

## WHY IS THE COMMON LAW EFFICIENT?

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POSNER, in *Economic Analysis of Law*,<sup>1</sup> argues persuasively that the common law can be best understood as an attempt to achieve economic efficiency. He is less persuasive in his explanation of why this is so—his argument is essentially that judges may as well decide in terms of efficiency, since they have no other criteria to use. To an economist accustomed to invisible hand<sup>2</sup> explanations of efficiency in the marketplace, this justification seems weak.

Of related interest is the analysis by Landes,<sup>3</sup> Gould,<sup>4</sup> and Tullock<sup>5</sup> of the decision to litigate a dispute rather than settle. All have concluded that, in general, parties will settle out of court. But, for the common law to remain efficient, it must change as conditions change; changes in the common law require that some cases be litigated. Does the rationality of the common law rest on irrational behavior of litigants?

In this paper I show that these issues—the presumed efficiency of the common law and the decision to use the courts to settle a dispute—are related. In particular, this relationship will occur because resorting to court settlement is more likely in cases where the legal rules relevant to the dispute are inefficient, and less likely where the rules are efficient. Thus, efficient rules may evolve from in-court settlement, thereby reducing the incentive for future litigation and increasing the probability that efficient rules will persist. In short, the efficient rule situation noted by Posner is due to an evolutionary mechanism whose direction proceeds from the utility maximizing decisions of disputants rather than from the wisdom of judges.

Section I of this paper contains an analysis of the framework which will be used to discuss pressures for efficiency. Section II contains the actual analy-

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<sup>1</sup> Richard A. Posner, *Economic Analysis of Law* (1972).

<sup>2</sup> For a general discussion of invisible hand explanations, see Robert Nozick, *Anarchy, State and Utopia* (1974).

<sup>3</sup> William M. Landes, *An Economic Analysis of the Courts*, 14 *J. Law & Econ.* 61 (1971).

<sup>4</sup> John P. Gould, *The Economics of Legal Conflicts*, 2 *J. Leg. Studies* 279 (1973).

<sup>5</sup> Gordon Tullock, *The Logic of the Law* (1971).

the basis of precedent. As shown below, it is the possibility of changing current precedents which sometimes makes litigation worthwhile and which will in some circumstances lead to efficiency.

The Coase theorem<sup>7</sup> indicates that placement of liability does not matter: if A were made liable, he would simply pay a bribe to B in order to induce B to avoid accidents; as indicated by (1), this would be the efficient solution. This will in fact occur if the costs of paying the bribe are sufficiently low; however, it is possible that the transactions costs will be greater than  $(T_A - T_B)$ , the saving from shifting liability to the efficient bearer. In this case, if he is liable, A will accept liability rather than paying B. Even if it is feasible for A to bribe B, there will be some transactions costs involved in paying the bribe. In Section II, it is assumed that paying a bribe is not feasible; in Section III the case of feasible bribery is examined.

## II. ANALYSIS

Given the basic situation discussed above, there are some cases in which there will be pressure for the law to evolve towards efficiency. The crucial point is the interest which the parties have in decisions as precedents. Thus, some legal cases involve individuals with a one-time interest in the outcome, while other cases involve corporate bodies of some sort—government agencies, labor unions, firms, insurance companies. Such organizations would have an interest in legal cases as precedents as well as interests as litigants.<sup>8</sup> Insurance companies, for example, would be concerned with future liability cases as well as with a particular case. In analyzing the relation between efficiency and litigation, there are three basic situations which must be considered. In part A, the situation in which both parties have a substantial interest in the case as precedent will be considered. Part B discusses the situation in which only one party is interested in the case as precedent. Part C considers the situation where neither party is interested in the case as precedent.

### A. Both Parties Interested in Precedent

If both parties to a certain type of legal dispute have a substantial interest in future cases of this sort, then precedents will evolve towards efficiency, the common law situation posited by Posner. If rules are inefficient, there will be an incentive for the party held liable to force litigation; if rules are efficient, there will be no such incentive. Thus, efficient rules will be maintained, and inefficient rules litigated until overturned.

<sup>7</sup> R. H. Coase, *The Problem of Social Cost*, 3 *J. Law & Econ.* 1 (1960).

<sup>8</sup> Richard A. Posner, *The Behavior of Administrative Agencies*, 1 *J. Leg. Studies* 305 (1972), discusses the interest of agencies in settling cases for use as precedents.



Substantial interest in precedent refers to a situation in which the party is likely to be in many such cases in the future. In effect, such parties are concerned with the entire stream of costs,  $T_A$  or  $T_B$ , rather than with  $X$ , the damages from one particular accident. Start with an inefficient rule—A is held liable if accidents occur, so that A is now spending  $S_A$  on accident avoidance and  $N_A X$  on damage payments for those accidents which still occur. An accident has just occurred; the parties must decide whether to settle or litigate.

If the case is litigated and B wins, he is paid  $X$ ; if A wins, he does not pay  $X$  in this case, and, in addition, A saves  $T_A$  in the future, but B must begin to pay  $T_B$ . Court costs for each party are  $C$ . The value to A of a court settlement is

$$V_A = R(-X) + (1-R)T_A - C \quad (2)$$

and to B:

$$V_B = R(X) + (1-R)(-T_B) - C \quad (3)$$

The parties can settle out of court if

$$-V_A > V_B \quad (4)$$

which simply says that a settlement can be reached if the expected loss to A of going to court is greater than the expected gain to B. If this is so, there is room for negotiation. Conversely, if (4) is not satisfied, the parties will litigate. In this example, litigation will occur if

$$(1-R)(T_A - T_B) > 2C \quad (5)$$

Here,  $T_A - T_B$  is the cost of the inefficient legal rule. As this becomes larger, litigation is more likely. Conversely, as  $R$  becomes larger (that is, as the inefficient rule is more entrenched) litigation is less likely. As court costs are higher, litigation is less likely. Finally, if the current rule were efficient (that is, if  $T_B$  were greater than  $T_A$ ), (5) would never be satisfied, so that there would be no litigation.

What will happen? If the parties go to court, B will probably win, since both parties agree that  $R > .5$ . However, whenever this situation arises in the future A will again go to court. At some point, some court will find in favor of A; at this point, the law has been changed and is now efficient. From that time on, precedents will favor A in comparable cases. Since there is no deadweight loss to party B when he is forced to bear liability (i.e., no term comparable to  $T_A - T_B$ ), B will not find it worthwhile to go to court when such an accident occurs; instead, B will spend  $S_B$  on avoiding such accidents and bear the cost  $N_B X$  of those which do occur.

It is now possible to define precisely the meaning of substantial interest.

A's interest in this sort of case is that (5) is satisfied. As this pr whether B has a substantial in next section, both parties must l guaranteed.

What if both parties are ins either defendants or plaintiffs:  $T_A - T_B$ , the efficiency savings f if both parties are equally like future, (5) is unchanged so th tained.

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#### B. Only One

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and the value to B is:

$V_B$

A's interest in this sort of case is substantial precisely if  $T_A$  is large enough so that (5) is satisfied. As this problem has been defined, it is not relevant whether B has a substantial interest or not; however, as we will see in the next section, both parties must have a substantial interest if efficiency is to be guaranteed.

What if both parties are insurance companies with ongoing interests as either defendants or plaintiffs? Then both A and B become interested in  $T_A - T_B$ , the efficiency savings from future cases. It can easily be shown that, if both parties are equally likely to be on either side of such cases in the future, (5) is unchanged so that the pressure for efficiency will be maintained.

We have thus shown that if rules are inefficient, parties will use the courts until the rules are changed; conversely, if rules are efficient, the courts will not be used and the efficient rule will remain in force. An outside observer coming upon this legal rule would observe that the rule is efficient; but this efficiency occurs because of an evolutionary process, not because of any particular wisdom on the part of judges. If judges decide independently of efficiency, we would still find efficient rules. Intelligent judges may speed up the process of attaining efficiency; they do not drive the process.

#### B. *Only One Party Interested in Precedent*

If only one party to a dispute is interested in future cases of this sort, there will be pressure for precedents to evolve in favor of that party which does have a stake in future cases, whether or not this is the efficient solution. This is because a party with a stake in future decision will find it worthwhile to litigate as long as liability rests with him; conversely, a party with no stake in future decisions will not find litigation worthwhile.

Let us continue our example: an accident has happened to a certain B. As the law now stands A is likely to win the case—that is,  $R < .5$ , and both parties agree on the value of  $R$ . However, B has a stake in the result of this decision; A has no such stake. That is, this type of case is an ongoing case for B, but a one time case for A. If B goes to court and wins, then in the future he will save  $S_B$  per period.  $T_B$  is the present value of the stream of accident costs to B as long as he is liable. Thus, if the courts are used and B wins, he receives  $X$  from A as a result of this accident; in addition, he saves  $T_B$  in the future. On the other hand, if A wins, he does not pay  $X$ ; A is, by assumption, not interested in future decision. The value to A of a court case is:

$$V_A = R(-X) - C \quad (6)$$

and the value to B is:

$$V_B = R(X) + R(T_B) - C \quad (7)$$



In this case, A will be willing to pay  $R(X) + C$  to avoid a court settlement; B will be willing to accept  $R(X) + R(T_B) - C$ . Therefore, there will be no settlement if

$$R(T_B) > 2C \quad (8)$$

From (8), we see that, unless  $R$  is very small (that is, unless precedents are extremely clear and unfavorable to B), or unless court costs are large, B will find litigation worthwhile. Moreover, each time such an accident occurs, B will again go to court rather than settling. As such behavior continues, at some point some court may rule in B's favor. At this point the rule favors B, and B will therefore cease taking precautions to avoid accidents. Rather, party A will begin spending  $S_A$  on accident avoidance. When such accidents again occur, the A who is involved will pay  $X$  to B, rather than litigate, since A has no future interest in the case.

This same argument could be turned around: if A has an ongoing interest in this type of case and B does not, then A will go to court until a favorable ruling is obtained; from this time on, precedents will favor A, and this rule will persist, since no B will find litigation worthwhile. Thus, when one party has an ongoing interest in a type of case there is a tendency for cases to be litigated until a precedent is established which favors this party. There is no tendency for efficiency in this situation.

This case appears to describe the evolution of nuisance law in the nineteenth century.<sup>9</sup> By the end of this century, those causing nuisances were largely factories, which would have ongoing interests in liability rulings; conversely, those suffering from nuisances were largely individuals with no such interest. (That is, factories were concerned with  $T_B$ , but individuals were indifferent to  $T_A$ .) The evidence indicates that nuisance law did in fact largely favor factories and firms, rather than individuals.

### C. *No Interest in Precedent*

If neither party is interested in precedents, the current rule will persist, whether it is efficient or inefficient. That is, if neither party has an ongoing interest in cases of this sort, then neither will force use of the courts. All such cases will be settled on the basis of the current rule, whatever it might be. Since cases will not go to court, there will be no pressure to change this rule.

Again begin with the situation in which an accident has occurred. A certain party of type B has lost  $X$  and is considering suing the party A who is liable. Both parties agree that the probability of B winning is  $R$ . If there is no

<sup>9</sup> See Joel Franklin Brenner, *Nuisance Law and the Industrial Revolution*, 3 J. Leg. Studies 403 (1974), for a discussion which is consistent with this argument.

interest in precedent, then the exact value of  $R$  is irrelevant for our purposes. We assume risk neutrality since, as we shall indicate below, risk aversion would complicate the analysis without changing the results.

Clearly, if this is the entire problem, the parties should settle. To A the expected value of a court settlement is

$$V_A = -RX - C \quad (9)$$

and to B it is

$$V_B = RX - C. \quad (10)$$

The parties can settle out of court if (4) is satisfied; this becomes

$$RX + C > RX - C \quad (11)$$

which is obviously met. Thus rather than going to court, A can pay some amount  $L$  to B, where

$$RX - C < L < RX + C \quad (12)$$

and this will be better than a court settlement for both parties. This is the essence of the arguments as to why most cases may be expected to be settled out of court. If the parties are risk averse, we replace terms in (9) and (10) with their utility equivalents. For risk averse individuals, the utility of a lottery is less than the utility of the expected value of the lottery; thus, in (4) the left side becomes relatively larger and the right side relatively smaller. Risk aversion makes out of court settlements relatively more likely.

In this situation, the courts will be used only if the parties disagree about the value of  $R$ . However, there is no reason to assume that such disagreement is related to the efficiency of current rules. Thus, as long as there is agreement about the probability of decisions, the legal rule will not change; and if there is disagreement and consequent pressure for rule change, there is no presumption that changes would be in the direction of increased efficiency. This situation is presumably that which exists when disputants are individuals with little ongoing interest in solutions. Furthermore, disputes would ordinarily be settled in accordance with current legal rules; it would be unusual for such cases to go to court, and there is no presumption that rules in such cases would be efficient. However, to the extent that the types of legal cases involving individuals are the same types of cases as those involving corporate bodies, this conclusion must be modified for, as we have seen, there is pressure for efficiency in the latter type of case, whereas individual disputants will accept the existing rule, whether it is efficient or not.<sup>10</sup>

<sup>10</sup> See Section III, C.



## III. SOME COMPLICATIONS

In this section I consider in turn: situations in which bribery is feasible; costs of out-of-court settlements; public good problems; situations in which different types of parties are interested in the same type of case; and some applications to statute law.

A. *Bribery*

Assume again that liability is currently inefficiently assigned—that, A is liable. As mentioned in Section I, it may be possible in this case for A to bribe B to take precautions, rather than taking precautions himself. As before, define  $T_A$  and  $T_B$  as the present value of the stream of costs if liability is placed, respectively, on A or B; from (1) we know that

$$T_B < T_A. \quad (13)$$

Define  $T_N$  as the present value of costs to A of bribing B to take precautions.  $T_N$  would include normal aspects of transactions costs—costs of finding the relevant B, of actually making the payments, of monitoring B's behavior, etc. A will find it worthwhile to bribe B if

$$T_N < T_A - T_B \quad (14)$$

that is, if the cost of paying the bribe is less than the saving from taking efficient precautions. Even in this case, however, there is a deadweight loss—an efficiency loss caused by the actual cost of paying the bribe,  $T_N$ .

Even with the bribe, there will still be  $N_A$  accidents per period. One of these accidents has occurred. A is now liable to pay  $X$  to the injured B. As above, A must decide whether to pay or to litigate. If A settles out of court or loses the case in court, he must then spend  $T_N + T_B$ ; he must continue to negotiate with parties B and pay the accident costs of these parties. If B loses, then he must pay  $T_B$ —that is, in the future A will not be liable if this type of accident occurs, so that B will spend  $S_B$  on avoiding such accidents. In addition, if B loses, he will not be paid  $X$ , damages in the accident which has already occurred. Thus, there is a  $(1-R)$  chance of B losing  $T_B$ . For A, the expected value of going to court becomes

$$V_A = R(-X) + (1-R)(T_B + T_N) - C \quad (15)$$

and for B

$$V_B = R(X) + (1-R)(-T_B) - C. \quad (16)$$

This occurs because, once A has won a case, the law is changed—precedents now favor A, rather than B. This is the essence of judge made common law.

The parties will again settle out of court if (4) is satisfied; but this now becomes

$$(1-R)T_N < 2C. \quad (17)$$

They will go to court if (17) is reversed:

$$(1-R)T_N > 2C \quad (18)$$

The parties will go to court if the expected present value of the costs to A of negotiating with B in the future to have B take precautions is greater than the total court costs. What has happened is that  $T_N$ , the present value of these negotiation costs, is a cost to A but not a gain to B. The stakes in the case are asymmetrical, so that there is less possibility of a settlement between the parties. Notice also that  $T_N$  in this situation the present cost of the inefficient legal rule.

The situation described above is again that in which both parties have an ongoing interest in decisions. It is likely that this will be the only relevant situation for bribes; if B does not have such an interest, then it is likely that B will be unidentifiable in advance. In this case, it is likely that the cost of A of bribing B would be prohibitive, and the analysis used in Section II B would be relevant.

Notice also that there is no relationship between court costs and bribery (transactions) costs. The decision as to whether or not to bribe B is made before the accident occurs; the decision as to whether to go to court is made after an accident has happened. Our argument is that A is likely to go to court to save *future* transactions costs. Of course, as shown in (18), if court costs are high enough relative to the present value of transactions costs, the case will be settled; but this simply says that if court costs are greater than the costs of the inefficiency imbedded in the current rule it is not worth changing the rule.

### B. Settlement Costs

Throughout, we have ignored the costs of settling the dispute out of court. This action will have some costs, and as these costs increase, the probability of going to court increases. Formally, such costs can be included in our analysis simply by redefining C everywhere as net court costs—the difference between court costs and settlement costs. The level of net court costs is itself an important parameter in our models. As can be seen from (5) and (18) the courts are more likely to be used in overturning inefficient rules as court costs are smaller. Gould<sup>11</sup> has argued that high court costs have the desirable effect of reducing inefficient litigation; but it must be pointed out that such

11. John P. Gould, *supra* note 4, at 296.



costs also have the undesirable effect of reducing efficient litigation—litigation aimed at overturning inefficient rules.

#### C. *Different Types of Parties, Same Type of Case*

In Section II we saw that when only one party has an ongoing interest in a type of case, precedents could be expected to evolve in favor of that party. Conversely, when both parties have an interest, precedents should evolve toward efficiency. However, it is possible that some cases of a certain type will involve only one party with an ongoing interest, while other cases of the same sort will involve two such parties. In this situation, there could easily arise a conflict—when only one party has an ongoing interest, the inefficient solution may be favored, while when both have such an interest the efficient solution will be favored.

It is possible that cases of this sort would be continually litigated. However, if this were to happen, parties would observe that precedents would not be binding, and this would reduce the incentive for litigation. A more likely solution is for parties to differentiate the cases, so that one sort of precedent would govern cases with one corporate body and a different set of precedents would govern cases with two corporate bodies. The law would then be inconsistent; but no litigant would have an incentive to capitalize on this inconsistency, and therefore it would continue to exist.<sup>12</sup> This explanation for legal inconsistency would seem to be a fruitful area of research for scholars trained in the law.

#### D. *Public Good Problems*

Once a decision is reached in a case, the decision is a public good.<sup>13</sup> It affects all parties of type A and B. Thus, a party of type A may decide not to litigate a case, even if such litigation would be efficient, in the hope that some other A may do the litigating and save the original A court costs. However, Equations (5) or (18) are not particularly stringent: In many cases, court costs are not prohibitively high. Nonetheless, we might expect some free rider problems. Our model would predict, for example, that large companies would be involved relatively more in litigation than would small companies.

<sup>12</sup> It might appear that the inconsistency would lead some disputants to litigate in the hope of capitalizing on the inconsistency. However, both parties would be aware of this possibility, and thus there would be no asymmetry. Our analysis rests on assuming that litigation occurs only when there is an asymmetry between parties.

<sup>13</sup> See Gordon Tullock, *Public Decisions as Public Goods*, 99 *J. Pol. Econ.* 913 (1971).

E. *Application to Statute Law*

Statute law is often inefficient.<sup>14</sup> However, in some cases lobbying for passage of statute law can take the place of deciding to litigate in our model.<sup>15</sup> Thus, if some law were proposed benefitting one well defined small group at the expense of another well defined small group, and if the group which would lose would lose more than the gaining group would gain (*i.e.*, if the law were inefficient), then the potential losers would be able to outspend the potential gainers, so that we would not expect the law to be passed. Thus, we would expect that inefficient statute laws would correspond to our analysis of the situation in which only one party has an interest in precedent; that is, such laws would be passed at the expense of large groups which would not be able to effectively lobby against their passage because of free rider problems.

## IV. SUMMARY

We have shown that the efficiency of the common law, to the extent that it exists, can be explained by an evolutionary model—a model in which it is more likely that parties will litigate inefficient rules than efficient rules. If decisions are made randomly, there will be a movement in the direction of efficient laws. The same model provides an explanation for using the courts to settle some disputes, rather than relying on out of court settlements.

The evolutionary pressure comes from behavior of litigants, rather than judges. We therefore found it useful to study behavior of potential litigants, classified according to their interest in cases as precedents. We found that when neither party is interested in precedent, there is no incentive to litigate, and hence, no pressure on the law to change. When only one party is interested in precedent, that party will litigate until a favorable decision is obtained; the law in such cases will favor parties with such an ongoing interest. When both parties have an ongoing interest in a type of case, there will be pressure toward efficiency. When different types of parties have an interest in the same type of case, we would expect inconsistencies to exist in the law.

Finally, we would predict that the evolution toward efficiency, in those cases where there would be such an evolution, would be faster as current rules are more inefficient, as net courts costs (court costs less settlement costs) are lower, and as inefficient rules are less soundly entrenched.

<sup>14</sup> Paul H. Rubin, *On the Form of Special Interest Legislation*, 21 *Public Choice* 79 (1975).

<sup>15</sup> This point is due to Gordon Tullock.



ADDENDUM: COMMENT ON "THE COMMON LAW PROCESS  
AND THE SELECTION OF EFFICIENT RULES"

Professor George L. Priest in his comment<sup>16</sup> has provided a valuable extension of my results. However, this extension is purchased at some cost, and this cost is perhaps greater than Priest himself realizes. It appears that his relatively informal discussion in fact hides some of his assumptions. He is of necessity assuming something more than ". . . that transactions costs in the real world are positive."<sup>17</sup>

I assume throughout my paper that both parties agree on the probabilities of victory for each of them. Priest claims that he avoids this assumption, and that I make the assumption for "expositional convenience."<sup>18</sup> This is not so: the assumption is made for substantive, not expositional, reasons. One must make some assumption about probability estimates of the parties; it is my feeling that the assumption of equal probability assessments is more easily justified than Priest's implicit assumption of differing estimates. Specifically, rational informed individuals (or their attorneys) will have the same estimates about probabilities of any given judicial decision. To assume otherwise is tantamount to assuming ignorance by one or both parties, and as a methodological principle I prefer to avoid assuming any such ignorance wherever possible. Once ignorance is assumed, it is very easy to prove anything, and thus to derive tautological models. Priest's form of the ignorance assumptions—that each party is as likely as the other to misjudge probabilities of victory—is perhaps more innocuous than most such assumptions, but it is nonetheless an assumption I prefer to avoid.

(Priest does not explicitly make any assumption about probability estimates. However, it is a well known result that rational, risk neutral or risk averse individuals with symmetric stakes in a case will not go to law. Thus, cases will be litigated only if one of these assumptions is violated. I assume asymmetric stakes to motivate my litigants. Priest denies this assumption; therefore, he must be assuming different probability estimates. He claims to be concerned only with the number of cases which will be litigated under alternative rules and not with the motives for such litigation. But it is dangerous to make assumptions about aggregate behavior without considering the behavior of the individuals which make up the aggregate.)

In this paper I desired to show how litigation would occur in a world with no ignorance, and how efficiency would be achieved in such a world. Specifically, I desired to show how rational behavior of litigants would lead to

<sup>16</sup> George L. Priest, *The Common Law Process and the Selection of Efficient Rules*, 6 *J. Legal Studies* 65 (1977).

<sup>17</sup> *Ibid.*

<sup>18</sup> *Id.* at 73, n. 18.

efficiency of legal decisions. I succeeded in this. Of course, to the extent that parties to disputes do in fact disagree about probabilities, Priest's mechanism would obtain, and his comment is to this extent a valuable extension of the model. However, I feel that the process described in this paper would be empirically more important in driving rules to efficiency than would Priest's process, for litigation will invariably occur if stakes are asymmetrical in my model, while Priest's mechanism is driven by random errors in perception by the parties.

I agree fully with Priest's point about judges. As stated in various places in my paper, the evolutionary model which I develop focuses attention on decisions of potential and actual litigants rather than on judges in driving the model.

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