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# A Solution to the Problem of Nuisance Suits: The Option to Have the Court Bar Settlement

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## Abstract

A solution to a broad category of nuisance suits is examined in this paper. The solution is to give defendants the option to have courts prevent settlements (by refusing to enforce them). Then, if a defendant knows he is facing a plaintiff who would not be willing to go to trial, the defendant would exercise his option to bar settlement, forcing the plaintiff to withdraw. And because the plaintiff would anticipate this, he would not bring his nuisance suit in the first place.

<sup>&</sup>lt;sup>\*</sup> Harvard Law School, and Harvard Law School and the National Bureau of Economic Research, respectively. The authors thank Lucian Bebchuk for comments, and Shavell thanks the John M. Olin Center for Law, Economics, and Business at Harvard Law School for research support.

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David Rosenberg and Steven Shavell<sup>\*</sup>

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#### **1. Introduction**

In this paper, we examine a solution to a broad category of nuisance suits. The solution is to give defendants the option to have courts prevent settlement, that is, to accord defendants the right to have courts declare that settlement agreements will not be enforced.

By a nuisance suit we refer to a legal action in which the plaintiff's case is sufficiently weak that he would be unwilling to pursue it to trial. The type of nuisance suit that we consider arises in the following simple model of litigation.<sup>1</sup> The plaintiff may choose to file a claim at a small cost. If the defendant does not settle with the plaintiff and does not, at a cost, defend himself, the plaintiff may either withdraw or, at a cost, litigate.

Given this model, it is easy to see how nuisance suits occur. By filing a claim, even a plaintiff with a weak case places the defendant in a position where he will lose by default judgment unless he spends on defense. Hence, the defendant should be willing to pay a positive amount in settlement even to a plaintiff with a weak case – despite the defendant's knowledge that were he to defend himself, a plaintiff with a weak case would withdraw. Plaintiffs with weak cases may take advantage of this situation and obtain settlements from defendants.

The solution that we consider to the foregoing problem of nuisance suits and extraction of settlements works in a straightforward way. If the defendant knows he is facing a plaintiff who would not be willing to go to trial, the defendant would want to exercise his option to have settlements rendered unenforceable. For if the defendant does this, the plaintiff would not be able to settle for a positive amount, and since the plaintiff would not be willing to go to trial, he would drop his case. Indeed, anticipating that the defendant would elect to prevent settlement, the plaintiff would not bring his nuisance suit in the first place. Thus, the option to bar settlement would cure the problem of nuisance suits under discussion.

As we also explain, the defendant would not exercise the option to bar settlement when he knows that the plaintiff is not bringing a nuisance suit and would be willing to proceed to trial. Therefore, the option to bar settlement would not turn out to stymie settlement when settlement would save the parties and the courts the costs of litigation.

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<sup>&</sup>lt;sup>1</sup> The authors developed this model in Rosenberg and Shavell (1985). For surveys of economic literature on nuisance suits, see Rasmusen (1998) and Spier (2004).

Another socially desirable aspect of the option to prevent settlement is that the court does not need any information about the litigants to implement it; the courts need merely accept requests of defendants to bar settlements.

In Section 2 below, we present an informal analysis of the model of nuisance suits and demonstrate how our solution would function to rectify it. In Section 3, we develop the analysis formally. In Section 4, we offer concluding remarks.

### 2. Informal Analysis

The diagram describing the model in the absence of an option to prevent settlement is shown in Figure 1 below.



Figure 1: The Model Without The Option to Have The Court Bar Settlement

First, the plaintiff P decides whether or not to file a claim and make a settlement demand; filing a claim involves a cost. Second, the defendant D decides among three choices: settle with P; default, in which event P is awarded the amount at stake; or defend, at a cost. Third, P decides whether to withdraw or to litigate. Last, if P litigates, he wins with a probability or loses with the complementary probability. The characteristics of the litigation situation – including the filing and the litigation costs, the amount at stake, and the likelihood of P prevailing at trial – are known by both P and D.

To understand the model, consider a numerical example. Suppose that the cost to P of filing is \$25; that the cost to D of defense would be \$200; that the cost to P of litigation would be \$100; that the amount at stake is \$1,000; and that the probability of P prevailing at trial is 1%.

Thus P's case is weak and he would not litigate it: his expected judgment from litigation would be only  $1\% \times \$1000$  or \$10, which is less than his litigation costs of \$100.

In order to see how nuisance suits arise, suppose that P files a claim and demands, say, \$100 in settlement. D will reason that if he settles, his expenses will be \$100, whereas if he does not settle, he will be led to spend \$200 to induce the plaintiff to withdraw (D clearly will not default, for that would cost him \$1,000). Hence, D will

prefer to settle for \$100 than not settle. Indeed, D would be better off settling for any amount up to his defense costs of \$200 than not settling. The precise amount that P will be able to extract from D in a settlement depends on P's bargaining power and, for concreteness, let us assume that it is  $$150.^2$  It follows that P would be willing to spend the \$25 in filing costs in order to obtain \$150 in settlement, for he would profit thereby; his profits would be \$125. More generally, a nuisance suit would arise whenever the filing fee is less than the settlement amount that P could extract, and this amount could be as high as D's defense costs, no matter how weak P's case.

Now consider the situation when defendants can ask the court to bar settlement. The model with this possibility is shown in Figure 2.



Note the differences from the model without the option to bar settlement. After P files a claim and makes a settlement demand, D can ask the court to bar settlement. (The court can bar settlement by declaring that it will not enforce any settlement agreement and that this policy in the case is irrevocable.<sup>3</sup>) If D bars settlement, P can withdraw. If P does not withdraw, then D has only two choices (because settlement is barred): default; or defend, at a cost. If D defends, P can withdraw or litigate, at a cost. If there is litigation, P wins or loses.

<sup>&</sup>lt;sup>2</sup> In the formal analysis of section 3, assumptions are made that effectively give all the bargaining power to P, so he would be able to obtain a settlement of \$200; but this is just for expositional convenience.

<sup>&</sup>lt;sup>3</sup> Note that the parties would not settle secretly: although they could do this, such a settlement would be valueless for the defendant, since the plaintiff could file suit despite the existence of the settlement.

Let us continue now with the numerical example. What we showed with reference to Figure 1 implies that, with reference to Figure 2, if D does not bar settlement, he will be led to settle for \$150.

What if D elects to bar settlement? If P does not immediately withdraw, D will be led to spend \$200 in defense (rather than default and lose \$1,000), inducing P then to withdraw. Hence, P is indifferent between withdrawing immediately or withdrawing later, and we assume that P withdraws immediately.<sup>4</sup> This means that D does not in fact spend \$200 to defend himself.

It follows that D will choose to bar settlement: for if he does so, he induces P to withdraw and bears no costs; whereas if he does not bar settlement, he is led to settle for \$150.

Because P can anticipate that D would elect to bar settlement and thus effectively deny P any return from filing, P will decide against spending \$25 to file. In other words, P will refrain from bringing his nuisance suit.

Next, let us consider a situation in which P has a strong case and would be willing to proceed to trial. Suppose that P's probability of prevailing is 60% (and otherwise, assume as above), so that his expected return from litigation would be  $60\% \times \$1,000$  or \$600, exceeding his litigation costs of \$100. Then we claim that D would not elect to prevent settlement and would settle with P.

In particular, let us examine the upper part of Figure 2, where D does not choose to bar settlement. In this branch, D would be willing to pay a settlement of up to \$800. For D knows that if he does not settle, he would face two choices: default and lose \$1,000; or defend, at a cost of \$200, and then litigate and lose \$600 on average. The latter route is what D would choose, and it would cost him \$800 in total. Note that the reason D would litigate is that P would not withdraw, since as we observed P's expected return of \$600 outweighs his litigation cost of \$100. The last point implies that P would be willing to settle for any amount over \$500 (that is, \$600 – \$500), and bargaining power would determine where, between \$500 and \$800, the settlement would be. Let us say the settlement amount would be \$700 for concreteness.

Suppose instead that D opts to bar settlement, so the lower part of Figure 2 applies. Then P will not withdraw, D will defend, and D will spend \$800 on average.

Faced with the choice between not barring settlement – and then settling for 700 – and barring settlement – and subsequently litigating and losing 800 on average – D will decide not to bar settlement, and settlement will occur. The implicit reason that D does not want to bar settlement is that, when P would be willing to litigate, D and P would really have to bear litigation costs if they do not settle.

To sum up, we have shown in a numerical example what we demonstrate generally below: defendants' option to have the court prevent settlement will discourage nuisance suits from being brought; but it will not be problematic otherwise, as it will not be exercised and will have no effect on the bringing or the settlement of strong suits, which would go to trial if not settled.

# **3. Formal Analysis**

Let us assume that the plaintiff P and the defendant D are risk neutral and that the

<sup>&</sup>lt;sup>4</sup> In reality P would face positive costs were he not to withdraw immediately; he would have to submit to discovery, make himself present at hearings, file certain motions in response to D's, and the like. Consequently, P would strictly prefer to withdraw immediately than to do so later.

sequence of actions that they may choose is as was described in Figures 1 and 2 in the informal analysis. Define the following notation.

f = P's cost of filing a claim;  $f \ge 0$ ;

s = P's settlement demand;  $s \ge 0$ ;

 $c_D = D$ 's cost of defense;  $c_D \ge 0$ ;

 $c_P = P$ 's cost of litigation;  $c_P \ge 0$ ;

p = probability that P would prevail in litigation;  $0 \le p \le 1$ ;

w = amount at stake (that P would obtain in a judgment); w > 0.

For simplicity, assume that  $c_D$  and  $c_P$  are each less than w. Suppose that both parties know all these variables. We now determine the behavior of the parties, presuming that at each decision point the litigants assume that the future decisions of litigants are personally optimal.

We first consider situations where P would not be willing to litigate.

**Proposition 1.** Assume that the plaintiff P would be unwilling to litigate – his expected judgment pw is less than his litigation cost  $c_P$ . Assume also that P's filing cost f is less than the defendant D's defense cost  $c_D$ .

(a) In the absence of the opportunity to have the court bar settlement, P will bring a nuisance suit: P will file a suit and D will pay a positive settlement (of  $c_D$ ) even though P would not be willing to litigate.

(b) In the presence of the opportunity to have the court bar settlement, P will not bring suit: were P to bring suit, D would opt to bar settlement, and P would withdraw, resulting in a loss to him of f.

*Proof.* (a) Working backwards in Figure 1, observe that P would choose to withdraw, since  $c_P > pw$ .

Now consider D's prior decision among three alternatives. If he settles, he pays *s*. If he defaults, he pays *w*. If he defends, he spends  $c_D$ , and no more, since as just observed P would then withdraw. Hence, D will choose the action that results in the minimum of  $c_D$ , *w*, and *s*. Since  $c_D < w$ , it follows that D will settle if  $s \le c_D$  and otherwise will defend.

Next consider P's initial decision. If he files a claim and demands *s*, this will be accepted by D if  $s \le c_D$ , and otherwise D will defend and P will withdraw. Hence, if P files a claim, his optimal settlement demand is  $s = c_D$ , which will be accepted. Thus, P will obtain a positive net gain of  $c_D - f > 0$ . If on the other hand, P does not file a claim, his return is 0. Hence, he will file a claim, demand  $c_D$ , and this will be accepted.

(b) We now consider Figure 2 and work backwards. From what was just stated in the proof of (a), we know what happens in the upper part of Figure 2 following a decision of D not to bar settlement. Namely, D will settle if  $s \le c_D$  and otherwise will defend, in which case P will withdraw.

Consider next the part of the Figure following a decision of D to bar settlement. Working backwards, we know as above that at the end, P would withdraw rather than litigate. D's decision prior to this is between two alternatives, defaulting and losing w or defending at a cost of  $c_D < w$ . Hence, D would defend and spend  $c_D$  and P would withdraw. The prior decision of P is whether or not to withdraw. If he withdraws, his cost (apart from the filing fee *f*) is 0, and if he does not withdraw, he will subsequently withdraw, so he would be indifferent between withdrawing and not. We assume that he does withdraw (see note 4 for a justification). Next consider D's decision whether or not to bar settlement. If D does not bar settlement, his cost will be the minimum of *s* or  $c_D$ , whereas if he does bar settlement, his cost will be 0. Hence he will bar settlement (and strictly prefer this if *s* is positive).

Last consider P's decision whether or not to bring suit. If he brings suit, since D will bar settlement, P will be led to withdraw, so P will suffer a cost of f, whereas if he does not bring suit, his cost is 0. Hence, P will not bring suit. Q.E.D.

We next consider situations where P would be willing to litigate. In order to simplify the exposition, we assume that  $c_D + pw < w$ , that is, D would not choose to default rather than litigate.<sup>5</sup>

**Proposition 2.** Assume that the plaintiff P would be willing to litigate – his expected judgment pw exceeds his litigation cost  $c_P$ . Assume also that P's filing cost f is less than the defendant D's defense cost  $c_D$  plus expected award pw.

(a) In the absence of the opportunity to have the court bar settlement, P will bring a suit and it will be settled (for  $c_D + pw$ ).

(b) In the presence of the opportunity to have the court bar settlement, D will not elect that option and P and D will behave as if it does not exist; thus P will bring suit and it will be settled (for  $c_D + pw$ ).

*Proof.* (a) Working backwards in Figure 1, observe that P would choose to litigate, since  $c_P < pw$ .

Next consider D's prior decision. If he settles, he pays *s*; if he defaults, he pays *w*; and if he defends himself, he spends  $c_D$ , and then litigates, so his expenses will be  $c_D + pw$ . Hence, D will choose the action that minimizes among  $c_D + pw$ , *w*, and *s*. It follows that D will settle if  $s \le c_D + pw$  (since the latter is less than *w*) and otherwise will defend and P will litigate.

Now consider P's initial decision. If he files a claim and demands *s*, this will be accepted by D if  $s \le c_D + pw$ . If the settlement is not accepted, then since D will defend and P will litigate, P will obtain  $pw - c_P$ . Thus, P is best off setting  $s = c_D + pw$  and receiving this in settlement. Since  $f < c_D + pw$ , P will prefer to file a claim than not.

(b) From what was just stated in the proof of (a), we know what happens in the upper part of Figure 2 following the decision where D does not bar settlement: D will settle if  $s \le c_D + pw$  and otherwise will defend, in which case P will litigate.

Consider the part of Figure following the decision where D bars settlement. Working backwards, we know that at the end, P would litigate. D's decision prior to this is between two alternatives, defaulting and losing w or defending at a cost of  $c_D$  and then litigating, so incurring costs of  $c_D + pw$ . Hence, D would defend and incur costs of  $c_D + pw$ . The prior decision of P is whether or not to withdraw. If he withdraws, his cost (apart from the filing fee f) is 0, and if he does not withdraw, he will subsequently litigate, so he would obtain  $pw - c_P > 0$ . Hence, P would not withdraw; he would litigate.

Next consider D's decision whether or not to bar settlement. If D does not bar settlement, his cost will be the minimum of *s* or  $c_D + pw$ . If D bars settlement, his cost will be  $c_D + pw$ . Hence, we can assume he will not bar settlement (he will strictly prefer this if  $s < c_D + pw$ ).

<sup>&</sup>lt;sup>5</sup> Were we not to make this assumption, it would still be true that D would not want to bar settlement but the settlement amount would be w.

Last consider P's decision whether or not to bring suit. If he brings suit, since D will not bar settlement, there will be a settlement if  $s \le c_D + pw$ , whereas otherwise there will not be and P will litigate, obtaining  $pw - c_P$ . Hence, if P brings suit, he will choose  $s = c_D + pw$  and there will be a settlement for this amount. Since  $f < c_D + pw$ , he will prefer to file than not to. Q.E.D.

# 4. Concluding Comments

(a) The source of nuisance suits studied in the model was the ability of the plaintiff cheaply to place the defendant in a position where he would lose unless he engaged in a relatively costly defense. Plaintiffs often seem able to do this: a plaintiff can usually file a claim at small expense and will prevail if the defendant does not mount a defense involving substantially greater expense. Also, the model is relevant in situations where plaintiffs and defendants have opposite roles to that studied above, namely, where defendants can assert counterclaims or defenses that have little or no merit but that plaintiffs would have to spend significantly to defeat.<sup>6</sup>

(b) The policy that we studied, of having courts refuse to enforce settlement agreements, is, as we noted above, simple for courts to implement, as it does not require them to obtain any information about the case. The policy should also be essentially costless to implement, because it is a policy under which the courts simply refrain from doing something. In contrast, other policies that could be employed to discourage nuisance suits, notably, imposition of penalties for such suits or use of fee-shifting, require courts to engage in inquiries about cases and legal costs, and thus would involve expense, perhaps substantial.<sup>7</sup>

(c) A different category of nuisance suit from that studied here is a suit that is brought only because the defendant does not realize the plaintiff would not litigate – a suit in which the plaintiff masquerades as a party who would be willing to litigate.<sup>8</sup> The policy we study here would not function to prevent these nuisance suits. The reason is that, if a defendant believes that a plaintiff is probably willing to litigate, then the defendant will want to settle, so will not bar settlement. The argument underlying this statement is essentially that which we used to show that when the defendant knows he is facing a strong suit that the plaintiff is willing to litigate, the defendant will not elect to have the court bar settlement.

<sup>&</sup>lt;sup>6</sup> In such situations plaintiffs would be led to lower their settlement demands by an amount commensurate with the cost of defeating defendants' counterclaims. The interpretation of our proposal in regard to such plaintiffs is that they would be allowed to request the court to bar settlement (or settlement on a particular issue of dispute).

<sup>&</sup>lt;sup>7</sup> To impose penalties for nuisance suits, courts would have to determine whether a suit was, in fact, a nuisance suit, which would involve cost and could result in judicial error. To use fee-shifting to discourage nuisance suits would also require courts to determine whether suits are nuisance suits (or likely to be such); for otherwise courts would have to adopt fee shifting generally (which is not something that would necessarily be socially desirable). Furthermore, to employ fee-shifting, courts would have to assess reasonable fees.

<sup>&</sup>lt;sup>8</sup> Nuisance suits of this type are studied in Bebchuk (1988) and Katz (1990).

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