August 9, 2013 <u>Address correspondence to:</u> ramseyer@law.harvard.edu erasmuse@indiana.org john.shepard.wiley.jr@gmail.com

Goal: 5000-7500 words Currently: 6502 words

Exclusive Dealing: Before Bork, and Beyond

J. Mark Ramseyer, Eric B. Rasmusen, and John Shepherd Wiley, Jr.*

Abstract:

Antitrust scholars have come to accept the basic ideas about exclusive dealing that Bork articulated in *The Antitrust Paradox*. Indeed, they have even extended his list of reasons why exclusive dealing can promote economic efficiency. Yet they have also taken up his challenge to explain how exclusive dealing could possibly cause harm, and have modelled a variety of special cases where it does. Some (albeit not all) of these are sufficiently plausible to be useful to prosecutors and judges.

* J. Mark Ramseyer, Mitsubishi Professor, Harvard Law School, Cambridge, Massachusetts 02138, 617-496-4878; Eric B. Rasmusen, Dan R. and Catherine M. Dalton Professor, Kelley School of Business, Indiana University, Bloomington, Indiana 47405-1701, erasmuse@indiana.edu, 812-855-9219; John Shepherd Wiley, Jr., john.shepard.wiley.jr@gmail.com.

We would like to thank xxx for useful comments.

1. Introduction

In an "exclusive dealing" contract, one party agrees to trade only with the other.¹ Courts have never banned such contracts outright. In the years before <u>The Antitrust Paradox</u>, however, they came perilously close.

Robert Bork changed all that. As profoundly as any book ever changes the law, his <u>Antitrust Paradox</u> changed the way judges handled exclusive contracts. Before Bork, they routinely held the deals illegal. After Bork, they routinely approved them unless one of the parties could explain why the contract cut consumer welfare.² More specifically, they approved them unless a plaintiff could show that the exclusive agreement did not just hurt rival producers, but also plausibly reduced competition. To make that showing, the plaintiff needed to prove that the defendant had market power, and that the contract at least sustained that power. At trial, a defendant could defend by showing the contract's fundamental efficiency.

In demonstrating the mutually beneficial character of most exclusive contracts, Bork ended an approach that courts had begun mid-century. Early in the 20th century, courts applying antitrust law had focused on price conspiracies, and let most firms negotiate exclusive dealing contracts as they pleased. A few decades later, they began to think the contracts could restrict competition, and help dominant firms acquire market power and monopolize the market. Rather than let dominant firms do that, they began to hold the contracts illegal.

Bork stopped that mid-century shift with a critique that followed two developments in economics. First, elementary Chicago-school microeconomic theory clarified the nonsensical analysis behind the hostility judges showed toward exclusive contracts. Basic price theory—straightforward prose with some diagrams and simple equations on the side—cleanly showed how most of the contracts could not possibly block competition. Second, closer examination of the specific industries involved in the cases often disclosed the substantial benefits that the exclusive contracts generated. These benefits followed from the

¹ Relatedly, both sides may agree to exclusivity, or a retailer may require various producers agree to sell only to it. Note that ordinary contracts lock in price and quantity, and effectively take "a purchaser out of the market for goods he already has bought or contracted to take," but it would be absurd to say that such a contract "is a device for suppressing competition instead of a device for waging competition." *Standard Oil of Cal. v. U.S., 337 U.S. 293,* 323 (1949) (Jackson, J. dissenting). A "requirements contract" obligates a producer to sell as much as a retailer desires. Because this is so often combined with an exclusivity clause, many observers use the phrase "requirements contract" to mean the combination of both an exclusionary contract and a requirements contract.

² Courts at common law did not object to exclusive contracts. See Jacobson (2002); *Mitchel v. Reynolds*, 24 Eng. Rep. 347 (Q.B. 1711); *Catt v. Tourle*, L.R., 4 Ch. App. 654 (1869); *Mogul Steamship v. McGregor, Gow*, All E.R. Rep. 263 (1891); *Chicago, St. Louis & New Orleans R.R. v. Pullman Southern Car*, 139 U.S. 79 (1891). Cases in the United States are brought under Sec. 1 (conspiracy) or Sec. 2 (monopolization) of the Sherman Act, Sec. 3 of the Clayton Act, or the FTC Act. They can be filed the Department of Justice, the Federal Trade Commission, or private plaintiffs. See the ABA's 2006 "Resources for Exclusive Dealing Agreements" for compendium of links to both law and economics.

fundamental efficiency of the contracts, and accrued to consumers and producers both.³

Post-Bork, scholars have tried to explore when—notwithstanding his basic price theory—exclusive dealing contracts might still cut efficiency. Much of this work has involved game theory and complex mathematical techniques. For the most part, it flies under the heading "Post-Chicago School." Given that none of it has anything to do with any particular university, one could just as accurately call it the "Neo-Chicago School" or simply "modern antitrust theory."

We stress at the outset that this is not a literature review. We have not tried to survey most articles. We have not even tried to survey the most important articles. Instead, we explore some of the impact that *The Antitrust Paradox* has had. Precisely because of the strength of Bork's work, that impact has been huge. And one measure of its enormity lies in the volume of excellent scholarship that it engendered. We urge readers to understand that do not purport to catalog that scholarship here.

2. Bork and Exclusion

It is a melancholy tale Bork tells. In large part, it begins in 1949. Standard Oil of California had required its dealers to sign exclusive dealing contracts, but that year Justice Frankfurter held them illegal:⁴

[The] observance by a dealer of his requirements contract with Standard does effectively foreclose whatever opportunity there might be for competing suppliers to attract his patronage Standard's use of the contracts creates just such a potential clog on competition as it was the purpose of § 3 to remove

It could have been worse. Justice Douglas dissented—but on the very nearly incomprehensible ground that what he saw as) the Robin-Hood contracts had helped populist stations fight back against (what he saw as) the ominously domineering Standard Oil:

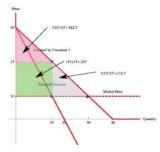
Big business has become bigger and bigger. Monopoly has flourished. Cartels have increased their hold on the nation. The trusts wax strong. There is less and less place for the independent. The full force of the Anti-Trust Laws has not been felt on our economy. It has been deflected. Niggardly interpretations have robbed those laws of much of their efficacy. ... The elimination of these requirements contracts sets the stage for Standard and the other oil companies to build service-station empires of their own.

³ More than anyone else, Benjamin Klein brought a flair to locating these reasons, but others have sometimes folded the approach within "transaction cost economics" or "the new institutional economics."

⁴ Perhaps Justice Frankfurter analogized vertical contracts to mergers: if one of the parties had a large market share, he worried that the contract would increase it further. In fact, of course, because a merger unite capacity horizontally while an exclusive dealing contract ties customers vertically, the contract binds a customer only when he consents.

Never mind incoherent Douglas; the fallacy behind Frankfurter's analysis is basic. As a simple example, suppose each of 90 retailers has the individual demand curve shown in Figure 1 and each of 9 upstream producers has a constant marginal cost of \$10/unit. Note that this is to assume that the retailers each have market power in the consumer market; otherwise they would compete the retail price down to cost and so would have flat demands and zero possible surplus in the wholesale market. The result will be a wholesale market price of \$10/unit. If each retailer buys 30 units, each will earn retailer surplus of \$450 (1/2(30-0)(40-10)). Suppose further that each producer sells to 10 retailers (300 units per producer).

Figure 1 One Retailer's Demand Curve



Now posit that Producer 1 (of the 9 producers) demands an exclusive contract requiring a retailer to buy only from Producer 1. If all retailers sign, Producer 1 will gain a monopoly. He can then raise his price to the monopoly level of \$25/unit.

Will Producer 1's plan work? No—rational retailers will refuse to sign his contract. They have a choice between Producers 2-9, who sell without an exclusive-dealing clause, and Producer 1, who demands the exclusive clause. Retailers will rightly reason that Producer 1 will raise his price to \$25/unit once they sign the exclusivity clause. To be sure, Producer 1 could promise a \$10/unit price in the contract, but then his attempt at monopoly has failed to earn him any profit.

To induce retailers to sign despite knowing they would become captive customers, Producer 1 could couple the exclusive-dealing clause with a signing bonus. Consider, though, how large a bonus he would need to pay. If a retailer refused Producer 1's contract, he could buy from Producer 2 at \$10/unit and pocket a surplus of \$450. If he signed the contract, he would buy the products from Producer 1 at a price he can rationally anticipate to be \$25/unit, for a surplus of \$112.50 (= $\frac{1}{2}(15-0)(25-10)$). The surplus would thus be \$337.50 less than if the retailer had rejected the exclusive-dealing clause, and so the would-be monopolist must offer a signing bonus of \$337.50 if he is to get any customers.

As Bork noted, the required bonus (\$337.50 in our example) is a price a would-be excluder (Producer 1 in our example) will not pay. Producer 1 charges the retailers \$25/unit, and on each customer who signs up for exclusivity he

earns operating profits of only \$225—15 units per customer at a price of \$25/unit and a cost of \$10/unit. Subtract out the signing bonus, and each retailer who signs just increases Producer 1's losses. The logic resembles the case of predatory pricing: it's easy to monopolize, if you're willing never to earn any profits. Maybe Douglas's economic monsters would accept that, but not greedy corporations. For Bork, the optimality of per se legality followed straightforwardly: predatory firms could never profitably use exclusive dealing contracts to monopolize an industry; hence, if such contracts sometimes promote efficient transactions, courts should simply allow them always.

3. Efficiency Reasons for Exclusion Contracts

Even before *The Antitrust Paradox*, judges understood many of the reasons why exclusion contracts might be efficient. Indeed, Frankfurter mentions several in *Standard Stations*.⁵ Skeptical lawyers can start by looking at their own profession. As Meese (2005) notes, a partner at Skadden, Arps cannot "moonlight" for Cravath, Swaine & Moore; and Cravath cannot work for both companies when Apple and Samsung sue each other over patents. Legal relationships are exclusive, and for good and obvious reasons. Indeed, there are a number of reasons why exclusive contracts might be efficient:

(1) **Free-riding.** An exclusive dealing contract can prevent a retailer from using one producer's marketing efforts to attract customers and sell them a rival producer's goods. Duly protected against such free-riding, producers will invest in marketing at rates closer to efficient levels (Marvel [1982], Segal and Whinston [2000b]).

(2) Hold-up. Sometimes a producer can serve a retailer effectively only if he first makes a series of retailer-specific investments. Once he invests, though, he leaves himself vulnerable to hold-up by the retailer, who can try to renegotiate the contract to a lower price. An exclusive contract mitigates that risk by making the retailer vulnerable to the producer as well.⁶

(3) **Planning.** Often, both the producer and the retailer need to plan production and marketing. All else equal, the producer would prefer a fixed-price fixed-quantity contract, and the retailer would prefer a fixed-price requirements contract. A fixed-quantity contract would force the retailer to accumulate inventory if consumer demand fell; a requirements contract would shift that inventory problem to the producer. Given this tension, an exclusive dealing contract constitutes something of a compromise: the retailer does not promise to buy a given quantity, but he does at least promise not to switch acquisitions to a

⁵ Standard Oil of Cal. v. U.S., 337 U.S. 293, 306-07 (1949).

⁶ See *Tampa Electric v. Nashville Coal*, 365 U.S. 320 (1961) and its description in Klein (2003).

rival producer. As a result, the contract protects the producer against the risk of losing market share to a rival producer, at the same time that it protects the retailer against swings in consumer demand.

(4) Allocation of Limited Resources. Sometimes what looks like an exclusive contract is just a simple sale. In particular, it is a sale of a good that, like any private good, is rivalrous. Take shelf space. Producers bid for the right to place their goods on a particular place on a retailer's shelf. There is only limited room on the eye-level shelf; some producer's product is going to end up where shoppers have to stoop to see it. It would be absurd to insist that retailers not promise by contract that a particular producer who pays more will get the best shelf; the price mechanism is needed to get the most efficient allocation.⁷

Note, however, that the welfare implications of these arrangements can vary. If oligopolists compete for the entire business of a retailer instead of just for a particular order, the nature of the strategic interaction changes. They could compete at a supermarket for sales on a daily basis, or they could compete once a year for exclusive shelf space. Which arrangement benefits consumers most remains inconclusive, as the debates among Lin (1990), O'Brien and Shaffer (1993), Farrell (2005), and Klein and Murphy (2008) illustrate.

(5) **Confidentiality.** A retailer handling a product necessarily stands in a good position to learn its producer's trade secrets, marketing plans, and other intellectual property. Just think of our Cravath examples above. An exclusive dealing contract slashes the odds that a retailer will disclose that intellectual property to the producer's rivals. In the process, it increases the producer's incentive to invest in that intellectual property at efficient levels.⁸

(6) **Quality Assurance.** With some goods (e.g., gasoline), a high-quality producer may fear that a retailer will buy a low-quality substitute and sell it under the high-quality brand.⁹ An exclusive dealing contract protects the high-quality producer against that risk.

(7) Increased Efficiency of Existing Market Power. Through exclusive dealing contracts, a monopolist producer can create downstream horizontal monopoly and avoid the risk of double marginalization. To accomplish this, the producer must conclude exclusive dealing contracts with a set of retailers who have market power and use either resale price maintenance or quantity

⁷ Wright (2006), Klein and Wright (2007), Bronsteen et al. (2005); *R.J. Reynolds Tobacco v. Philip Morris*, 199 F. Supp. 2d 362 (M.D.N.C. 2002). This is the point Coase (1979) makes in the context of radio payola: disc jockies deciding which songs to play based on the payments from the record companies.

⁸ See Joyce Beverages v. Royal Crown Cola, 555 F. Supp. 271, 276 (S.D.N.Y. 1983); R.W. Int'l. v. Welch Foods, 13 F.3d 478 (1st Cir. 1994).

⁹ This was the fear with gasoline in the *Sinclair* case, 261 U.S. at 475-476.

specifications. Given that double marginalization hurts both producers and consumers, this possibility does not justify antitrust intervention.

4. Bad Motives for Exclusion Contracts.

Seeing no rational bad motives for exclusion contracts but more than one good motive, Bork proposed a safe harbor: make the contracts legal per se. "The truth appears to be," he explained (Bork[1978] p. 309), "that there has never been a case in which exclusive dealing or requirements contracts were shown to injure competition." In fact, perhaps Bork lost his way in his own rhetoric. Later in <u>Antitrust Paradox</u> (Bork [1978] pp. 344-345), he gave his own example of an exclusive contract that he thought the court rightly banned: <u>Lorain Journal</u> (*Lorain Journal v. U.S.*, 342 U.S. 143 (1951)). The <u>Journal</u>, a local newspaper, required its advertisers not to advertise with the local radio station. To Bork, the regulation of the radio spectrum gave the station a monopoly that the <u>Journal</u>, if it could but acquire the station, could profitably exploit. Explained Bork (1978, p. 345):

The radio license, which the <u>Journal</u> had earlier unsuccessfully applied for, constituted a a monopoly protected by the government. If the <u>Journal</u> could bankrupt [the station] and gain the license, it would ... have much better reason than most predators to hope to be secure from further entry into its market.

(1) Naked Exclusion. Since <u>The Antitrust Paradox</u>, economists have worked hard to find potentially bad motives for these contracts. We ourselves (Rasmusen, Ramseyer and Wiley [1989]) suggested one: sometimes, everyone involved expects that a producer can lock up enough of a market through exclusive dealing contracts that no rival will achieve the minimum efficient scale of operation. Sometimes, this "naked exclusion" works.¹⁰

Return to the example above, but with different cost curves. Now, each producer has annual fixed costs of \$400 and a marginal cost of \$8/unit up to output of 200 units and \$10/unit beyond, as shown in Figure 2.

¹⁰ Areeda, as quoted by Bork (p. 304), foreshadows this idea by worrying that exclusion could "deprive rivals of the business that would otherwise permit them to operate at an efficient scale..." Similarly, Kaplow (1985: 532) notes: "If ... many customers are buying the product of an industry that is becoming more concentrated, each buyer will be unwilling to incur a significant expense in preventing the concentration because it bears the total cost of any of its efforts but ony receives a benefit in proportion to its share of the market. Each buyer reasons that it can take a 'free ride' on the efforts of the other buyers who will bear the expense of preventing the rise of concentration."

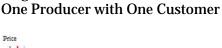
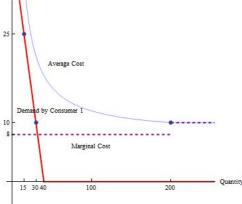


Figure 2



The competitive equilibrium will be the same as before—a market price of \$10/unit, with each retailer buying 30 units and earning retailer surplus of \$450. Each producer would sell to 10 retailers at a price of \$10/unit, for a quantity of 300 per producer. Its marginal cost would only be \$8/unit for the first 200 units, and so it would earn quasi-rents of \$400, just what it needs to pay for its fixed cost. Given these cost curves, for each producer 200 units represents the minimum efficient scale of production: at a price of \$10/unit, unless it can sell 200 units it cannot recover its \$400 fixed cost. Any producer who anticipates selling less than 200 units would exit the market.

Suppose Producer 1 now offers retailers a contract bundling a price of \$25/unit with a signing bonus of -\$1. Two possible equilibria emerge. In the first equilibrium, all retailers may reject the bundled contract. Suppose Retailer 1 thinks nobody else will sign the contract. If he signs, he will receive a signing bonus of \$1 but pay a price of \$25/unit. He will buy 15 units (the quantity demanded at \$25) and earn the \$112.50 retailer surplus shown in Figure 1, for a total payoff of \$113.50. If he does not sign, he will buy 30 units from another producer at \$10/unit, and earn a retailer surplus of \$450. Reasoning similarly, all 89 other retailers will refuse to sign as well.

In the second equilibrium, all retailers accept the bundled contract. Suppose Retailer 1 thinks the other 89 retailers will all sign the exclusive contract. If he signs as well, he will earn a total payoff of \$113.50. If he refuses to sign, he would be the only retailer to whom the other 8 producers could sell. Producer 2 would have a fixed cost of \$400, but could not sell enough units to pay for it. At a price of \$10/unit for 30 units and a marginal cost of \$8/unit, Producer 2's payoff would be 30(\$10 - \$8) - \$400 = -\$340; at a price of \$25/unit for 15 units, its payoff would be 15(\$25 - \$8) - \$400 = -\$145. Anticipating this inability to recover

its \$400 annual fixed cost, Producer 2 (and Producers 3 through 9) would stay out of the market. Given this logic, Retailer 1 has a simple choice: (a) not buy at all, for a payoff of \$0, or (b) return humbly to Producer 1 and pay \$25/unit without any exclusive dealing bonus, for a payoff of \$112.50. Humiliation wins the day.

Because all retailers make the same calculations, two equilibria emerge: (i) they all sign, or (ii) they all refuse to sign. For each retailer, the crucial question is whether enough other retailers will sign to preclude a competitive market for the product. To maintain that competitive market, at least two producers besides Producer 1 must stay and compete for the unattached retailers. Yet no producer will recover his \$400 fixed cost unless he sells at least 200 units. If each retailer buys 30 units, those two competitive producers must be able to sell to at least $400/30 = 13 \ 1/3$ retailers (or 14.8 percent of the 90 retailers). Put differently, if Producer 1 can sign up over 86 percent of the market, the two additional producers will not enter, and the price of the product to uncommitted retailers will not fall to \$10/unit. Provided retailers have pessimistic expectations about each other, Producer 1 can monopolize the market through an exclusive dealing contract.

As this example makes clear, "naked exclusion" works only if Producer 1 can foreclose a large enough fraction of the market to deny its competitors a minimum efficient scale. If sufficient producers remain to serve those retailers who refuse the contract, "naked exclusion" cannot work. The point should have been crucial in the recent *U.S. v. Dentsply*,¹¹ but the court seems to have missed it. Dentsply sold three quarters of the false teeth in America. On the ground that it required exclusive contracts of its distributors, the Justice Department sued. The district court held for Dentsply by the (very sensible) logic that it could not monopolize the market when so many retailers remained uncommitted, but the appellate court disagreed and banned the contracts.

Innes and Sexton (1994) and Segal and Whinston (2000) correct errors in Rasmusen, et al. (1989) and suggest other pricing schemes by which a firm can exploit even small economies of scale to make "naked exclusion" work. Suppose, for example, that a producer offered exclusive contracts with a signing fee of \$1, but added an exculpatory clause. The exclusivity would not bind, it explained, if fewer than (90-13 =) 77 of the retailers (in our earlier example) signed the contract. A retailer who signed would pocket the \$1 fee but face no binding constraint if other producers remained. As a result, "no retailer signing" would cease to be an equilibrium. Instead, all retailers would sign.¹²

The strategy combination, "76 of the retailers sign", might be an equilibrium too. Because Producer 1 cannot monopolize without signing 77 of the 90 retailers (in our earlier example), the first 76 can safely sign the exclusive

¹¹ 399 F.3d 181 (3d Cir. 2005).

¹² For a thoughtful discussion of the effect that loyalty discounts might have on profitable exclusion, see Elhauge & Wickelgren (2012).

contract. The next retailer to do so, however, would effectively give Producer 1 a monopoly. Because no retailer would find it worthwhile to do so for a \$1 signing fee, none of the remaining 14 would sign the contract. Note, though, that this equilibrium requires some coordination device to determine which retailers will be the unlucky 14 who do not receive a signing fee.

These models suggest that courts should look skeptically at exclusive contracts that either (a) condition enforcement on the amount of competition or (b) include discriminatory terms. Such clauses potentially cause retailers to sign contracts even if they would otherwise prefer to avoid them. If the impact of such clauses is clear to the retailers, we hope it will be clear to a judge as well.¹³

Simpson and Wickelgren (2007) note that the effect of a "naked exclusion" strategy depends on whether an excluder sells to retailers or to final consumers. If he sells to competitive retailers, then he sells to firms that earn zero surplus in equilibrium anyway. They will pass along any added input cost to consumers and have little incentive to coordinate on the nobody-signs equilibrium.

On the other hand, if the excluder sells to final consumers (or retailers who earn rents or quasi-rents, so their demand curves are downward sloping) then we must think what happens after breach, which the law allows so long as the breacher pays expection damages. If, as in the example above, the buyer does have downward-sloping demand and positive surplus, and is currently buying 15 units from the producer at a price of 25/unit, it could breach, buy 30 units from an entrant at a price of 10/unit, pay damages equal to the producer's pre-breach profit of 25/unit. It would be better off because it would pay 225 less for the 15 units it was buying before entry, but it also would earn surplus from buying 15 units more at the entrant's price of 10/unit.

To be sure, the court would have to be economically wise in calculating expectation damages. Breach would be disastrous for the retailer if it ended up having to pay damages of $30 \times 15/1000$ x source the court thought the retailer would have purchased 30 units from the original producer at the original high price.

(2) **Cartel Ringmaster.** Sometimes, an upstream producer with no market power can use exclusion contracts to coordinate a downstream retailer cartel. In effect, the producer ensures that no retailer buys enough input to undercut other retailers. The producer and retailers then split the monopoly rents among them, perhaps by pricing the input above marginal cost but below the monopoly level. Bork (1978, p. 237) acknowledges this possibility in a discussion about a hypothetical case where an oil refiner acquires all U.S. gas stations: ¹⁴

¹³ For an excellent experimental study of these tactics and others, see Landeo and Spier (2009, 2012).

¹⁴ See *JTC Petroleum v. Piasa Motor Fuels*, 190 F.3d 775 (7th Cir. 1999), discussed in Scheffman and Higgins (2003). "Cartel ringmaster" is also one of the "raising rivals' costs" techniques in Krattenmaker and Salop (1986), discussed below.

Foreclosure theory is like a conjuring trick: it causes you to look at the wrong level of the industry, in this case the refining level. The problem just stated is not vertical but horizontal; the evil is not foreclosure of rival refiners but the establishment of a retail monopoly.

(3) Raising Rivals' Costs. The clearest idea of "raising rivals' costs" turns on a move by one producer to raise the costs of its rivals by driving up the price of an input it uses less intensively.¹⁵ The idea is best known from Salop and Scheffman (1983) but has a precursor in Williamson (1968). Suppose price-competing firms use a Leontief technology with a per-unit boron-to-zinc ratio of 1.8 to .2 for the strategic firm and 1 to 1 for its rivals. If market demand is inelastic, and boron and zinc each start with a price of \$1, the firms earn zero profits and the product sells for \$2, which is 1.8*\$1+ .2*\$1 for the strategic firm and <math>1*\$1+1*\$1 for the others. If the predator can somehow raise the price of zinc to \$2 by lobbying for a tax on zinc, then its cost will rise only to \$2.20 (that is, <math>1.8*\$1+.2*\$2), but its rivals' cost will rise to \$3 (that is, <math>1*\$1 + 1*\$2). The predator will price its products at \$2.99 and serve all customers. Cost-raising regulations are a common form of raising rivals' costs. A classic example is Dupont's strong support for regulation to protect the ozone layer, apparently related to its holding patents on the products which would remain legal under regulation (see Smith [1998]).

It is one thing to raise costs through a tax; it is another thing entirely to try to raise costs by cornering a market. Suppose the excluder tried to raise rivals' costs by driving up zinc prices through overbuying. The excluder will have to pay for useless zinc, of course. Moreover, the excluder cannot raise zinc prices by overbuying unless its new demand also replaces the old demand of its now-excluded rivals. If those rivals buy 50 units less, the excluder must buy and destroy (because reselling the zinc would drive the price back down) 50 units more—and at the new high price. Thus, the entire increase in the rivals' costs ends up being borne by the excluder.

Beyond the strategy of manipulating government policy to penalize rivals, the logic behind the claims about "raising rivals' costs" turns hazy. Krattenmaker and Salop (1986) do lay out two overbuying models ("bottleneck" and "real foreclosure"), but they ignore the question of whether the excluder could earn any profit through the strategy. Brennan (1988) argues that the "raising rivals' costs" literature either refers to horizontal practices already well-known (e.g. the cartel ringmaster), or simply uses new terminology to cloud analysis. Nonetheless, the literature remains enormously popular. As of June 14, 2013, Krattenmaker and Salop (1986) had been cited 912 times, and Salop and Scheffman (1983) 1,134 times.

¹⁵ This asymmetry is not stated outright in Salop and Scheffman (1983), but it is there in the form of their requirement that the excluder's average cost rise less than the residual demand curve he faces given the other firms' equilibrium sales.

(4) Liquidated Damages: The Incumbent Can Profit from Entry. Suppose a monopoly incumbent and the existing customers see a new entrant looming who has much lower costs than the incumbent. Aghion and Bolton (1987) suggest that they could sign an exclusive-dealing contract with the very intention of having it breached. The reason is that the contract would include a clause for substantial liquidated damages. The customers would breach by buying from the new entrant at low prices, and pay damages to the incumbent. The entrant would charge low prices, because otherwise the customers would not buy from it, given the liquidated damages. In the end, the customers benefit from the low prices and the incumbent benefits from the damages. Only the entrant loses.

This is a rent-seeking use of an exclusive-dealing contract in which no exclusion actually occurs. This scheme does depend on liquidated damages being greater than actual damages for the incumbent, which courts in general do not enforce (see, e.g., Goetz and Scott [1977]). As a result, the idea is primarily of theoretical interest, except that it does show the danger of safe-harbor rules: clever people may be able to figure out hitherto-unknown tricks to get around them. The Tax Codes has "principal purpose" clauses to thwart creative tax shelters with wiggle room, and antitrust law might benefit from the same practice (see U.S.C. Title 26's sections 269(a) and 357(b)(1)).

(5) Other Effects. Research & Development. Chen and Sappington (2011) explore the effect of exclusive dealing contracts on research & development. The effect of the contracts on R&D, however, is almost certainly minor. Schumpeter (1950) argued that blatant merger-to-monopoly might increase R&D levels. If even monopoly has an indeterminate effect on R&D, we find it hard to believe that exclusive dealing contracts could have a substantial predictable effect. Even if they did, we do not know how one would determine the welfare implications of that effects—whatever it might be.

Investment. Segal and Whinston (2000b) analyze the impact of exclusive contracts on investment more broadly. Toward that end, they model the interaction among an incumbent supplier, an entrant, and a retailer, and posit that the supplier and retailer can costlessly renegotiate the contract after making their initial investments. Given these circumstances, they show that an exclusive contract will not affect the parties' incentives to invest unless the investment affects the surplus that the retailer and the entrant can secure in isolation.¹⁶

Retailer effort. Bernheim and Whinston (1998) model the effect of exclusive contracts on retail effort. They posit two producers who compete to sell through one retailer with market power. Unfortunately, given the limitations inherent in their assumptions, they derive results with largely inconclusive policy consequences.

People often view the "post Chicago" theoretical models as favoring government intervention more than the Chicago School framework, but that is

¹⁶ See David de Meza and Mariano Selvaggi (2007) and Catherine C. de Fontenay, Joshua S. Gans, and Vivienne Groves (2010) for related analyses.

not entirely true. We who come up with perverse game theory models are generally not doing it for ideological reasons, but more often out of curiosity and the joy of invention. Often these models are entirely impractical for use by judges, who are not experts, and often they are impractical for use even by experts, since key variables are unobservable except to executives inside the companies. "Often" is not "always", however. At a minimum, these models show that clever people can come up with ways to unfairly exclude their rivals, and at their best, they show how under very specific conditions courts should look carefully at excluding conduct.

5. General Discussion.

Basic economics dictates that courts treat exclusive contracts as almost always legal per se, argued Bork. The price theory that he used did indeed dictate that approach. Post-Bork, scholars have moved beyond that basic price theory, and modeled situations where exclusive contracts can generate inefficient results. Do these new models warrant a different legal rule? In discussing vertical integration, Bork (1978, 226) wrote:

There is a faint theoretical case, hardly worth mentioning, that vertical mergers can be used by very large firms for purposes of predation under exceptional circumstances, but it is highly doubtful that that narrow possibility has any application to reality.

Do the risks identified by the post-Bork models for exclusive contracts present more than a "faint theoretical case"?

Courts are not free. Lawyers are not free, time lost to litigation is not free—and even after the time and effort invested judges do not always "get it right." Scholars may model situations where exclusion contracts could generate bad results, but the models justify a rule other than Bork's per se legality only under limited circumstance: only if the benefits from the greater adjudicatory precision exceed the costs in lawyer fees, in time, and in the additional cases that judges (who now scrutinize all exclusion contracts more intensely) decide wrongly.

"The perfect is the enemy of the good," wrote Voltaire. Richard Epstein calls the principle Blum's Law, after his late colleague Walter Blum: "In law, 80 percent is perfection." If judges cannot apply a theory with any accuracy, that theory should not be part of the law. And judges often cannot apply antitrust theory: just this spring (2013), for instance, three justices (including former Harvard antitrust law professor Stephen Breyer and dean Elena Kagan) voted to keep alive a class action against American Express (which has barely a quarter of the credit card market) for monopolizing the credit card market.¹⁷ In his 2008 article on Judge Bork's contribution to the law of exclusion, Judge Easterbrook said,

¹⁷ American Express v. Italian Colors (U.S. Supreme Court, June 20, 2013).

Judges are no better than the rest of us at predicting the future. My colleagues and I spend most of our time on cocaine prosecutions, employment discrimination, and the myriad other subjects within federal jurisdiction. We cannot hope to emulate students of industrial organization, and my friends who study that subject are themselves no great shakes at prediction.

Moreover, even if some courts can apply theory accurately, if doing so takes too many cases past summary judgement to the stage of high-cost discovery, the law should ignore that theory.

"Exclusionary conduct has been the source of the most significant divide between Chicago School and post-Chicago commentators," wrote Jonathan Baker in 2013. Yet even the most adamantly post-Chicago (in some cases, "anti-Chicago" might be more accurate) scholars do not urge a return to the days before Bork. As Crane (2009, 1928) put it in his review of a book by several self-consciously "post-Chicago" scholars:

Not one of the [scholars] wants to pick up where we left off pre-Chicago. As Pitofsky acknowledges ..., "Virtually all ... share the view that U.S. antitrust enforcement, as a result of conservative economic analysis, is better today than it was during the Warren years" (p 5). ... Going back is not an option."

Antitrust is a notoriously expensive field to litigate. Bork's rule of presumption that exclusive-dealing contracts are legal may bar a few meritorious claims, but it will benefit consumers if it protects firms from an avalanche of meritless but cost-raising claims.

6. Concluding Remarks

The Antitrust Paradox pulled the U.S. out of a half-century-long nightmare in which courts routinely banned innocuous business practices as monopolization in disguise. Before that half-century, courts had applied to exclusive contracts a rule of reason. After Bork, they applied a rule of reason again. But during the intervening nightmare, they imposed a rule of distinctly unreason.

The bad days are gone now, and recent theoretical studies (of which we take some illustrative examples, but which we d not purport comprehensively to survey) have not undermined Bork's approach as much as some scholars have claimed. If anything, they have bolstered his approach by illustrating how unusual a situation must be before an exclusive contract might harm competition. Exclusive dealing is presumptively legal, and presumptively legal it should remain.

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