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CORRESPONDENCE

Optimal Antitrust Penalties and Competitors' Injury

William H. Page*

I. INTRODUCTION

Herbert Hovenkamp's primary target in *Antitrust's Protected Classes*¹ is the Chicago School's optimal deterrence model of antitrust penalties.² Substantive antitrust rules are often overinclusive — prohibiting practices even when they are efficient — in order to avoid the costs of error associated with a more case-specific rule.³ The optimal deterrence model attempts to correct for this overinclusiveness by setting the penalty for antitrust violations at a level just sufficient to deter only inefficient instances of the violation.⁴ The task is complicated by, among other things, the myriad effects antitrust offenses can have on economic actors: allocative inefficiencies and efficiencies (the losses and gains, respectively, in value to consumers from reduced or increased output of a product); productive inefficiencies and efficiencies (cost increases or cost savings in production of a product); and wealth transfers from one economic actor to another. William Landes distills the analysis into a formula: the penalty should be equal to the net harm to everyone but the offender.⁵ For cartels, the optimal penalty would be equal to the deadweight welfare loss plus the wealth transfer to the cartel from purchasers; this penalty would deter only those instances of the offense in which the deadweight welfare loss exceeded any savings in production costs to the cartel.

Hovenkamp contends that the model understates the welfare losses

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1. Hovenkamp, *Antitrust's Protected Classes*, 88 MICH. L. REV. 1 (1989).

2. See Landes, *Optimal Sanctions for Antitrust Violations*, 50 U. CHI. L. REV. 652 (1983). For development, see Page, *The Chicago School and the Evolution of Antitrust: Characterization, Antitrust Injury, and Evidentiary Sufficiency*, 75 VA. L. REV. 1221 (1989) [hereinafter Page, *Chicago School*]; Page, *The Scope of Liability for Antitrust Violations*, 37 STAN. L. REV. 1445 (1985) [hereinafter Page, *Scope of Liability*]; Page, *Antitrust Damages and Economic Efficiency: An Approach to Antitrust Injury*, 47 U. CHI. L. REV. 467 (1980) [hereinafter Page, *Antitrust Damages*].

3. See, e.g., *Arizona v. Maricopa County Medical Socy.*, 457 U.S. 332, 343-44 (1982).

4. Landes, *supra* note 2, at 654-56.

5. *Id.* at 656.

associated with monopolistic practices by ignoring costs imposed on competitors of the offender — what he calls *WL3* (welfare loss three) losses.⁶ These, he argues, are a social cost of monopoly in addition to the conventional deadweight loss in value from the monopolistic output restriction (*WL1* losses), and even in addition to the costs of rent-seeking that Richard Posner⁷ and others have suggested approximate another cost of monopoly (*WL2* losses). This failure to recognize *WL3* losses, Hovenkamp argues, has led Chicago School commentators to set undue restrictions on the private damage action. Frank Easterbrook, for example, has contended that competitors should never have the right to sue for antitrust harms.⁸ Hovenkamp attempts to refute Easterbrook by showing that these injuries constitute a social cost;⁹ that Congress originally intended both to protect competitors

6. Hovenkamp, *supra* note 1, at 17-20. Hovenkamp uses the following diagram:

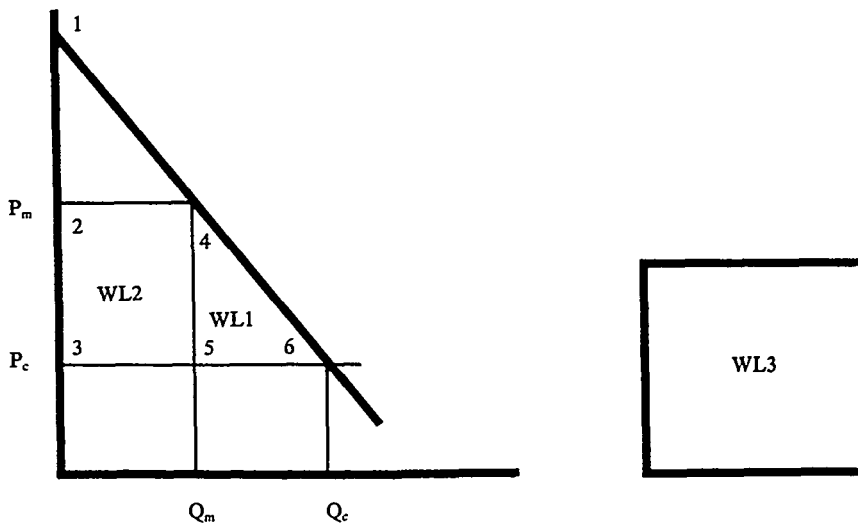


FIGURE ONE

The competitive price and output are P_c and Q_c respectively. The monopoly price and output are the higher P_m and the lower Q_m . As a result of the reduced output from monopoly, consumers lose in surplus value an amount equal to the area *WL1*, the amount by which their valuation of the lost output (the area under D between $Q_c - Q_m$) exceeds the cost of production. They also pay more for the remaining units of output: the area *WL2* reflects the wealth transferred from consumers to the monopolist as a result of the overcharge. Posner and others have argued that this amount approximates the costs of rent-seeking that the monopolist and others incur in trying to achieve monopoly — another welfare loss. See *infra* note 7.

According to Hovenkamp, the area *WL3* represents an additional welfare loss to consumers: the harm to competitors imposed by the would-be monopolist's rent-seeking efforts.

7. See, e.g., Posner, *The Social Cost of Monopoly and Regulation*, 83 J. POL. ECON. 807 (1975).

8. Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263, 331 (1981).

9. Hovenkamp, *supra* note 1, at 17-20, 32-33.

and to provide them with a remedy;¹⁰ and that competitors are “often the most efficient enforcers of the antitrust laws, for they are in a position to catch monopolistic activity much earlier than are consumers.”¹¹

Hovenkamp makes a worthwhile contribution to the “new learning” on the private antitrust remedy,¹² the effort to reconcile private treble damage and injunction actions with the economic goals of antitrust. He is right to emphasize the centrality of harm to competitors in our present system of private antitrust enforcement. In my view, however, his notion of *WL3* losses and the related characterization of competitors as a “protected class” are unnecessary and potentially misleading as criteria for defining compensable antitrust harms.

Since the *Sylvania* decision,¹³ courts have increasingly turned to economic models — particularly those of the Chicago School — to separate monopolistic from competitive harms.¹⁴ By formalizing the effects of antitrust practices on efficiency and on the wealth of various economic actors, the models guide the formulation of substantive rules, the application of rules to particular practices, and the definition of compensable harms. Hovenkamp’s notion of *WL3* losses offers no such guidance. In the next Part, I argue that the concept of *WL3* losses misconceives the social costs of monopolistic exclusion and fails to provide a theoretical link between the competitor’s harm and the monopolistic output restriction. In Part III, I argue that competitors’ harms should in some instances be compensable as antitrust damages — not because they represent social costs in themselves, but because they can be proxies for the demonstrable costs of monopoly. Competitors are not, I argue, a protected class; their right to recover is purely instrumental to the ultimate standard of consumer welfare.

II. WELFARE LOSSES AND COMPETITIVE HARM

Theories are supposed to show causal relationships. In the conventional model of monopoly, for example, the output restriction causes the deadweight welfare loss and the monopoly overcharge. The theory allows us to see a host of critical relationships, such as the link

10. *Id.* at 27-30.

11. *Id.* at 31. The same point is made in Spiller, *Comments on Easterbrook and Snyder*, 28 J.L. & ECON. 489 (1985).

12. See Breit & Elzinga, *Private Antitrust Enforcement: The New Learning*, 28 J.L. & ECON. 405 (1985).

13. *Continental T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36 (1977).

14. See generally Page, *Chicago School*, *supra* note 2.

between elasticity of demand and monopoly power.¹⁵ These kinds of causal relations are crucial in the analysis of the welfare effects of monopoly. Hovenkamp offers no comparable theory to support the notion of *WL3* losses. In particular, he provides no account of the causal relationship between competitive harms and the monopolistic output restriction.

Significantly, Hovenkamp is unable to formalize his concept other than by drawing a mysterious box next to the conventional comparative static model of the effects of monopoly.¹⁶ But there is no apparent reason why it could not as plausibly be drawn next to a model of perfect competition.¹⁷ Hovenkamp says his notion of *WL3* losses is “not captured by the [market] demand curve itself. Its definition, existence, or size is not clearly related to any of the cost or revenue functions ordinarily included in the demand curve.”¹⁸ Without causal connections, there is no way to set limits of any kind on the size of the box. Existing as it does outside the demand curve — beyond the pale, one might say — there is no upper bound to its size. As Hovenkamp recognizes, the size of the *WL3* losses is “potentially unlimited.”¹⁹ It is not necessary, in his view, that there be any monopoly before *WL3* losses can occur. “*WL3* losses occur while the monopolist or aspiring monopolist is taking the anticompetitive actions that it hopes will create or protect its monopoly.”²⁰

Hovenkamp apparently does not mean by all this to suggest that all harms to competitors are costs of monopoly. He recognizes, for example, that “[t]he fact that an efficient plant was forced to close or that a potentially successful product was kept off the market is part of the social cost of monopoly only if the person responsible did it in order to attain or retain a monopoly position.”²¹ But this reference to

15. See, e.g., R. POSNER, *ANTITRUST LAW: AN ECONOMIC PERSPECTIVE* 247 (1976); Landes & Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937 (1981).

16. See *supra* note 6.

17. Similar problems, of course, attend the notion of *WL2* losses suggested by Posner, *supra* note 7, and summarized (and apparently accepted) by Hovenkamp, *supra* note 1, at 15-16. The idea here is that the wealth transfer to producers is not normatively neutral, as traditional economists have contended, since it attracts resources toward getting those profits. These expenditures on “rent-seeking” are wasted, and approximate a welfare loss from monopoly in addition to the traditional deadweight loss, dubbed *WL1* by Hovenkamp. The difficulty with this position, which very few Chicagoans accept without qualification, is that resources expended in hopes of getting a monopoly are not necessarily (or even probably) entirely wasted — they are quite likely to reflect expenditures on advertising and product enhancement that provide benefits to consumers. Thus, *WL2* very likely overstates the welfare loss from monopoly.

18. Hovenkamp, *supra* note 1, at 18.

19. *Id.*

20. *Id.* at 32.

21. *Id.* at 21.

monopolistic intent is all we get on the critical question of causation.

The traditional tools of economic analysis show the shortcomings of Hovenkamp's approach. They can illustrate, for example, more pertinent instances than *WL3* losses of costs borne by competitors of the offender that are also social costs. Consider, for example, the model of pricing by a firm (or cartel) that acquires a dominant market share, but must nonetheless share the market with a fringe of competitive firms.²² In that model, the monopolistic output restriction not only causes a deadweight welfare loss and a wealth transfer to the dominant firm, but also creates a price umbrella over competitive fringe firms. Those firms therefore increase production to the point at

22. Consider the following diagram, adapted from Page, *Scope of Liability*, *supra* note 2, at 1466, and Note, *Standing at the Fringe: Antitrust Damage and the Fringe Producer*, 35 STAN. L. REV. 763, 770 (1983):

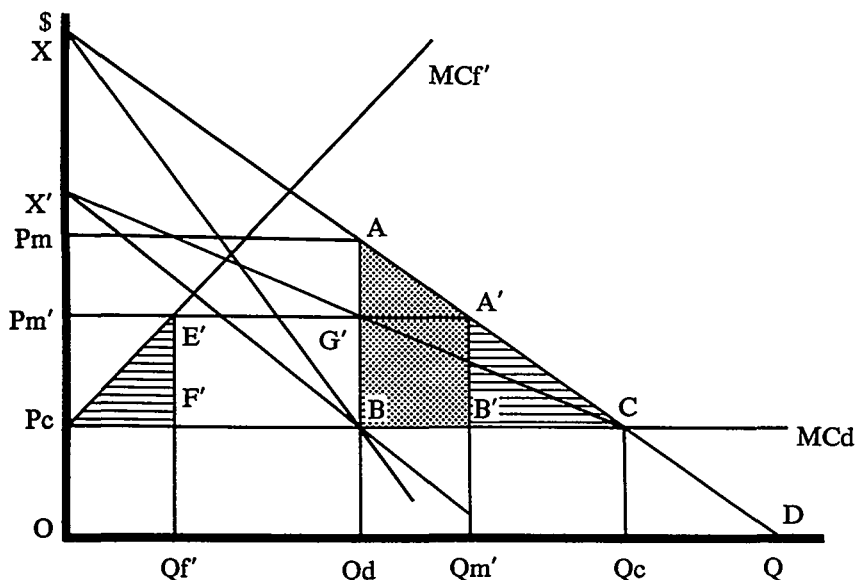


FIGURE 2

In this model, a cartel or dominant firm with marginal cost MCd is created in a market with demand XD , but must share the market with a competitive fringe firm with marginal cost MCF' . The cartel maximizes profit by subtracting the fringe firm's output from the market demand, and acting as a monopolist with respect to the remainder. It thus constructs a residual demand curve $X'C$ and marginal revenue curve $X'B$. It then sets output at Qd where $X'B = MCd$, giving a price of Pm . The fringe firm is competitive, and so takes Pm' as given, setting output where $Pm' = MCF'$. The cartel receives a monopoly profit equal to the area $A'B'F'E'$; the fringe firm receives the area $E'Pm'Pc$ as a rent.

Now compare this equilibrium with the competitive price (Pc) and output (Qc). The lower output and higher price causes a deadweight welfare loss of $A'CB'$. In addition, the increased production of the less efficient fringe causes an increase in production costs of $E'F'Pc$. This productive inefficiency is a social cost of the dominant firm pricing in addition to the deadweight welfare loss.

which their marginal cost equals the dominant firm price — much as Mexico follows the OPEC price. Since, before the formation of the cartel, all firms were equally efficient at the margin, the reallocation of output to the fringe firms reduces productive efficiency.

The increased production costs of the fringe are a recognizable social cost of dominant firm pricing that are neither *WL1* nor *WL2* losses. But they cannot be *WL3* losses either. Although they reflect increased costs of competitors' production, they manifestly do not harm the fringe competitors, because the overcharge that the price umbrella imposes on consumers fully covers the competitors' costs.

Hovenkamp uses *WL3* losses primarily to describe the harms that exclusionary practices impose on competitors. But the dominant firm model helps us understand the effects of these practices as well. Suppose the dominant firm in the previous example were able to exclude the fringe firm. The exclusion would certainly harm the fringe firm. Would that harm be a social cost? Not if the dominant firm's means of exclusion were simply to set a competitive price and output:²³ that would eliminate the deadweight welfare loss and the productive inefficiency of dominant firm pricing. The harm to the fringe firm would thus be a wealth transfer to consumers, and permit a net savings in production costs and an increase in allocative efficiency.

Suppose, however, that the dominant firm were able costlessly²⁴ to exclude the fringe firm and then to set a pure monopoly price and output. Such an action would clearly be anticompetitive, even though it eliminated a competitor that was less efficient *on average* than the dominant firm. The fringe firm's production limits the monopoly power of the dominant firm. Were that production eliminated, the dominant firm would become a monopolist. The deadweight welfare loss under pure monopoly is demonstrably greater, *ceteris paribus*, than the sum of the deadweight loss and the productive inefficiency associated with dominant firm pricing.²⁵

23. This was apparently the strategy of Alcoa in the classic monopolization case, *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 431 (2d Cir. 1945).

24. The assumption of costless exclusion is, of course, unrealistic; the would-be predator must incur some costs to impose them on competitors. It is possible, however, that the costs to the predator will be less than the costs imposed on the victim, making the practice profitable to the predator. I have ignored these costs in order to focus more clearly on the welfare effects of the harm to the competitors.

25. In the diagram in note 22, *supra*, if the cartel were able to exclude the fringe firm, it would become a pure monopolist, setting output where the marginal revenue curve *XB* drawn to the market demand curve *XD* equals *MCd*, and setting a price of *Pm*. Output in the market would fall from *Qm'* to *Qd*, a decrease equal to *Qf'*, the fringe firm's output. The deadweight welfare loss would increase by the shaded area *A'B'BA*. The production costs *E'F'Pc* would be saved, but since the output restriction *Qm' - Qd* is equal to the fringe firm's lost output *Qf'*, the increase in allocative inefficiency exceeds the savings in production costs by 1/2 the area of

Notice, however, that the cost imposed on the fringe firm itself is not an additional social cost of exclusion, as Hovenkamp suggests, but is already accounted for in the foregoing welfare analysis. The fringe firm loses the stream of rents it would have garnered from pricing under the dominant firm's umbrella. But its fixed costs have already been incurred; they are bygones, not an additional cost of the monopolistic practice. Moreover, if the firm's output drops to zero, its variable costs are actually saved by the exclusionary practice. The true welfare loss from the monopolistic practice is the lost value associated with the units of output that the fringe firm would have produced, minus the savings in production costs.

The fringe firm's assets may decline in value; perhaps this decline is what Hovenkamp means by *WL3* losses. But the reduction in the assets' value is simply a measure of their special profitability in the dominant firm's market. This amount reflects the fringe firm's lost stream of rents. The social cost is accounted for in the reduction in allocative inefficiency from the exclusion. The real concern in this type of exclusionary practice thus lies in the increased monopoly power of the dominant firm.

What about the costs imposed on competitors during a predatory campaign, before the competitors are actually excluded? Hovenkamp suggests that such costs are social costs if the offender has a monopolistic motive. Here it is important to distinguish different forms of predation. If the means of exclusion is predatory pricing, then — contrary to Hovenkamp's assertion²⁶ — the harm to the competitor is demonstrably not a social cost. The competitor suffers losses, certainly, but they are the result of reduced revenues, not increased production costs. These losses are wealth transfers to consumers, who

A'B'BG' plus the area of *AA'G'*. Stated another way, the increase in allocative inefficiency is equal to $Qf'(Pm' - Pc) + Qf'/2 (Pm - Pm')$ and the savings in production costs is equal to $Qf'/2 (Pm' - Pc)$. Substituting, we can see that the allocative inefficiency is equal to twice the savings in production costs, plus $Qf'/2 (Pm - Pm')$.

Note that in this example, since *MCd* intersects *XB* and *X'B* at the same point *B*, the dominant firm's output does not change with the exclusion of the fringe firm. If *MCd* intersected *XB* and *X'B* at points above *B*, the dominant firm's output would increase with the exclusion of the fringe; if *MCd* intersected *XB* and *X'B* at points below *B*, the dominant firm's output would decrease with the exclusion. In both cases, however, the reduction in allocative efficiency would outweigh any cost savings.

26. Hovenkamp, *supra* note 1, at 34-35.

benefit from the lower prices.²⁷ The only welfare loss associated with predatory pricing during the predatory campaign is the increase in production beyond the level at which consumers are willing to pay the marginal cost of producing the good; that cost, however, is borne entirely by the predator, which must produce the marginal units. The victim need not increase production and may, in fact, minimize its losses by decreasing production.

Even if the predatory campaign takes the form of raising rivals' costs,²⁸ the losses to competitors are not themselves the defining social cost of the practice. Raising rivals' costs is monopolistic because it reduces the supply elasticity of the fringe firms, thereby increasing the

27. See Page, *Antitrust Damages*, *supra* note 2, at 483-84.

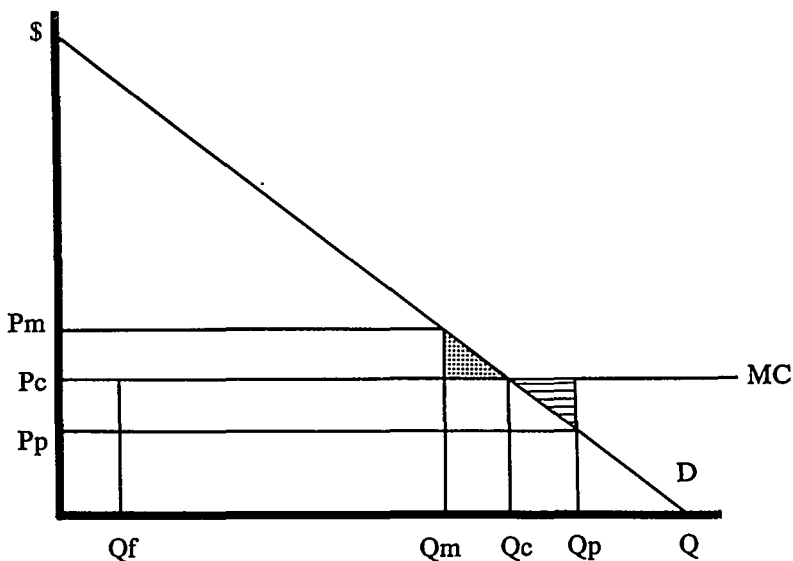


FIGURE 3

In this diagram, the predator sets a price of P_p , below its marginal cost MC in hopes of driving out a competitor with output Q_f and recouping its losses by setting a monopoly price of P_m . To do this, the predator must increase output to Q_p , suffering losses equal to the difference between MC and P_p on all units of output. The victim also suffers losses on its units of output, but these are from reduced revenues, not from increased costs. They are a wealth transfer to consumers. The only social cost during the predatory campaign is the shaded area below MC , the excess costs from producing units that consumers value less than their cost of production. That cost is borne by the predator.

28. See Hovenkamp, *supra* note 1, at 18-20. On raising rivals' costs as a competitive strategy, see Krattenmaker & Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price*, 96 *YALE L.J.* 209 (1986). But see Liebler, *What Are the Alternatives to Chicago?*, 1987 *DUKE L.J.* 879, 894.

monopoly power of the predator.²⁹ Suppose, for example, the predator is able to deny the victim access to an economy of scale, and thus is able to increase the victim's marginal cost.³⁰ The victim's output declines as its marginal cost increases; the predator's output may increase,³¹ but by an amount less than the victim's reduction in out-

29. This point can be illustrated in the following diagram:
 MCd D

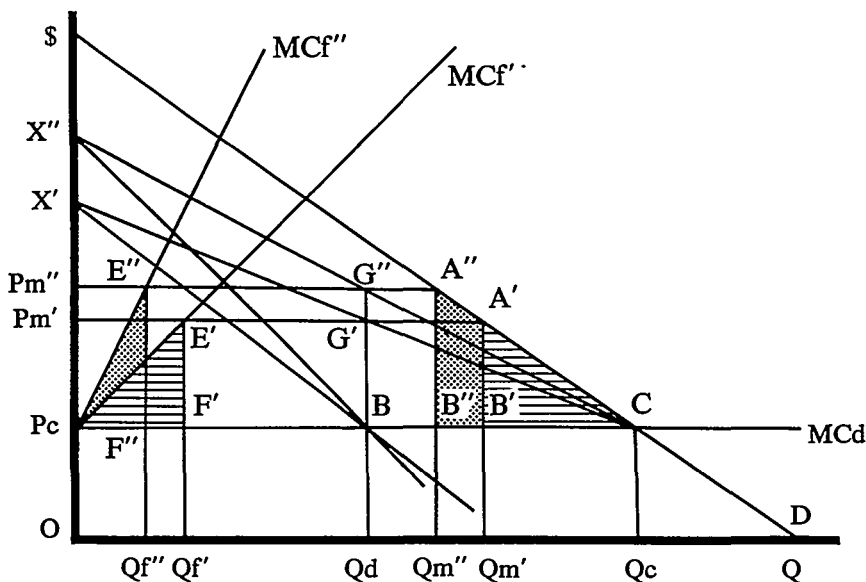


FIGURE 4

The diagram is similar to the one in note 22, in that it shows the effect of a fringe firm's output on the profit maximizing price and output of a dominant firm. It differs from the earlier diagram in that it compares those effects under two possible fringe firm supply functions, MCF' and MCF'' . Suppose the fringe firm's supply curve is MCF' . The dominant firm maximizes profit by constructing a residual demand curve $X'C$ with the marginal revenue curve $X'B$ drawn to it. It then equates marginal revenue with its marginal cost MCd at output Qd , and sets the corresponding price of Pm' . The fringe firm sets its marginal cost equal to Pm' at an output of Qf' , and the market's output ($Qf' + Qd$) is Qm' . The deadweight loss here is $A'CB$ and the monopoly profit to the dominant firm is $A'B'E'$. The fringe firm's production costs exceed the dominant firm's cost for those units by an amount equal to the area of $E'F'Pc$.

Now suppose the dominant firm is able (costlessly to itself) to increase the marginal cost of the fringe firm. The fringe firm's supply elasticity decreases as its marginal cost shifts up to MCF'' . Now the dominant firm is able to construct a less elastic residual demand curve $X''C$ and corresponding marginal revenue curve $X''B$. The resulting profit-maximizing price, Pm'' , is higher, and the attendant market output Qm'' is lower. The fringe firm now takes the higher price, but with higher marginal costs and lower output Qf'' .

30. Hovenkamp uses the examples of *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492 (1988), and *American Socy. of Mech. Engrs. v. Hydrolevel Corp.*, 456 U.S. 556 (1982). Hovenkamp, *supra* note 1, at 19.

31. In the diagram in note 29, *supra*, the dominant firm's output remains constant before and after the practice because I have (for simplicity) drawn the dominant firm's marginal cost curve MCd so that it intersects the residual marginal revenue curves $X'B$ and $X''B$ at the point (B) where they intersect each other. If MCd intersected the marginal revenue curves below B , the dominant firm's output would decline; if MCd intersected the marginal revenue curves above B ,

put; the market's output thus declines and the price rises.³² But note: because the victim's cost savings from reducing its output at least partially offset its increased costs per unit, productive inefficiency may increase little, or actually decline.³³ The effect of the predatory practice on the victim's costs is damaging not because of its effect on the firm's costs but because of the effect of the reduction in the firm's supply elasticity on the predator's monopoly power.³⁴

III. THE OPTIMAL PENALTY AND THE SCOPE OF LIABILITY

The forgoing discussion shows the theoretical weaknesses in Hovenkamp's notion of *W/L3* losses. But Hovenkamp does not offer *W/L3* losses as an exercise in pure theory; instead, he suggests that it supports a broader definition of compensable harms in antitrust cases. He suggests that the optimal deterrence model is inappropriate for the analysis of questions of antitrust damages, particularly for exclusionary practices, because it assumes that the optimal penalty is calculated and then the right to recover for that amount is assigned to the best plaintiff, regardless of which economic actors actually suffered the harm. This assumption, he says, is inconsistent with a system of remedies based on damages for individual harms.³⁵ He canvasses the legislative history of the Sherman Act and discovers that Congress

the dominant firm's output would increase, but by less than the amount that the fringe firm's output would decrease.

Also in the diagram in note 29, *supra*, I have illustrated the effect of the exclusionary practice by rotating the fringe firm's supply curve MCf' to MCf'' . If the practice instead caused a parallel upward shift in MCf , then the attendant residual demand and marginal revenue curves would also shift upward and parallel. In that case, the dominant firm's output would also increase, since the firm's marginal cost would necessarily intersect the higher, new marginal revenue curve at a higher output. Again, however, the fringe firm's reduction in output would more than erase the increase.

32. Output in the market could increase only if the shift in output from the fringe to the dominant firm caused the market price actually to decline. This circumstance would require, among other conditions, that the dominant firm's marginal cost decline at a rate greater than the firm's new residual demand curve. Such circumstances, resembling natural monopoly, are unlikely.

33. In the diagram in note 29, *supra*, whether a given reduction in the slope of the fringe firm's marginal cost from MCf' to MCf'' reduces or increases productive efficiency depends upon whether the decrease in the fringe firm's output from Qf' to Qf'' is proportionally greater than the increase in the amount by which the fringe firm's marginal cost exceeds the dominant firm's marginal cost. Specifically, the area of $E'F'Pc$ will be greater than the area of $E''F''Pc$ if $Qf'(Pm' - Pc)/2$ is greater than $Qf''(Pm'' - Pc)/2$. This condition is satisfied if the ratio Qf'/Qf'' is greater than the ratio $(Pm'' - Pc)/(Pm' - Pc)$.

34. The welfare effects of the exclusionary practice depicted in note 29, *supra*, are clear. The deadweight welfare loss increases by an amount equal to the area $A'B'B''A''$. Even if productive inefficiency declines (*see supra* note 33), the sum of productive and allocative inefficiency increases.

35. Hovenkamp, *supra* note 1, at 5. *See* 15 U.S.C. § 15 (1988) (limiting recovery to three times the damages sustained by the plaintiff).

intended to protect not only consumers (from both deadweight welfare losses and wealth transfers to producers) but also competitors of anti-trust offenders. Competitors are, he concludes, one of antitrust's protected classes.

Hovenkamp apparently does not intend by this argument to revive the protectionist antitrust perspective of the Warren Court, which, in practice if not in words, equated damage to competitors with damage to competition. Hovenkamp says in his discussion of legislative history that "only conduct calculated to create a monopoly is to be condemned,"³⁶ and later recognizes that "[n]ot all the losses . . . in antitrust cases reflect net welfare losses."³⁷ He offers little guidance, however, on how courts are to separate *WL3* losses from other harms factually caused by a properly-defined antitrust offense.

Hovenkamp's argument raises these concerns because he misconceives not only the social costs of monopolistic practices, but the relationship between private harm and the optimal penalty. Hovenkamp is correct that the present legal regime does not permit severing the penalty from the private harm,³⁸ although the *Illinois Brick*³⁹ doctrine qualifies this point. One need not, however, on that account, reject the optimal deterrence model. As I have argued at length elsewhere, that model can guide the application of established doctrines such as anti-trust injury and standing.⁴⁰ The antitrust injury doctrine provides a first approximation of the optimal penalty by identifying those harms that are causally related to the allocative inefficiency associated with the offense. The causal connection is shown if the type of harm alleged varies in direct proportion to the output restriction.⁴¹ The criterion of proportional variation may, however, be overly expansive, since the sum of the harms that meet it may exceed the optimal penalty, particularly if the coefficient of proportionality is greater than one. Thus, in many cases, a second step is necessary to select the

36. Hovenkamp, *supra* note 1, at 27.

37. *Id.* at 37.

38. The penalty could be calculated independently of the harm to the plaintiff. The legal system already recognizes a similar device in *qui tam* actions. See generally Caminker, *The Constitutionality of Qui Tam Actions*, 99 *YALE L.J.* 341 (1989). Whether such an approach would be preferable to the current regime of private antitrust penalties is a difficult issue, but one we need not decide under the current language of § 4 of the Clayton Act. 15 U.S.C. § 15 (1988).

39. *Illinois Brick Co. v. Illinois*, 431 U.S. 720 (1977) (permitting direct purchasers from price-fixers to recover, even if part of overcharge passed on). Hovenkamp is dissatisfied with *Illinois Brick* also. See Hovenkamp, *The Indirect Purchaser Rule and Cost-Plus Sales*, 103 *HARV. L. REV.* 1717 (1990).

40. See sources cited *supra* note 2; see also *Cargill, Inc. v. Monfort of Colo., Inc.*, 479 U.S. 104, 110 n.5 (1986).

41. See Page, *Chicago School*, *supra* note 2, at 1272-73.

plaintiffs in the best position to bring suit for an amount equal to the optimal penalty.⁴² This second step is provided by the doctrine of antitrust standing.

Under this approach, harms to competitors should in some instances be compensable. One reason, which Hovenkamp recognizes, is that competitors are a reliable and knowledgeable class of antitrust plaintiffs. As we saw in Part II, however, competitors' harms are not themselves the defining social costs of monopoly. They are antitrust injury only if they are proportional to the social cost, the deadweight loss from increased monopoly power.⁴³ It is therefore misleading to characterize competitors as a protected class; their right to recover for their harms is purely instrumental. Nothing in Hovenkamp's survey of the legislative history of the Sherman Act contradicts this view of the private damage action.

A relatively clear application of this approach would approve both the traditional measure of damages for the overcharge in price-fixing cases, and the *Illinois Brick* doctrine's limitation of the right to recover for the overcharge to the first purchaser from the offenders. The overcharge is proportional to the allocative inefficiency of the offense: both are created by the same output restriction. The antitrust injury, so defined, directly reflects the largest portion of the optimal penalty, the monopoly profit.⁴⁴ But all purchasers in the chain, direct and indirect, suffer antitrust injury in this sense; allowing them all to recover would raise a serious risk of duplicate recovery, increased litigation costs, and dilution of the incentive to sue. The *Illinois Brick*⁴⁵ solution, which concentrates the right to recover for the overcharge in the first purchasers, is the prototypical standing rule: it selects the most efficient set of plaintiffs to impose the deterrent penalty.⁴⁶

A less common case is the problem of defining the right to sue for "overcharges" paid to the cartel's competitive fringe.⁴⁷ As we saw in the last part, the fringe firms are able to increase their output to the

42. Page, *Scope of Liability*, *supra* note 2, at 1483-98.

43. The requirement of proportionality is satisfied in the example in *supra* note 25. Because, in that example, the lost rent is equal to the savings in production costs, the lost rent is likewise proportional to the increase in allocative inefficiency.

44. Page, *Scope of Liability*, *supra* note 2, at 1465.

45. *Illinois Brick Co. v. Illinois*, 431 U.S. 720 (1977).

46. Page, *Scope of Liability*, *supra* note 2, at 1486-88. Notice that this analysis does not depend on recognizing the overcharge as an independent social cost of monopoly; the defining social cost is the deadweight welfare loss from the monopolistic output restriction. See *supra* note 17. The overcharge is nonetheless compensable as antitrust injury because it meets the standard of proportional variation.

47. See Hovenkamp, *supra* note 1, at 31 n.110.

point at which their marginal cost equals the cartel's price.⁴⁸ Do the amounts consumers pay to these firms also reflect antitrust injury? The antitrust injury and standing analysis resolves this problem in the following way.⁴⁹ Purchasers from the competitive fringe suffer antitrust injury, since their harm is causally related to the allocative inefficiency associated with the cartel: the same output restriction that allows the cartel to set the dominant firm price also allows the fringe to set its price at that level.

The standing analysis is less clear-cut, but also permits suit. One might argue that the overcharge paid to the fringe is in part a wealth transfer that does not reflect the monopoly profit, because it is not captured by the cartel; thus, to allow it as damages in addition to the overcharge paid to the cartel members themselves would represent overdeterrence. But this reasoning ignores two points. First, as we have seen,⁵⁰ the increased output of the fringe carries with it increased costs of production for those marginal units, costs that are also social costs of dominant firm pricing. Moreover, the overcharge to cartel members, by itself, is inevitably less than the optimal penalty, since it does not take account of the deadweight welfare loss from the cartel. To allow purchasers from the fringe to recover would thus not represent overdeterrence, or permit duplicative recoveries. It follows, then, that those who purchase from the fringe also have antitrust standing.

This approach also recognizes the right of competitors to sue for true exclusionary practices. It does so, however, not because the harms to competitors are themselves social costs, but because they are causally linked to the monopolistic output restriction, and serve as a reasonable proxy for the welfare loss associated with the output restriction. Suppose, for example, that the fringe firms in the last example are excluded from the market. As we saw in Part II,⁵¹ in these circumstances the output restriction in the market corresponds directly to the reduction in the fringe firms' output; the expected returns to the fringe firms on those units of production — represented by the going concern value of the firm — should be recognized as antitrust injury. Notice that the harm to the excluded firm is not itself an exogenous social cost;⁵² it *reflects* the allocative inefficiency in the sense of

48. See *supra* note 22.

49. Page, *Scope of Liability*, *supra* note 2, at 1465-67, 1490-92; see also *In re Arizona Dairy Prods. Litig.*, 627 F. Supp. 233 (D. Ariz. 1985).

50. See *supra* note 22.

51. See *supra* note 25.

52. Obviously, if the predator bombs the victim's plant there are additional social costs. Hovenkamp views these as antitrust injury. See Hovenkamp, *supra* note 1, at 20-21. They are not, however, since they bear no relationship to the monopolistic effect; they would be the same

bearing a direct proportional relationship to it. It is antitrust injury because it serves as an appropriate proxy for a portion of the optimal penalty.

This reasoning applies even if the firm is not entirely excluded from the market. If the exclusionary practice raises the firm's marginal costs by denying access to inputs, economies of scale, or efficient means of distribution, and thereby enhances the offender's monopoly power, the expected profits on those lost sales should be recoverable.⁵³

This argument casts doubt on Hovenkamp's suggestion that the victim's lost investment is a preferable measure of damages in such cases.⁵⁴ Lost profits are antitrust injury because they are proportional to the output restriction that the practice makes possible. It is not clear that Hovenkamp's notion of lost investment bears the necessary relationship to the extent of the output restriction.⁵⁵ The lost profits represent returns on the very units of production that are excluded from the market.⁵⁶ None of this denies the problems of proof that the lost profits measure raises, but the legal system has well-established standards of proof that set limits on the risk of error.⁵⁷

It is crucial, of course, that the exclusion be a true anticompetitive

regardless of the market conditions. The standard of proportional variation excludes this basis for recovery, although the additional damages would be independently actionable.

53. See *supra* note 29. The amount must, of course, be reduced by any benefit to the fringe from the increased price in the market. The measure would thus be the difference between $E'Pm'Pc$ and $E''Pm''Pc$. Notice that if the increased cost to the fringe firm takes the form of a parallel upward shift in its MC , the reduction in its rent would be greater since the shift would have a greater effect on the costs of intramarginal units of production.

54. Hovenkamp, *supra* note 1, at 38-40.

55. Hovenkamp refers to lost unrecoverable investment. *Id.* at 40. If by this measure he means the reduction in the value of the assets associated with the monopolistic exclusion, then it is a measure of lost profits and therefore antitrust injury. Of course, investment may be "lost" for a host of reasons unrelated to anticompetitive exclusion. Consequently, use of this measure does not eliminate the evidentiary concerns Hovenkamp raises.

56. Easterbrook has criticized my argument on this point because it appears to allow greater damages to the plaintiff in circumstances in which the market conditions before the predation were least competitive. Easterbrook, *supra* note 8, at 326-27. Where the market, for example, is shared oligopolistically between two firms, the damages for exclusion of one of them would be greater than if the market were competitive before the exclusion. This point illustrates the importance of the theoretical frame for the question. In my view, by far the more plausible market condition before predation is dominant firm pricing. Both of Easterbrook's hypothetical cases require that the victim have a market share comparable to that of the predator, an unlikely circumstance.

57. Hovenkamp correctly points out that lost accounting profits may include opportunity costs, the return on investment in its best alternative use. Hovenkamp, *supra* note 1, at 40. The requirement of mitigation of damages imposes some limitations on this difficulty. See generally Hamilton & Cone, *Mitigation of Antitrust Damages*, 66 OR. L. REV. 339 (1987). On the question of speculativeness of damages, see *Bell v. Dow Chem. Co.*, 847 F.2d 1179, 1183-84 (5th Cir. 1988) (rejecting potential entrant's claim for lost profits as speculative); *McGlinchy v. Shell Chem. Co.*, 845 F.2d 802, 806-07 (9th Cir. 1988) (rejecting expert testimony concerning lost profits).

exclusion, not the simple displacement of the output of one firm by the output of another. Competition itself excludes firms from some share of the market. The Supreme Court made clear in *Brunswick*⁵⁸ and *Cargill*⁵⁹ that firms do not suffer antitrust injury when they suffer lost profits because an allegedly unlawful merger of their competitors enhances competition. And last term, in *Atlantic Richfield Co. v. USA Petroleum Co.*,⁶⁰ the Court extended the principle to deny antitrust injury to competitors of firms whose prices were lowered by a maximum resale price-fixing agreement. For the same reasons, profits on sales lost because of a competitor's exclusive dealing arrangements or tying arrangements⁶¹ are not antitrust injury if they reflect merely a substitution of one firm's output for another. In all such cases, the plaintiff should be required to demonstrate that the harm is linked to an output restriction in the market.⁶²

Less obviously, harm from predatory pricing during the predatory campaign should not be treated as antitrust injury. Hovenkamp appears to accept the traditional view that lost profits on sales made during a predatory campaign are compensable.⁶³ But, as we saw in the last section, those lost profits are mere wealth transfers to consumers. Moreover, they are not necessarily proportional to any inefficiency associated with predatory pricing; indeed, the victim may reduce its output or shut down entirely until the campaign ends. The only real social cost of the practice is borne by the predator. Only if the victim of predatory pricing is actually excluded is there a social cost that would justify recognizing a right of the victim to recover.

Hovenkamp's failure to distinguish increased costs from reduced revenues indicates the pitfalls of a concept as vague as *WL3* losses. Antitrust plaintiffs are likely to use the antitrust laws for rent-seeking, to suppress vigorous competition. As the Court observed in *Atlantic Richfield*, "a competitor will be injured and hence motivated to sue only when a vertical, maximum price-fixing arrangement has a *procompetitive* impact on the market."⁶⁴ To mitigate this danger, the

58. *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477 (1977).

59. *Cargill, Inc. v. Monfort of Colo., Inc.*, 479 U.S. 104 (1986).

60. 110 S. Ct. 1884 (1990).

61. *See, e.g., Metrix Warehouse, Inc. v. Daimler-Benz, A.G.*, 828 F.2d 1033, 1042-43 (4th Cir. 1987) (evidence that sales pursuant to tying arrangement were in part due to procompetitive act of defendant contradicted plaintiff's "yardstick" measure of lost profits).

62. *See Page, Scope of Liability, supra* note 2, at 1479-82.

63. Hovenkamp, *supra* note 1, at 32-33; *see also Atlantic Richfield*, 110 S. Ct. at 1892 & n.10 and *passim* (maximum resale prices at issue were "non-predatory"); Blair & Harrison, *Rethinking Antitrust Injury*, 42 VAND. L. REV. 1539, 1561-65 (1989) (unsuccessful predatory pricing causes antitrust injury to competitors).

64. 110 S. Ct. at 1895 (emphasis in original).

doctrine of antitrust injury requires plaintiffs to offer a clear account of the causal relationship between their harm and the only true indicator of monopolistic behavior, the output restriction. By liberating plaintiffs from this requirement, Hovenkamp's *WL3* losses would undermine the function of the antitrust injury doctrine.

IV. CONCLUSION

Hovenkamp has provided a useful opportunity to consider the relationships among social cost, competitive harm, and antitrust injury. His general points — that we must work within a system of remedies based upon individual harms and that competitors are sometimes the best enforcers in such a system — are correct. Unfortunately, his idea of *WL3* losses is an insufficient basis for analysis and should be rejected. A properly interpreted doctrine of antitrust injury and standing should rely on convincing theoretical links between the private harm alleged and the monopolistic output restriction.