a result of the alleged predation to permit recoupment, the Court acknowledged that a reasonable jury could

---

60 Id. at 2593-98. This evidence is discussed infra at text accompanying notes 61-85.

61 In *Kodak*, 112 S. Ct. at 2083, the Court clarified that there is no special summary judgment rule for antitrust cases that encourages judges to weigh evidence and take such cases from the jury. Some had previously read *Matsushita* to say otherwise. E.g., Thomas Jorde & Mark Lemley, *Summary Judgment in Antitrust Cases: Understanding Monsanto and Matsushita*, 36 Antitrust Bull. 271, 293 (1991).

62 The Supreme Court's 1986 predatory pricing decision, *Matsushita*, does not provide precedent for this result. In *Matsushita*, the Court reversed the Third Circuit's decision to send a predatory pricing case to trial when the district court had previously awarded summary judgment. The Court remanded the case with instructions virtually ordering reinstatement of the original judgment. *See In re Japanese Elec. Prods.*, 807 F.2d 44 (3d Cir. 1986). The Court was in effect willing to take the *Matsushita* case from the jury when the evidence favoring the losing plaintiff was extremely meager—in contrast with its decision to take *Brooke Group* from the jury when the record could arguably have been construed in favor of the losing plaintiff.

have concluded that generic prices rose in fact.\textsuperscript{64} This finding, favorable to plaintiff, did not end the majority's analysis, however, because the majority resisted the conclusion that the alleged predation caused the generic price increase. Instead, the majority found that the evidence did not distinguish an anticompetitive price increase (resulting from the alleged predation and sufficient to permit recoupment) from a price rise that would have occurred in a competitive market—had the demand for generics shifted out along a rising marginal cost curve.\textsuperscript{65}

The majority's conclusion about causation is surprising, however, for two reasons. First, because generics and brandeds are likely supply substitutes (in both production and distribution),\textsuperscript{66} the competitive price rise the majority postulates would have required an outward shift of the demand function for cigarettes as a whole. This theory about demand growth would have been more plausible had the cigarette industry been growing. Second, the majority's competitive theory does not fit comfortably with the Court's observation that the cigarette industry had substantial excess capacity.\textsuperscript{67} Industry excess capacity could suggest to a reasonable jury that the marginal cost of production is not rising, and thus lead the jury to rule out the majority's competitive alternative to finding that the alleged predation caused the price of generics to rise,\textsuperscript{68} the inference that was required in order to uphold the jury verdict in favor of plaintiff.

The Court provided an additional reason for refusing to permit the jury to find that the price of generics would likely increase sufficiently to permit recoupment. It argued that important features of cigarette industry structure tend to suggest that an anticompetitive price increase would be difficult to arrange and maintain in the cigarette oligopoly.\textsuperscript{69} The Court's willingness to make this inference from industry structure

\textsuperscript{64} 113 S. Ct. at 2595 ("It may be that a reasonable jury could conclude that the cumulative discounts attributable to subgenerics and the various consumer promotions did not cancel out the full effect of the increases in list prices . . . and that actual prices to the consumer did indeed rise . . . .").

\textsuperscript{65} Id. at 2595 ("Where, as here, output is expanding at the same time prices are increasing, rising prices are equally consistent with growing product demand [as with supracompetitive pricing]."). Because output was expanding for generics but not for the cigarette industry as a whole during the 1980s, 964 F.2d at 338, the Court appears to be referring to the generic segment.

\textsuperscript{66} 748 F. Supp. at 363.

\textsuperscript{67} 113 S. Ct. at 2583, 2595.

\textsuperscript{68} Because generics and brandeds are likely supply substitutes, the relevant capacity measure is for cigarettes as a whole. Hence, a shift in consumer tastes to favor generics, the Court's proposal, would be unlikely to lead to an increase in the price of cigarettes in either segment through the mechanism proposed by the Court.

\textsuperscript{69} 113 S. Ct. at 2596–97.
is surprising, however, given that the Court acknowledged elsewhere that oligopolistic coordination had somehow managed to persist for decades.\textsuperscript{70}

The Court's analysis of industry structure, from which it concluded that the industry environment was not congenial to coordination, has a distinctly Chicago flavor. The majority's discussion of four aspects of industry structure was not informed by insights derived from post-Chicago developments in oligopoly theory that qualify Chicago views and suggest why coordination could occur in the cigarette industry.\textsuperscript{71} First, the majority recognized that an industry facing declining demand and excess capacity might perform competitively,\textsuperscript{72} but it did not note the possibility, also consistent with contemporary economic theory, that these structural features might instead facilitate coordination. Excess capacity can facilitate coordination by increasing the ability of the oligopoly to punish firms that deviate. Declining demand can facilitate coordination by limiting the gains from cheating, thereby making deviation from a high coordinated price unattractive.

Second, the majority argued that the large number of product types and pricing variables in the cigarette industry creates a complex and difficult coordination task.\textsuperscript{73} Yet the majority did not consider the possibility that firms could employ focal rules to turn what the Court termed "multivariable coordination" into a much simpler problem.\textsuperscript{74} Third, the majority recognized that firms with different incentives might be unable

\textsuperscript{70} Id. at 2583; see id. at 2599 (Stevens, J., dissenting). The Court found Liggett's theory that the cigarette oligopoly could engineer a price rise "anomalous" in light of the predictable testimony of Liggett's executives denying participation in an illegal industry conspiracy to increase price. Id. at 2595. Yet there need be no inconsistency: oligopolies can achieve high prices through coordination without necessarily reaching an agreement under Sherman Act § 1. Jonathan Baker, Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory, 38 Antitrust Bull. 143, 162-69, 190 (1993).

\textsuperscript{71} Development in economic theory involving horizontal coordination bear on predatory pricing claims only when the alleged predator is an oligopoly, as in Brooke Group.

\textsuperscript{72} 113 S. Ct. at 2595-96.

\textsuperscript{73} Id. at 2596.

\textsuperscript{74} In general, coordinating firms might reach a consensus by establishing as focal (self-evident) one or more simple and readily grasped behavioral rules. For example, the firms might preserve existing price differentials across product types and brands, and preserve existing percentage discounts to wholesalers or retailers, while merely altering the entire structure of prices by a common percentage. In the instant case, predation and recoupment might be coordinated by altering the prices of all generic products by one appropriate percentage and the prices of all branded products by another percentage. By grandfathering most of the terms of trade in this way, the firms could simplify their coordination problem dramatically. Baker, supra note 70, at 162-69.
to reach an oligopolistic consensus.\textsuperscript{75} But the majority did not note that those incentives would need to diverge a great deal before making it impossible for the firms to identify a coordinated outcome at which coordination is more preferable than competition to each.\textsuperscript{76}

Finally, the majority pointed out that uncertainty could make an oligopolistic consensus unstable, susceptible to breaking down through "a chain reaction of competitive responses."\textsuperscript{77} The opinion emphasizes that rival sellers of branded cigarettes (such as Philip Morris) could not be sure that Brown & Williamson, in entering the generic segment in competition with Liggett, was acting to deter Liggett from competing aggressively. According to this view, these rivals might conclude that Brown & Williamson was also competing aggressively, and that the oligopolistic consensus over the price of branded cigarettes was breaking down.

This observation is not decisive, however, for four reasons not recognized by the Court. First, the other members of the cigarette oligopoly did not in fact respond to Brown & Williamson's entry into generics by competing aggressively, contrary to what the majority forecast.\textsuperscript{78} Second, even if the majority's forecast had proved correct, that result would not necessarily undermine the alleged predatory scheme. Aggressive competition would drive prices even lower and so increase Liggett's losses during the period of predation. If this were to occur, it could strengthen the punishment Brown & Williamson was allegedly trying to impose upon Liggett through below-cost pricing and, by strengthening the inducement to Liggett to raise its price for generics, make recoupment more likely.

Third, the majority does not recognize the possibility that the other members of the cigarette oligopoly delegated the primary punishment role to the defendant.\textsuperscript{79} Brown & Williamson may have been willing to accept this role, even though it would bear a disproportionate fraction of the cost of predation, because it may have expected to gain the most

\textsuperscript{75} 113 S. Ct. at 2596-97.
\textsuperscript{76} Baker, supra note 70, at 168 n.48. Mavericks are more likely to constrain coordinated prices from full effectiveness than to make coordination impossible altogether. Id. at 202. From this perspective, the cigarette oligopoly intended the alleged predation to change the incentives of the most significant industry maverick, Liggett. Liggett's incentives to deviate from a coordinated outcome came from its relatively small allegiance to the branded segment of the market and its relatively large commitment to the generic segment. The divergence of interest among the remaining major cigarette producers was likely small, although R.J. Reynolds, with its economy-priced Doral brand, may have been the firm most likely to have constrained coordination in the absence of Liggett.
\textsuperscript{77} 113 S. Ct at 2597.
\textsuperscript{78} Petitioner's Reply Brief on Certiorari at 8, Brooke Group.
\textsuperscript{79} Supra at text accompanying notes 10–11.
from disciplining Liggett. Under such circumstances, Brown & Williamson's low price would not have led to a competitive chain reaction from its rival oligopolists.

Fourth, the majority does not recognize that coordination can be harmful even if it is imperfect and incomplete, as in contemporary economic models in which an oligopolistic consensus breaks down for a time before reforming. Uncertainty may be an oligopoly's "greatest enemy," but oligopolists may be able to defeat that enemy when the costs of negotiating and, if necessary, renegotiating the oligopoly consensus are low.

These post-Chicago developments were not noted by the Court in *Brooke Group*, and they were not brought to the Court's attention by the parties to the case. In sharp contrast, briefs before the Court in the *Kodak* litigation referenced and discussed the post-Chicago economic literature relevant to that case. Against this background, it is not surprising that the Court relied exclusively on Chicago School ideas concerning price predation and oligopolistic coordination in *Brooke Group*, while accepting a post-Chicago economic perspective concerning the issues addressed in *Kodak*.

**IV. CONCLUSION**

The Chicago School view that predatory pricing is highly unlikely to occur now competes with a post-Chicago perspective more sympathetic to contemporary developments in the economics of oligopolistic coordination...
to the possibility of price predation. In *Brooke Group*, the Supreme Court largely declined to choose between these economic perspectives. The Court stepped away from the Chicago view by refusing to reject, as a matter of law, the possibility of recoupment through oligopolistic coordination. The Court did not consider the post-Chicago contention that multimarket recoupment is plausible, or the post-Chicago suggestion that deep pocket predation could be successful if the prey has limited access to financial resources. But it awarded judgment as a matter of law based on Chicago School presumptions, without reconsidering Chicago arguments in light of contemporary developments in economics.

The primary message of the Supreme Court's two most recent major antitrust decisions, *Kodak* and *Brooke Group*, taken together, is not about the significance of the facts in antitrust litigation, contrary to what some commentators argued in the wake of *Kodak*. Rather, these decisions demonstrate that antitrust law continues to demand a careful economic analysis of the challenged conduct. In deciding both *Brooke Group* and *Kodak*, the Court relied heavily on its view of economic logic and the teaching of economic authorities. In *Kodak*, the Court embraced post-Chicago economic arguments that were called to its attention by the parties and were consistent with the facts under review. In contrast, post-Chicago economic arguments were not before the Court in *Brooke Group*, and the Court relied on the most current economic arguments of which it was aware—the Chicago-oriented approach it had adopted seven years before in *Matsushita*.

*Brooke Group* should not be read as rejecting post-Chicago economic arguments in antitrust matters. Rather, the Supreme Court's willingness to entertain the idea of recoupment through oligopolistic coordination in *Brooke Group*, combined with its contemporary economic analysis in *Kodak*, suggest that it will accept post-Chicago interpretations of challenged conduct if they are squarely posed in the matter under review, called to the Court's attention by the parties, and consistent with the facts.

---