ANTITRUST REFORM PROJECT

HOW THE MARKET SELF-POLICES AGAINST PREDATORY PRICING

DONALD J. BOUDREAUX & ANDREW N. KLEIT

June 1996 ISSN#1085-9047

HOW THE MARKET SELF-POLICES AGAINST PREDATORY PRICING

Donald J. Boudreaux &
Andrew N. Kleit

EXECUTIVE SUMMARY

Courts today are more skeptical than in the past of predatory-pricing allegations. This skepticism grows largely from economic research showing that predatory pricing is unlikely to result in a monopoly because rivals of predators have both incentive and ability to withstand the predatory on slaught. Moreover, customers and suppliers of predatory pricers also often have incentive and ability to thwart predatory efforts. However, the incentives and strategies available to customers and suppliers have thus far escaped systematic investigation.

While some of these 'private policing' strategies are lawful, one of the perverse consequences of antitrust law is to make many of these strategies unlawful. Minimum resale price maintenance, maximum resale price maintenance, and price discrimination are only some of the means that would be open to suppliers to police against predation if such practices did not run afoul of antitrust law. Antitrust prohibitions thus increase the costs to private firms of protecting themselves from monopoly.

Once the incentives customers and suppliers have to prevent monopoly are more fully taken into account, predatory pricing is recognized as even less likely than when only rivals' reactions to below-cost prices are considered. Appreciation of the role of customers and suppliers in the competitive process makes clear the senselessness of several recent antitrust suits-such as the federal government's suit against Micrsoft, and the suit filed by independent booksellers against book publishers.

HOW THE MARKET SELF-POLICES AGAINST PREDATORY PRICING

Donald J. Boudreaux &
Andrew N. Kleit

In 1991, three retail pharmacies in Faulkner County, Arkansas sued Wal-Mart for selling pharmaceutical items at predatorily low prices. The plaintiffs claimed in *American Stores v. Wal-Mart, Inc.*¹ that Wal-Mart's below-cost pricing of some pharmaceuticals threatened to create for Wal-Mart a monopoly in pharmaceutical retailing in Faulkner County. The plaintiffs' story is a familiar one to students of antitrust law: by pricing below cost, a "predator" (in this case Wal-Mart) forces its rivals to price below cost. The losses thereby inflicted on rivals drive them into bankruptcy, leaving the predator as the market's sole supplier. With rivals gone, the predator will raise prices to monopolistically high levels. To avoid this undesirable outcome in the future, the law must command the predator to stop charging dangerously low prices today. Only through the diligent policing of courts and antitrust agencies against such predatory tactics can consumers be saved from the extortions of monopolists.

Is this concern about "predatory pricing" warranted? For most of this century, the consensus answer was "yes." Until the late 1950s, economists and legal experts agreed that predatory pricing was an effective means of monopolizing markets. Inflicting losses on rivals through below-cost pricing seems such an obvious technique for scaring away all competition.

Alas, what seems obvious on first blush is not at all obvious upon closer investigation. An avalanche of "Chicago School" economic analysis beginning in 1958 swept away the prior unthinking faith in the ability of below-cost pricing to beget monopolies.² "Predation doesn't pay and, thus, won't be attempted," has been the consensus conclusion of antitrust economists for much of the past four decades.³

Although the Chicago School skepticism of predatory pricing remains dominant today, we later discuss efforts to undermine it and to replace it with a new consensus in which predation is once again regarded as a genuine threat to competitive markets. Those leading today's charge against

Until the late 1950s, economists and legal experts agreed that predatory pricing was an effective means of monopolizing markets.

Chicago are referred to variously as the "Post Chicago School" or the "Strategic Predation" school. We argue, however, that the recent academic efforts to discredit the Chicago skepticism of predation are themselves critically flawed.

Recent academic efforts to discredit the Chicago skepticism of predation are themselves critically flawed. Chicago School analyses of predation focus on the high costs of predation to predators in conjunction with rivals' incentives to defeat predators. While we endorse these Chicago analyses, we move beyond them by showing that predatory-pricing schemes can often be undermined by *suppliers* or *customers* of predators. Even if rivals are unable to squelch predatory-pricing schemes, suppliers or customers of predators will often take effective steps to prevent predation from succeeding.

First, though, let's briefly review the reasons why Chicago School scholars are rightly skeptical of predatory-pricing allegations.

WHY PREDATORY PRICING IS UNLIKELY: THE CHICAGO VIEW

Even if a predator manages to run existing rivals out of business, new entrants will emerge once the predator starts trying to recoup its price-war losses by charging monopoly prices. This new competition keeps the predator from recouping the losses it necessarily incurred by pricing below cost during the predation period; hence, the threat of new entry is generally sufficient to keep firms from predatorily pricing in the first place. Empirical and theoretical work confirm this conclusion.⁴

But no predator is likely to get even this far. In fact, predatory pricing is an exceedingly poor way to run rivals out of business. Not only does a predatory-pricing firm incur large losses today as a result of below-cost sales, but its losses are necessarily larger than those of its rivals. Rivals, after all, can reduce the amounts they sell below cost while the predator must—to hurt rivals by taking away their customers—*expand* output during the price war. Predatory pricing hurts the predator more than the prey. This indisputable fact led Robert Bork to advise that "the best method of predation is to convince your rival that you are a likely victim and lure him into a ruthless price-cutting attack."⁵

By showing that attempted monopolization through below-cost pricing is much like sightings of the Loch Ness monster,⁶ Chicago-style economists concluded that cries of predatory pricing are almost always deceitful. Low prices invariably reflect superior efficiency rather than monopoly design. To put it bluntly, plaintiffs in predation cases are firms that prefer to compete in the courtroom rather than in the marketplace. By misleading a judge or jury to conclude that a rival's low prices portend monopoly, a predation plaintiff avoids the inconvenience of competing

Plaintiffs in predation cases are firms that prefer to compete in the courtroom rather than in the marketplace.

through low prices and improved quality. (In *Wal-Mart*, one of the plaintiffs admitted on the stand that Wal-Mart's entry into the retail pharmacy business provoked his firm to operate more efficiently!⁷) By summoning the force of law to prevent rivals from serving consumers as well as rivals can, plaintiffs in predation cases pose a much greater threat to competition than do firms who vigorously lower their prices. Consumers invariably suffer whenever plaintiffs win — or even file — predation suits.

This Chicago School skepticism of predatory-pricing claims is rubbing off on federal courts. In two landmark decisions during the past decade, the United States Supreme Court substantially increased the evidentiary burdens confronting plaintiffs in predatory-pricing cases under federal law. Unlike in the past, plaintiffs today must do more than assert that prices have fallen in response to the pricing practices of larger rivals. Nor can plaintiffs any longer create a presumption of predation by merely pointing to defendants' internal memos featuring belligerent language such as "let's crush the competition." The Court now understands that price cutting lies at the heart of the competitive process and that muscular language in memos is consistent with healthy competition. (Would you invest your money in a firm whose managers expressed no optimism about the firm's chances of outperforming rivals?) Importantly, the Court also realizes that predatory-pricing suits are too likely to be ruses to avoid, rather than to promote, competition.

Some state courts, too, have grown more sophisticated in their predation analyses. For example, in *Wal-Mart* the Arkansas Supreme Court overturned a trial-court ruling in which Wal-Mart was found to have priced predatorily.9 In reversing the trial court, Arkansas's high court found that Wal-Mart's admittedly low pharmaceutical prices were competitive rather than predatory. Nevertheless, Wal-Mart's victory was narrow: the high court ruled in Wal-Mart's favor by 4 to 3.

A RESUSCITATION OF ACTIVE GOVERNMENT ATTACKS ON PREDATORY PRICING?

Wal-Mart's slim victory reflects the current trend in the economics of predation. Whereas economists and many courts have generally agreed, at least since the mid-1980s, that predatory pricing is so rare that it warrants little concern, this consensus may now begin to dissolve. The solvent is a new breed of theorists who insist that Chicago School scholars do not appreciate the extent to which business people behave "strategically." This new breed of theorists argues that the conventional supply-and-demand analysis of Chicago takes inadequate account of all the clever and future-oriented "strategic" maneuvers available to firms seeking monopoly power. For example, while Chicago theory concludes that predatory pricing won't occur because the predator must endure larger losses than the prey, the new theory insists that many predators are willing to incur these larger losses today in

Predatory-pricing suits are too likely to be ruses to avoid, rather than to promote, competition.

This new breed of theorists argues that the Chicago School takes inadequate account of all the clever strategic moves available to would-be monopolists.

The risk here is that the law will eventually follow this new strategic economics literature, abandoning its well-founded skepticism of predatory-pricing claims.

Legal attacks
on strategic
predatory
pricing would
necessarily be
accompanied by
legal attacks on
legitimate price
cutting.

order to build a reputation as an aggressive price cutter. As soon as rivals and potential entrants learn how very aggressive the predator is, rivals and entrants will learn not to undercut the predator's monopoly prices.

The risk here is that the law will eventually follow this new strategic economics literature, abandoning its well-founded skepticism of predatory-pricing claims. Recent court suspicion of predatory-pricing claims rests solidly on the Chicago-style supply-and-demand reasoning responsible for the economic consensus of the 1980s that predatory pricing is no more real than the Loch Ness monster. But if some economists become increasingly enthralled with strategic predation stories, there is a genuine hazard that courts in the future will use these new theories to renew attacks on firms that energetically lower prices and improve product quality.

Despite the theoretical wizardry of "strategic economists," their attempts to justify vigorous government and court action against alleged predatory pricing fail. They overestimate the institutional competence of courts to distinguish competitive price cuts from "predatory" price cuts. That is, even if clever strategizing by aspiring monopolists often cleared straight paths to monopoly, it is impossible for courts to distinguish legitimate price cutting of the kind the antitrust laws are supposed to promote from price cutting that portends future monopolization. Legal attacks on strategic predatory pricing would necessarily be accompanied by legal attacks on legitimate price cutting. Unless there is good reason to believe that most price cutting leads to monopolization, a dubious proposition, to say the least, enabling courts and antitrust agencies to police against predatory pricing surely promises to do more harm than good to competition and consumers.

But a more fundamental problem mars the strategic predation literature: its proponents are insufficiently sensitive to the role of strategic behaviors! Once the full panoply of strategic behaviors are accounted for, it turns out that the conclusions drawn from tried-and-true Chicago microeconomics are right on the money. Predatory pricing is a futile means of monopolizing markets.

All Firms Have Incentives to Maintain Competitive Suppliers and Buyers

The market can self-police against monopolization. Every market is chock-full of firms with incentives to ensure that competition prevails. Every firm is a buyer wanting its suppliers to behave competitively, and every firm is a seller wanting its customers to behave competitively. To the extent that firms can act on those incentives, there is no need for administrative agencies and courts to police against attempted monopolization. Insufficient recognition has been paid to the strategies available to firms operating either upstream (as suppliers) or downstream (as buyers) from would-be monopolists to police against monopolization. This paper attempts to remedy that oversight.

We argue also that the plausibility of many claims of predatory pricing can be gauged by looking at who does — and who does not — complain about alleged threats of monopolization. Failure of suppliers or buyers to protest against alleged attempted monopolization is much like the dog in the Sherlock Holmes mystery that didn't bark. The absence of such protests is strong evidence that the defendant's allegedly predatory activities are, in fact, pro-competitive.¹¹

It is easy to understand why buyers want their suppliers to be competitive. Monopolists charge higher prices than competitors. As a consequence, buyers can afford fewer units. Monopoly causes buyers to pay more per unit and to get fewer units. But it is no less true that suppliers want their customers to be competitive. For example, soft-drink manufacturers' demand for high-fructose corn syrup (used as a sweetener) is greater the larger the volume of soft-drinks sold to consumers. If Coca-Cola and Pepsi compete vigorously against each other, soft-drink prices will remain low and consumers will buy more soft-drinks than if Coca-Cola and Pepsi successfully collude to avoid competing against each other. Monopolization of the soft-drink market translates into lower demand for high-fructose corn syrup. Archer-Daniels-Midland and other suppliers of high-fructose corn syrup thus earn lower profits as a result of the downstream monopolization of the soft-drink market. Thus, these suppliers have an interest in keeping soft-drink manufacturing competitive.

The upshot is that while each firm would like to have a monopoly of *its* stage of the production process, such monopolies hurt all firms elsewhere in the production process. Whether monopolist or competitor, every firm has an interest in keeping upstream suppliers and downstream buyers competitive.

ONE MONOPOLIST IS BETTER THAN TWO

It is important also to bear in mind the following two well-established and related economic findings. First, if there *is* monopoly power anywhere in the production process, there is only one price paid by final consumers that maximizes monopoly profits.¹² The second point is what economists call the "successive-monopoly problem." The successive-monopoly problem exists whenever two or more firms in a production process have monopoly power and each charges monopoly prices. Under these circumstances (e.g., when a raw-material monopolist and a downstream manufacturer are both charging monopoly prices) the price paid by consumers of the final output will be higher than the price that maximizes aggregate monopoly profits.¹³ In other words, in any production process involving two or more stages of production, charging monopoly prices at more than one of those stages results in lower total monopoly profits earned by producers than if a monopoly price is charged at one and only one stage of production.

Failure of suppliers or buyers to protest against alleged attempted monopolization is much like the dog in the Sherlock Holmes mystery that didn't bark.

For example, let's say that soft-drink retailing is monopolized through successful predatory-pricing by Coke against Pepsi and all other rivals. Once Coke is the soft-drink monopolist, Coke charges retailers a monopoly price for its drink. Let's further assume that all of Coke's suppliers — from raw-material extractors through intermediate-input producers — remain competitive. Under these conditions (which are the best imaginable for Coca-Cola shareholders), Coke's monopoly profits will be, say, \$10 million annually.

Every firm has an interest in keeping upstream suppliers and downstream buyers competitive.

Now, though, suppose that the sweetener market also becomes monopolized, so that there are now two stages of production in the soft-drink market that are monopolized: the market for sweetener and the market for the final cola product. When the sweetener market becomes monopolized, Coca-Cola's monopoly profits fall, even though it still enjoys a monopoly in the final cola market. The reason for the fall is that the price of one of Coca-Cola's inputs rises due to upstream monopolization. Coke's costs increase; hence, it produces and sells less of its drink than it did before the sweetener market was monopolized. Moreover, the fall in Coke's monopoly profits will be greater than the rise in monopoly profits earned by the sweetener monopolist. Coke's annual monopoly profits may fall from \$10 million to, say, \$6 million. If so, we can be sure that the monopoly profits earned by the sweetener monopolist are less than \$4 million.

To understand more clearly economists' finding that monopolies at two or more stages of production result in lower total monopoly profits than does monopoly at only a single stage, it is helpful to think of a tollroad. Imagine that you own the only road linking Washington to Baltimore. Anyone who wants to travel by car the fifty miles between these two cities must use your road. Further suppose that profits are maximized by charging a toll of \$10 for each one-way trip—i.e., \$10 per trip is the monopoly price.¹⁴ Any toll lower or higher than \$10 generates lower revenues than does a toll of \$10. Putting aside the time and administrative costs of actually paying and collecting the toll, it makes no difference at how many points you collect the toll. If \$10 is the profit-maximizing toll, you can collect \$10 all at once from each driver at the beginning or at the end of the journey. Or you can collect \$5 at the beginning and \$5 at the end. Or you can collect \$2 at each of five toll booths along the way. Or you can collect \$1 at each of 10 toll booths along the way. Regardless of the number of booths you use to collect tolls, you have an incentive to ensure that the total amount collected per driver per trip is no less and no more than \$10.

Now imagine that the tollroad has two owners. Someone owns the first 25-mile stretch, while the other person owns the second 25-mile stretch. Because the number of owners of the tollroad doesn't affect drivers' demands to use the tollroad, if \$10 is the profit-maximizing toll when the tollroad has a single owner, then \$10 is the profit-maximizing toll when the tollroad has multiple owners. With two different owners, joint profits will be maximized

if each owner charges a toll of \$5 per driver — or if only one owner charges \$10 and the other owner charges nothing. Either way, drivers will pay \$10 for each one-way trip between Washington and Baltimore. Any combination of tolls adding up to something other than \$10 per one-way trip will reduce the joint profits earned by the road's owners.

But now suppose that the owner of the second 25-mile stretch of the tollroad raises his toll to \$6 while the owner of the other half of the road keeps his toll set at \$5. The total cost per trip to each driver of using this road rises to \$11, which causes too few drivers to use the road. Joint profits earned on the road thus fall below what those profits would be if the sum of the two tolls per driver equalled \$10. In short, by charging a toll that causes the total toll per one-way trip to be greater than \$10, owner #2 takes money out of owner #1's pocket. Moreover, we know that whatever increase in profits owner #2 enjoys by charging a price of \$6 rather than \$5, this increase is smaller than the decrease in owner #1's profits. If owner #2's toll hike did not cause owner #1 to lose more than owner #2 gained, then a joint toll of \$10 would not be the profit-maximizing toll. But because the joint profit-maximizing toll is \$10, any action causing drivers to pay a total toll of more than \$10 per one-way trip reduces the total joint profits earned by the two road owners. Clearly, owner #1 has incentives to compel owner #2 to lower his toll to \$5.

Thus, both monopolists and competitors want their suppliers and buyers to be competitive. But what practical strategies might firms pursue to thwart monopolization at other stages of production? A number of such strategies are available. And even *more* would be available were it not for perverse prohibitions created by antitrust laws. We use the Wal-Mart case as an example to show how the market might self-police against monopolization.

If Wal-Mart monopolized pharmaceutical retailing, drug makers would suffer lower profits.

AN EXAMPLE USING PHARMACEUTICAL RETAILING

We begin this example by initially making the extreme assumption that Wal-Mart has already monopolized retail pharmacy sales. Consumers, obviously, would suffer. But so, too, would pharmaceutical suppliers. Because monopolist Wal-Mart would raise retail prices to monopoly levels, fewer pharmaceuticals would be sold at retail than would be sold if retailing were competitive. Consequently, wholesale demand for pharmaceuticals would be lower than otherwise. This reduced demand snatches money directly out of the pockets of pharmaceutical suppliers. Surely these suppliers will not sit by idly as Wal-Mart's monopoly eats into their profits.

How might Wal-Mart's suppliers undermine Wal-Mart's monopoly? Several strategies are available. Pharmaceutical suppliers can enter the retail pharmacy trade and compete head to head with Wal-Mart, either by opening their own new retail establishments, by purchasing existing retailers, or by

In the face of new entry, Wal-Mart would have no choice but to lower its retail prices to competitive levels.

retailing pharmaceutical items directly to consumers through catalogues or the internet. Similarly, these suppliers can finance the entry of other retail pharmacies into Wal-Mart's territory. Either way, in the face of new entry, Wal-Mart would have no choice but to lower its retail prices to competitive levels.

Some suppliers — those who enjoy some monopoly power (say, because of a patent or because of well-developed brand-name recognition) — also can force Wal-Mart to behave competitively by imposing sales quotas on Wal-Mart. If a supplier is the exclusive producer of a pharmaceutical item crucial to Wal-Mart's retail pharmacy business (for example, Bayer aspirin or a patented drug that all self-respecting, full-service pharmacies carry), this supplier may be able to contractually insist that Wal-Mart sell some minimum number of units of the item every month. The supplier can set this minimum number at the competitive level. To sell this competitive quantity, Wal-Mart will have to lower the price it charges for this item down to what the price would be if Wal-Mart confronted competitors. Failure of Wal-Mart to meet its sales quota allows the supplier to stop supplying Wal-Mart. If the supplier's product is critical enough to Wal-Mart's retail success, and if this product is unavailable from other suppliers, Wal-Mart has incentive to meet the sales quota, lest it lose the opportunity to carry an important retail item.

To ask how suppliers might undermine an existing monopoly, however, is to overlook the most important avenues open to suppliers to keep the retail pharmacy market competitive. Wal-Mart's suppliers have an interest in stopping the monopoly *before* it materializes.

Suppose, for example, that the Merck pharmaceutical company suspects that Wal-Mart's low retail prices will eventually generate a Wal-Mart monopoly in the retail pharmacy market. Merck can refuse to deal with Wal-Mart as long as Wal-Mart charges prices that Merck feels are too low. Because Wal-Mart does not yet have a monopoly, Merck suffers no significant loss of sales by refusing to distribute through Wal-Mart: Merck will increase the amount of pharmaceuticals it distributes through Wal-Mart's rival pharmacies. Buyers who otherwise would have purchased Merck products from Wal-Mart purchase these products instead from other pharmacies. Wal-Mart's rivals are helped — they now have more business — while Wal-Mart suffers from the loss of Merck supplies. Wal-Mart's ability to predatorily price rivals out of business is curtailed. 17

Merck can avoid retail monopolization also by helping to finance the efforts of Wal-Mart's rivals to survive a predatory-price war. By lending monies or guaranteeing bank loans to beleaguered retail pharmacies, Merck diminishes Wal-Mart's prospects for successful monopolization. As Robert Bork points out, the prey "would merely have to show the predator his new line of credit to dissuade the predator from attacking." A retail pharmacy that shows Wal-Mart a contract pledging monies from Merck (or from some

If even one of
Wal-Mart's rivals
has the financial
wherewithal to
successfully fight
a predatory-price
war with WalMart, Wal-Mart
will never
monopolize its
market.

other sound lender) will deflate Wal-Mart's enthusiasm for continuing a predatory price war. After all, if even one of Wal-Mart's rivals has the financial wherewithal to successfully fight a predatory-price war with Wal-Mart, Wal-Mart will never monopolize its market.

At the very least, if Wal-Mart were really a threat to monopolize pharmaceutical retailing, Merck and other Wal-Mart suppliers have incentives under existing antitrust laws to assist in legal actions against Wal-Mart. Merck could support a predatory-pricing suit filed by another private party or by the government by offering to testify about the monopolizing dangers of Wal-Mart's pricing policy, and, perhaps, by giving evidence that prices charged by Wal-Mart are below the wholesale prices Merck charges Wal-Mart. But in the actual suit in Wal-Mart, the trial record contains no indication that any pharmaceutical supplier uttered a word of complaint against Wal-Mart's pricing practices. No pharmaceutical supplier even bothered to submit an *amicus* brief supporting the plaintiffs' case against Wal-Mart. Dogs that should have barked, if Wal-Mart's actions presaged monopoly, remained tellingly silent. Although it is impossible to say for certain why no supplier of Wal-Mart assisted in the preparation and prosecution of the plaintiffs' case, the silence of suppliers at least suggests that suppliers did not believe that Wal-Mart's pricing practices threatened monopolization.

PERVERSE EFFECTS OF ANTITRUST LAWS

Although ostensibly designed to promote competition, antitrust laws are riddled with doctrines that prevent self-policing by market participants against attempted monopolization. Perhaps the most notorious antitrust doctrine in this regard is the *per se* prohibition on minimum resale price maintenance (minimum rpm). In place since 1911, this prohibition bans contracts between manufacturers and distributors under which distributors agree not to resell the manufacturer's goods to consumers at prices below some minimum.¹⁹ On one side, supporters of the ban insist that minimum rpm hurts consumers by promoting collusion either among manufacturers or distributors.²⁰ On the other side, opponents of the ban argue that minimum rpm promotes consumer well-being by giving retailers appropriate incentives to market goods.²¹ This latter argument enjoys the great bulk of theoretical and empirical support.²²

Yet another reason, never before recognized, justifies overturning the ban on minimum rpm. Minimum rpm contracts would be effective devices for suppliers to use against downstream firms suspected of monopolizing distribution. If Merck suspects that Wal-Mart is pricing some Merck pharmaceuticals below cost in an attempt to monopolize retail distribution, and if Merck fears that Wal-Mart's pricing policy might actually create a retail monopoly, Merck could use minimum rpm to prevent Wal-Mart from

The silence of suppliers in this case against Wal-Mart suggests that suppliers did not believe that Wal-Mart's pricing practices threatened monopolization.

reselling Merck products below cost. The minimum resale price specified in the contract would be high enough to ensure that Wal-Mart's rivals earn an adequate return on this product. Because minimum rpm contracts are now illegal, however, this potential weapon in policing against downstream monopolization is unavailable to suppliers.

Minimum rpm contracts would be effective devices for suppliers to use against downstream firms suspected of monopolizing distribution.

Even sillier than the ban on minimum rpm is the ban on *maximum* rpm—a ban prohibiting manufacturers from contractually capping the retail prices charged by their distributors. Not only does the law prevent suppliers from negotiating contracts in which distributors agree not to lower resale prices below some minimum, the law outlaws contracts in which distributors agree not to raise resale prices *above* some maximum! The *per se* ban on maximum rpm has been roundly and rightly criticized as serving not even an ostensibly good purpose.²³ (How can contracts that keep prices down possibly harm consumers?) And the benefits to consumers of maximum rpm contracts are obvious. Manufacturers who find it efficient to grant exclusive territories to distributors—such as newspaper companies that allocate each of their delivery routes to one and only one deliverer at a time—may find that these deliverers who face no competition will jack resale prices up to monopoly levels. Maximum rpm contracts are a harmless way for manufacturers to prevent their distributors from charging monopoly prices.

This same logic suggests in addition that maximum rpm contracts would deter monopolization attempts by distributors. If maximum rpm contracts were legal and enforceable, a distributor would have little to gain by even a successful predatory attack on rivals. Once the predator has secured a monopoly, manufacturers have incentives to insist on maximum rpm contracts with the monopoly distributor. Because such contracts ensure that the monopoly distributor makes no monopoly profits, there is no reason in the first place for any distributor to predate on rival distributors. The very possibility of maximum rpm deters downstream distributors from predatory attacks against rivals.

Rpm is not the only currently illegal business tactic that could be used, were it not illegal, to police against monopolization. Price discrimination also can make efforts to monopolize more difficult. Robert Bork saw this possibility clearly when he wrote that "sellers who saw a monopoly developing at the customer level would offer the lower prices to other customers to prevent that outcome." Unfortunately, the Robinson-Patman Act subjects price-discriminating firms to the risk of being dragged into court on antitrust grounds. Despite the Robinson-Patman Act's cost-justification defense, selling the same goods at different prices to different customers remains legally risky even in the face of different costs of servicing these different customers. Because the Robinson-Patman Act contains no "protecting-against-downstream-monopolization" defense, it would be near impossible

for a price-discriminating seller to defend against a charge of violating the

If maximum rpm contracts were legal, a distributor would have little to gain by even a successful predatory attack on rivals.

Act on the grounds that the seller's different prices are meant to increase the costs of downstream monopolization.

If Merck suspects Wal-Mart of attempted retail monopolization, Merck might — in a world without the Robinson-Patman Act — raise the wholesale price it charges Wal-Mart above the price it charges Wal-Mart's rivals. To predatorily price against rivals by driving the retail prices of Merck products below costs, Wal-Mart must be prepared to lose even more than it would if it paid the same wholesale prices paid by rivals. Not only must Wal-Mart sell more output than rivals at below-cost prices; in addition, Wal-Mart's per-unit losses are higher than rivals' per-unit losses because Wal-Mart pays higher wholesale prices for the items.

tion can make efforts to monopolize more difficult.

Price discrimina-

Unfortunately, the Robinson-Patman Act's restrictions on price discrimination may well make a supplier leery of charging different prices to different buyers. This leeriness, to the degree that it exists, is yet another cost of an antitrust statute notorious for its inefficiency.²⁶

THE GENERAL LESSONS

The general lesson is that markets themselves contain incentives and opportunities for firms to police against monopolization. Such opportunities would be greater were it not for existing antitrust laws.

Consumers can rely much more confidently upon policing by market participants than upon policing by courts and administrative agencies. Firms have every incentive to accurately assess the likely future consequences of actions taken by their buyers and suppliers. Courts and enforcement bureaucracies have no such incentives and no special skills allowing them to determine when price cuts will and will not likely lead to monopolies. Although rivals of price-cutting firms have incentives to accurately assess the consequences of price cuts, rivals also have every incentive to misrepresent those consequences. Eliminating the ability of rivals to use antitrust law as a means of stifling competition will force them to compete in ways that promote consumer well-being: cutting prices, improving efficiency, and enhancing product quality.

Lamentably, too many antitrust cases and too many works of antitrust scholarship still sound the implicit theme that courts and bureaucrats are better informed about industrial and commercial matters than are entrepreneurs, investors, and firm managers. Nothing could be more distant from the truth.

Modern industrial society is marked by an astonishingly specialized division of labor and division of knowledge. Each of us specializes in only a tiny fraction of all the tasks that daily are done to keep the economy Courts and enforcement bureaucracies have no incentives and no special skills allowing them to determine when price cuts will and will not likely lead to monopolies.

functioning. This intricate specialization is immensely desirable. Adam Smith's lesson in *The Wealth of Nations* is that a people grow wealthier the more they specialize and trade. Nobel prize-winning economist F.A. Hayek expanded Smith's point by noting that a wealthy society is marked by a division of knowledge no less than — in fact, in proportion to — its division of labor.²⁷ The grocer knows nothing about making automobiles, and yet he drives a car regularly; the GM plant manager knows nothing about growing food and its reliable distribution, and yet he consumes groceries regularly. It would be pointless for either of these persons to second-guess the business decisions made by the other. If the grocer had better knowledge than the GM plant manager on how to operate an automobile-manufacturing facility, the grocer would profit by becoming a manager of such a plant and shareholders of auto firms would profit by hiring him as a manager. Likewise for the GM plant manager with regard to grocery retailing.

It is pure fantasy to suppose that judges can become adequately informed about the multitudes of details and nuances that characterize even the simplest of industries.

What is true for grocers, plant managers, and every other occupation in the private sector is true for government employees, including judges. Judges specialize in knowing the formal law. But even the most brilliant and hard-working judge can never learn all of this law, for it is too vast and too fluid. If judges cannot learn more than a fraction of the subject matter central to their occupations, it is pure fantasy to suppose that judges can become adequately informed about the multitudes of details and nuances that characterize even the simplest of industries. Each year the typical judge hears several dozen cases on a wide variety of topics, from run-of-the-mill criminal appeals, to philosophic First Amendment cases, to technical environmental disputes. To believe that a judge hearing an antitrust case can learn enough about the industry to render an informed opinion on whether or not a firm's low prices are a justifiable competitive tactic or an unjustifiable prologue to monopoly is to believe the impossible.²⁹

We rely upon markets — and upon the voluntary exchange of private property rights central to them — precisely because the knowledge and incentives of central planners and other government agents are far inferior to the knowledge and incentives possessed collectively by market participants. This reliance upon the market is what economist Harold Demsetz calls "the trust behind antitrust." If antitrust is meant to safeguard the free-market economy, we must generally trust the free market to work — otherwise there is no good reason to safeguard the free-market economy. Essential to a free market is reliance upon the pricing and investment decisions made by owners of private property. No one seriously claims that private owners *always* make proper decisions regarding the use of their resources, but serious scholars do insist that no one can be trusted *more* than owners consistently to make better decisions regarding the use of property. Judges are not business people.

OTHER MISGUIDED ANTITRUST INVESTIGATIONS

Like the case against Wal-Mart, a number of other antitrust cases are implicitly built upon the premise that business people don't know enough to promote their own interests. The much-publicized government attack on Microsoft, as well as a less-publicized lawsuit against book publishers, are only two such cases.

Microsoft Is No Monopolist

Consider first Microsoft's recent travails with the Department of Justice and the federal courts. A common complaint against Microsoft is that it enjoys monopoly power today despite the fact that its software is clearly inferior to rivals' offerings.

The argument against Microsoft goes like this: Microsoft enjoys monopoly dominance today only because, several years ago, IBM chose to use Microsoft's MS-DOS as the operating-system software for IBM personal computers. Therefore, IBM's early leadership in the personal-computer market propelled Microsoft into market dominance despite the fact that Microsoft's products were not markedly superior to those of its rivals. More importantly, say Microsoft's critics, because of so-called "network economies," Microsoft's dominance in operating-system software is unchallengeable.

A network economy exists whenever the value to someone of using a particular product (here, a brand of operating-system software) is higher the greater the number of other people using that same product. Just as people want to have their telephones connected to a telephone network on which everyone else is connected, so, too, do computer users want to use the same operating system used by other computer users. (Applications software programmed to run on non-MS-DOS operating systems generally cannot be run on MS-DOS systems.) Microsoft's critics complain that because its use by IBM gave Microsoft's operating system a head start over other operating systems, too many people are today "locked in" to Microsoft's products. It pays no individual to switch to superior operating systems even though almost everyone would be made better off by such a switch.

There is plenty wrong with the charges leveled against Microsoft. Many fallacies — especially those centered on alleged network economies — have been unmasked by economists Stan Liebowitz and Stephen Margolis.³¹ Liebowitz and Margolis convincingly show that neither theory nor history supports allegations that network economies shield inefficient firms from competition posed by superior products. After all, entrepreneurs who devise cost-effective ways for consumers to switch from less-efficient to more-efficient networks profit handsomely, and handsome profits have a

A number of antitrust cases are built upon the premise that business people don't know enough to promote their own interests.

Neither theory nor history supports allegations that network economies shield inefficient firms from competition.

steadfast reputation for inspiring ingenious solutions. The switch during the 1980s from vinyl LPs to compact discs is one example of a switch in networks from one that was less efficient (LPs) to one that was more efficient (CDs). (The research of Liebowitz and Margolis reveals that all the popular examples of allegedly inferior network standards being inefficiently "lockedin" are bogus. Even the QWERTY keyboard and the VHS standard for videocassettes — routinely cited as examples of inefficient network standards with which consumers are now stuck — are, in fact, superior to available alternatives.)

One other point, however, has not to our knowledge yet been raised in Microsoft's defense: all who allege that Microsoft possesses unwarranted market power assume that IBM was suicidal or stupid. Probably neither assumption is valid. Certainly neither assumption provides a sensible basis for antitrust intervention.

Back when IBM chose to use MS-DOS in its first generation of personal computers, it had every interest in avoiding the creation of monopoly power among its suppliers, such as makers of operating-system software. Computers will not run without operating-system software. The higher the price (or the lower the quality) of operating-system software, the more costly (or less worthwhile) it is for consumers to use personal computers. If Microsoft charges monopoly prices for its operating-system software, or if it produces shoddy or consumer-unfriendly merchandise, consumers won't buy as many IBM computers.

IBM unquestionably had a profit incentive to avoid a Microsoft monopoly. Therefore, when IBM chose to use MS-DOS, it makes sense to presume that IBM was aware of whatever "market power" it might help create for Microsoft. If choosing only Microsoft to supply its operating-system software created some market power for Microsoft, IBM obviously was willing to pay this price in exchange for the greater benefits that IBM anticipated from using only Microsoft as a supplier.³²

Of course, it is fashionable in the mid-1990s to point to serious errors committed by IBM in the personal-computer market during the past several years. IBM may well have seriously miscalculated the consequences of putting so many of its eggs in Microsoft's basket. Hindsight is always less foggy than foresight. But the relevant question for purposes of devising sensible public policy is: Who has stronger incentives to make the correct decisions—profit-seeking firms familiar with the industry, or judges, juries, and bureaucrats with no particular skills or insight into the industry in question? The presumption must be that IBM was in the best position, and had the most robust incentives, to make the right decision regarding any contracts it signed with its suppliers.

Back when IBM chose to use MS-DOS in its first generation of computers, it had every interest in avoiding the creation of monopoly power among its suppliers.

It doesn't do to argue that courts can later clean up any mistakes revealed by the passage of time. First, identifying a mistake is typically not easy, especially for an institution with no particular business acumen such as a court. What look like mistakes to some people often appear to others to be nothing more than unavoidable costs of securing some benefits. Second, if courts get into the business of regularly cleaning up the ugly consequences of mistaken business decisions — and making the heroic assumption that courts do this job effectively — the incentives of firms to make sound decisions in the first place will fall. It is precisely because IBM stands to suffer the consequences of its poor business decisions (and to reap the rewards of good decisions) that we expect IBM to exert great effort to minimize such errors.

Contrary to popular perception, it isn't necessarily true that IBM's decision to exclusively use MS-DOS created significant market power for Microsoft. In an industry ceaselessly churning with major changes, it is highly questionable that any advantages a firm gains initially will enable that firm to rest on its laurels in future years. It is quite likely, then, that Microsoft's continued high market share and high earnings reflect superior performance rather than monopoly power — a likelihood further enhanced by the fact that no customers of Microsoft were among those complaining to antitrust regulators about Microsoft's alleged monopolizing ways. Significantly, Federal Trade Commission (FTC) economist Robert Levinson, who studied the lengthy government investigation of Microsoft, reports that "none of the press reports I have seen during the four years of government investigation suggest *consumer* discontent with any of the allegedly anticompetitive pricing methods or other policies pursued by Microsoft." Once again, it is informative that dogs aren't barking.

The bottom line is that if there were no benefits to using only Microsoft's operating-system software, IBM likely would not have contracted exclusively with Microsoft — just as it is likely today that all computer makers have powerful incentives to do all they can to keep the software market competitive.

Don't Book on Monopoly

Issues in another recent case are clarified by recognizing suppliers' interests in competitive downstream markets. Last year, the American Booksellers' Association (ABA), which represents independent booksellers, sued four large book publishers (Houghton Mifflin Co., Penguin USA, Rutledge Hill Press, and St. Martin's Press). Just as the FTC did in a very similar case brought against publishers in 1988 (and settled in 1992), the ABA alleges that the defendant book publishers are violating the Robinson-Patman Act by granting discounts to large chain book retailers. These discounts, in turn, are said to promote monopolization of book retailing by driving smaller independently owned bookstores out of business.³⁴ In brief,

It is quite likely that Microsoft's continued high market share and high earnings reflect superior performance rather than monopoly power.

the ABA rather unbelievably contends that publishers are promoting book-retailing monopolies!

Far from
assisting in the
creation of retail
monopoly,
publishers would
take steps to
thwart all
genuine threats
of retail
monopolization
in the book trade.

Of course, there's no way in the world that book publishers would want book retailing to be monopolized. Indeed, far from assisting in the creation of retail monopoly, publishers would take steps to thwart all genuine threats of retail monopolization in the book trade. A monopoly in book retailing means higher book prices for consumers which, in turn, means fewer books sold and lower profits in publishers' pockets. This is not a result that publishers want. Therefore, the fact that publishers charge lower wholesale prices to large book-retailing chains than are charged to smaller independent book sellers must reflect some benefit that publishers receive from these large retailing chains that are not received from the smaller retailers. Perhaps there are economies of scale in selling and shipping in large volume, so that the unit cost of books is lower the greater the number of books sold. Perhaps the large chains provide more advertising and other marketing services for books than are provided by the smaller book sellers. There are any number of sound reasons why publishers might find it less costly per book sold to do business with large retailers than with smaller retailers. What emphatically does not make sense is the plaintiffs' argument implying that book publishers are accomplices to monopolization of the retail book trade.

CONCLUSION

Scholars and judges broadly agree that antitrust should be used to protect consumers by guarding against inefficient monopolization. Scholars and judges also broadly agree that over-vigorous use of antitrust subverts, rather than promotes, competition. As Justice Lewis Powell wisely observed in a 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.³⁵

The market is full of incentives for suppliers, rivals, and customers to ensure that predatory-pricing schemes fail.

Unfortunately, private plaintiffs and government agencies often misuse antitrust laws to stymie competition by falsely accusing rivals of attempted monopolization when rivals are guilty of nothing more than satisfying consumer demands at low prices.³⁶ The many past examples of this practice counsel against active court supervision of firms' low-price policies. When it is further recognized that the market itself is full of incentives for suppliers, rivals, and customers to ensure that predatory-pricing schemes fail, the case for allowing suits that allege predatory pricing is too weak to take seriously. Cutting prices (in the absence of contractual agreements with suppliers not to do so) should be *per se* legal.³⁷

ABOUT THE AUTHORS

Donald J. Boudreaux is Associate Professor of Law and Economics at Clemson University and Research Scholar at the Competitive Enterprise Institute. From 1985 to 1990, he was Assistant Professor of Economics at George Mason University. His antitrust research has appeared, among other places, in the Supreme Court Economic Review, Southern Economic Journal, Regulation, Hofstra Law Review, Journal of Institutional and Theoretical Economics. He completed this paper while visiting the Cornell Law School as a John M. Olin Research Fellow.

Andrew N. Kleit is Associate Professor of Economics at Louisiana State University. His Ph.D. in economics is from Yale University. Prior to his position at LSU, he was Economic Advisor to the Director of the Bureau of Competition at the Federal Trade Commission. His antitrust articles have appeared in such publications as *Journal of Law and Economics, Southern Economic Journal*, and the *Texas Law Review*.

We thank Wayne Crews, Bill Kovacic, Dwight Lee, John Lopatka, Tom Miller, Bruce Yandle, and participants in the Austrian Economics Colloquium at New York University for constructive discussion and comments. Boudreaux also thanks the John M. Olin program at the Cornell Law School for having him as a visiting scholar during the time this paper was completed.

ENDNOTES

¹319 Ark 214; 891 S.W.2d 30 (1995).

²The classic paper in this literature remains John McGee, "Predatory Price Cutting: The Standard Oil (N.J.) Case," 1 *Journal of Law and Economics* 137-169 (October 1958).

³See, e.g., *id.*; John S. McGee, "Predatory Pricing Revisited," 23 *Journal of Law and Economics* 289-330 (October 1980); Robert H. Bork, *The Antitrust Paradox* (New York: Basic Books, 1978); Frank H. Easterbrook, "Predatory Strategies and Counterstrategies," 48 *University of Chicago Law Review* 263-337 (Spring 1981); R. Mark Isaac & Vernon L. Smith, "In Search of Predatory Pricing," 93 *Journal of Political Economy* 320-345 (April 1985); and Kenneth G. Elzinga & David E. Mills, "Testing for Predation: Is Recoupment Feasible?" 34 *Antitrust Bulletin* 869-893 (Winter 1989).

⁵Bork, *supra* note 3, at 152.

⁶See Kenneth Kelly, "The Role of the Free Rider in Resale Price Maintenance: The Loch Ness Monster of Antitrust Captured," 10 *George Mason University Law Review* 27-81 (1988).

⁷Chancery Court trial record in *Wal-Mart*, p. 1634.

⁸Matsushita Electric Industrial Co., Ltd. v. Zenith Radio Corp., et al., 106 S.Ct. 1348 (1986); and Brooke Group, Ltd. v. Brown & Williamson Tobacco Corp., 113 S.Ct. 2578 (1993).

⁹Supra note 1.

¹⁰See, e.g., Jonathan B. Baker, "Recent Developments in Economics that Challenge Chicago School Views," 58 *Antitrust Law Journal* 645-655 (1989); and Steven C. Salop, "Exclusionary Vertical Restraints Law: Has Economics Mattered?" 83 *American Economic Review* 168-172 (May 1993).

¹¹In a 1990 merger case, a federal appellate court explicitly recognized the relevance of suppliers' reactions to a charge of monopolization. In *United States v. Syufy* 903 F.2d 659 (1990), the Department of Justice sued the owner of several Las Vegas movie theaters. Concerned that too many of Las Vegas's theaters were owned by a single person, the government sought to force this owner to disgorge his ownership interests in several of the theaters. The 9th U.S. Circuit Court of Appeals denied the government's request, finding that Mr. Syufy enjoyed no monopoly power despite his large share of the Las Vegas movie-exhibition market. Among the reasons cited by Judge Alex Kozinski for this finding was the fact that Mr. Syufy's suppliers did not complain about his large market share:

Perhaps the most telling evidence of Syufy's inability to set prices came from movie distributors, Syufy's supposed victims. At the trial, distributors uniformly proclaimed their satisfaction with the way the Las Vegas first-run film market operates; none complained about the license fees paid by Syufy.... Indeed, few if any of the distributors were willing to say anything to support the government's claim" [at 669].

¹²See, e.g., Joseph J. Spengler, "Vertical Integration and Antitrust Policy," 58 *Journal of Political Economy* 347-352 (August 1950).

¹³See Roger D. Blair & David L. Kaserman, *Law and Economics of Vertical Integration and Control* (Orlando, FL: Academic Press, 1983), at 31-36.

¹⁴To ease exposition, we assume that the monopolist road owner finds it too costly to price discriminate. Nothing substantial turns on this assumption.

¹⁵The possibility of a buyer keeping its supply market competitive by inducing the entry of new suppliers was recognized by a U.S. district court in *United States v. Archer-Daniels Midland, Co.*, 781 F. Supp. 1400, 1418 (S.D. Iowa, 1991). Among the reasons this court listed in support of its finding that the merger of two producers of high-fructose corn syrup would not generate monopoly power is the fact that the customers of the merged firm are primarily large and sophisticated soft-drink manufacturers. The court correctly reasoned that if the merged firm attempts to charge monopoly prices, soft-drink manufacturers would hold "out the

threat of inducing a new entrant into HFCS [high-fructose corn syrup] production and assuring the new entrant adequate volume and returns."

¹⁶Joseph Brodley argues that such strategies are risky because suppliers want to maintain good working relationships with buyers. See Joseph F. Brodley, "Antitrust Standing in Private Merger Cases: Reconciling Private Incentives and Public Enforcement Goals," 94 *Michigan Law Review* 1-110 (October 1995), at 37. While it's true that suppliers value good working relationships with buyers, it doesn't follow that suppliers will hesitate to take retaliatory actions against buyers suspected of monopolizing the downstream market. Given a choice, a supplier would surely prefer to sell to competitive buyers with whom the supplier has only cool relationships than sell to a monopoly buyer with whom the supplier has a warm relationship. After all, if buyers remain competitive, the importance to a supplier of a good relationship with any buyer is lower than in the case where the buyer is a monopolist. Moreover, if the supplier succeeds in keeping its downstream market competitive, it amasses lots of goodwill capital with those downstream firms that it helps protect from predation.

¹⁷If Wal-Mart is predatorially pricing Merck's products, Merck can limit the amounts of its product that it distributes through Wal-Mart. If Wal-Mart cannot supply all the additional demand it creates for itself through predatorially low prices on Merck pharmaceuticals, then frustrated Wal-Mart customers will shop elsewhere. Wal-Mart's rivals will not have to meet Wal-Mart's predatorially low prices on Merck pharmaceuticals.

¹⁸Bork, *supra* note 3, at 148.

¹⁹Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U.S. 373 (1911).

²⁰See, e.g., William S. Comanor, "Economics of Vertical Arrangements," in Harry First, Eleanor M. Fox, & Robert Pitofsky, eds., *Revitalizing Antitrust in its Second Century* (New York: Quorum Books, 1991); William S. Comanor, "Vertical Price Fixing, Vertical Market Restrictions, and the New Antitrust," 98 *Harvard Law Review* 983-1002 (March 1985); and Robert Pitofsky, "In Defense of Discounters: The No-Frills Case for a Per Se Rule Against Vertical Price Fixing," 71 *Georgetown Law Journal* 1487-1495 (August 1983).

²¹See, e.g., Lester G. Telser, "Why Should Manufacturers Want Fair Trade?" 3 *Journal of Law and Economics* 86-105 (October 1960); Don Boudreaux & Robert B. Ekelund, Jr., "Inframarginal Consumers and the Per Se Legality of Vertical Restraints," 17 *Hofstra Law Review* 137-158 (Fall 1988); and Kelly, *supra* note 6.

²²Id. For a careful empirical study of resale price maintenance, concluding that rpm is much more likely to benefit rather than harm consumers, see Pauline M. Ippolito, "Resale Price Maintenance: Empirical Evidence from Litigation," 34 *Journal of Law and Economics* 263-294 (October 1990). See also the longer Federal Trade Commission study from which this article is derived: Pauline M. Ippolito, *Resale Price Maintenance: Economic Evidence from Litigation* (Bureau of Economics Staff Report, Federal Trade Commission, April 1988).

²³See Roger D. Blair & David L. Kaserman, "The Albrecht Rule and Consumer Welfare: An Economic Analysis," 33 *University of Florida Law Review* 461-484 (Summer 1981); Frank H. Easterbrook, "Maximum Price Fixing," 48 *University of Chicago Law Review* 886-910 (Fall 1981).

²⁴Bork, *supra* note 3, at 390.

²⁵Bork points out that even when there is a valid cost-based justification for different prices, "the mere threat of litigation and the expense of establishing the defense, which can be considerable, will inhibit sellers from giving full recognition to cost differences. This handicaps more efficient modes of doing business and reduces or removes incentives for creating them." *Id.* at 399.

²⁶On the Robinson-Patman Act, see Marius Schwartz, "The Perverse Effects of the Robinson-Patman Act," 31 *Antitrust Bulletin* 733-757 (Fall 1986). On the Clayton Act, of which Robinson-Patman is an amendment,

- see William F. Shughart II, "Don't Revise the Clayton Act, Scrap It!," 6 Cato Journal 925-932 (Winter 1987).
- ²⁷F.A. Hayek, "The Use of Knowledge in Society," in F.A. Hayek, *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948).
- ²⁸See Leonard Read, "I, Pencil," *The Freeman* (1956).
- ²⁹See, e.g., Frank H. Easterbrook, "The Limits of Antitrust," 63 *Texas Law Review* 1-40 (August 1984), and Easterbrook, "Knowledge and Ignorance in Antitrust," in Thomas Jorde & David Teece, *Antitrust, Innovation, and Competitiveness* (New York: Oxford University Press, 1992). We suggest that any judge who generally possesses better insight than market investors into the nature and likely outcome of industry pricing practices could make a good deal of money by resigning his or her seat on the bench and becoming a full-time investor.
- ³⁰Harold Demsetz, "The Trust Behind Antitrust," in Eleanor M. Fox & James T. Halverson, eds, *Industrial Concentration and the Market System* (Chicago: A.B.A., 1979).
- ³¹See S. J. Liebowitz & Stephen E. Margolis, "The Fable of the Keys," 33 *Journal of Law and Economics* 1-25 (April 1990); and S.J. Liebowitz & Stephen E. Margolis, "Path Dependence, Lock-In, and History," 11 *Journal of Law, Economics, and Organization* 205-226 (April 1995). Professor Liebowitz's network-economies web page can be found at http://www.pub.utdallas.edu/-liebowit/
- ³²In the language of economics, IBM internalized the expected costs of Microsoft monopoly power.
- ³³Robert J. Levinson, "Efficiency Lost? The *Microsoft* Consent Decree," in Malcolm Coate and Andrew N. Kleit, eds. *Competition Policy Enforcement: The Economics of the Antitrust Process*, forthcoming 1996; original emphasis.
- ³⁴For a good discussion of this lawsuit, see Nick Gillespie, "Borders Patrol," *Reason*, July 1995, at 37-41.
- ³⁵Matsushita, *supra* note 8, at 1360.
- ³⁶See William F. Shughart II, *The Political Economy of Antitrust* (New York: Quorum Books, 1990); and Fred S. McChesney and William F. Shughart II, eds., *The Causes and Consequences of Antitrust: The Public Choice Perspective* (Chicago: University of Chicago Press, 1995).
- ³⁷See Easterbrook, *supra* note 3; and Donald J. Boudreaux, Kenneth G. Elzinga, & David E. Mills, "The Supreme Court's Predation Odyssey: From Fruit Pies to Cigarettes," 4 *Supreme Court Economic Review* 57-93 (1995).