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Litigation under the English and American Rules: Theory and Evidence

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LITIGATION UNDER THE ENGLISH AND
AMERICAN RULES: THEORY AND EVIDENCE

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**LITIGATION UNDER THE ENGLISH AND AMERICAN RULES:
THEORY AND EVIDENCE**

by

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I. Introduction.

From an international perspective, the American rule for allocating legal costs incurred in a dispute -- whereby each party bears its own costs independent of the case's outcome -- is exceptional. Throughout much of the world, the convention is that the losing party is liable for the winner's legal fees up to a reasonable limit. Reformers of the U.S. legal system have come to favor this alternative known, due to its origin, as the English rule. They believe that the loser-pays rule offers plaintiffs stronger incentives to file meritorious claims involving small potential awards and, at the same time, induces plaintiffs who might proceed with speculative claims to more carefully assess their merit. The Bush Administration has joined the reform movement and advocates adoption of a modified loser-pays rule for some federal cases.¹

To gain insights into the workings of the legal system and the public policies favoring various cost-allocation rules, in this paper we focus on how the English and American rules influence the outcomes of cases going to trial. Despite the relevance of such knowledge to an overall evaluation of alternative cost-allocation rules, little is known in this regard. Our empirical analysis uses data from Florida's experiment with the English rule for medical malpractice claims during the period July 1980 - September 1985. Our full data set includes 16,674 claims filed before, during, and after the period in which a loser-pays rule was in effect. The subset of litigated cases includes 1560 observations, 55.5 percent of which were governed

¹ Agenda for Civil Justice Reform: A Report from the President's Council on Competitiveness, August 1991, U.S. Government Printing Office, No. 1991, 0-229-793 QL:2. The Administration's recommendation is as follows:

Adopt of a 'loser pays' rule in cases involving state law brought under the federal courts' diversity jurisdiction. The loser would pay the winner's costs of vindicating its prevailing position, subject to two limitations: 1) fee shifting would be restricted to the amount of fees the loser incurred and 2) could be further limited by judicial discretion where appropriate. [p.24]

The Administration also seeks a moratorium on statutes that provide for one-way fee-shifting in favor of plaintiffs for particular types of claims. In private antitrust cases and civil rights claims, for example, fee awards are granted to successful plaintiffs, but not to successful defendants. [Rf., Clayton Antitrust Act, Section 4, 15 U.S.C. Section 15(a), 1982; Civil Rights Attorney's Fees Awards Act of 1976, 42 U.S.C. Section 1988 (1982).] Near 200 federal statutes establish such rules. A current list appears in each issue of *The Attorney Fee Reporter*.

by the English rule. These data are, in our opinion, the best available to evaluate the effects of alternative cost-allocation rules.

We proceed in Section II by developing hypotheses regarding how the choice between the English and American rules might affect litigated outcomes. These concern changes in behavior at trial and changes in the set of claims that proceed through the litigation process. In Section III we present our empirical results, which taken at face value indicate that plaintiffs going to trial under the English rule are more likely to win judgments than plaintiffs under the American rule. We also report evidence on differences in the dollar value of judgments and settlements. In Section IV we discuss these results and their implications. We argue that the improvement in plaintiffs' prospects in litigated cases reflects an increase in the quality of both settled and litigated claims under the English rule, and is not attributable only to a different selection of cases going to trial.

II. Hypotheses Concerning Litigation Under the English and American Rules.

Several theoretical inquiries have analyzed alternative cost-allocation rules.² In this section, we rely on these and the available empirical evidence to develop hypotheses concerning whether plaintiffs' prospects at trial will improve under the English rule. We focus on (i) changes in the behavior of the parties and finders of fact in litigated cases, (ii) the effects of the rule on claim quality, and (iii) changes in the selection of cases going to trial.³

² The literature, which is summarized by Cooter and Rubinfeld (1989), includes Mause (1969), Landes (1971), Posner (1977), Shavell (1982), Cooter, Marks and Mnookin (1982), Bebchuk (1982), Braeutigam, Owen and Panzar (1984), and Katz (1987).

³ This discussion is not intended to be exhaustive. We do not incorporate risk aversion, which may be particularly important in litigation settings because legal rules prohibit the transfer of claims to third parties who otherwise could reduce risk by proceeding with a portfolio of claims. (Contingent-fee arrangements diminish, but do not eliminate risk for individual plaintiffs and are less effective in doing so under a loser-pays rule.) While risk aversion improves settlement prospects, little is known about its effect on litigated outcomes. Defendants who deal with risk-averse plaintiffs may take harder positions in settlement negotiations in English rule cases. Plaintiffs who are more tolerant of risk may refuse such terms, but it is difficult to assess how their prospects might differ from plaintiffs who are more risk averse.

A. Behavioral Changes at Trial.

Braeutigam et al (1984) and Katz (1987) demonstrate that the English rule will encourage the parties to increase their expenditures on legal counsel in cases that go to trial for two reasons. First, with fee-shifting, the private marginal costs of additional expenditures are reduced as the parties will anticipate with some probability that their rival will pay these costs. Second, the stakes in litigated cases -- the difference between winning and losing -- increase under the English rule by the amount of the legal costs subject to the fee-shifting rule. Given that the marginal benefit to additional expenditures at trial is the change in probability of a plaintiff verdict multiplied by the absolute stakes, the greater stakes encourage greater expenditures.⁴

The effects of greater expenditures by the litigants on litigated outcomes depend on the functional relationships among the true probability of plaintiff success, expenditures by the parties, and other claim characteristics.⁵ The expenditure decisions themselves are complicated by (i) their dependence on the direction and strength of cross-partials in the probability function, and (ii) the role of expectations regarding the other party's actions. Nevertheless, one aspect of the expenditure decision is likely to be of some consequence in litigated cases. The English rule will have a differential effect on the private marginal costs of expenditures if one side has a higher probability of winning at trial: Parties who have the odds on their side and thus expect to shift their fees with high probability will enjoy a cost advantage.⁶

In medical malpractice, product liability, and other types of claims, defendants typically enjoy a substantial advantage in win rates. Provided that both defendants and plaintiffs share the general expectation that defendants will win most cases that are litigated, the defendants' higher average probability of winning translates into a lower private marginal cost. This in turn will

⁴ Our prior research on Florida's experience yielded strong support for the hypothesis that litigation is more costly under the English rule. Correcting for selection effects, defense expenditures in litigated cases more than doubled. Rf. Snyder and Hughes (1990, p. 375). Data on plaintiffs' expenditures were not available.

⁵ See Braeutigam et al (1984) and Katz (1987).

⁶ See Hughes and Woglom (1991) for simulation results concerning this effect and the role of risk aversion.

induce greater defense expenditures, solidifying the defendants' traditionally strong position.⁷

On a priori grounds, the marginal cost effect could be particularly potent in medical malpractice cases where the defendant win rate at trial is about 80 percent. This means that the private marginal cost of defense expenditures under a fee-shifting rule may be, in expected terms, only one-fourth the private marginal cost of plaintiff expenditures. Of course, the parties who proceed to trial often disagree about the plaintiff's chances and, moreover, the equilibrium probability is endogenous. Nevertheless, given a difference of opinion, a cost differential will exist when the parties recognize that the equilibrium probability favors the defendant.⁸

Subject to appropriate qualifications concerning the underlying functional relationship between outcomes and expenditures, we state the first of several hypotheses concerning plaintiff win rates in litigated cases:

Hypothesis Ia: Provided that litigants are aware that defendants tend to prevail at trial, the expected marginal costs of expenditures at trial will be lower for defendants than for plaintiffs' under the English rule. Defendants will, therefore, increase their expenditures by more than plaintiffs, *cet. par.* This change in behavior will reduce plaintiff win rates in cases litigated under the English rule.

We note that our data will not allow us to compare changes in defense and plaintiff expenditures.

Thus, this hypothesis only provides a possible interpretation of changes in litigated outcomes.⁹

⁷ Hause (1989, p. 168) provides intuition for this incentive, and the specific model he develops illustrates how the probability level affects the ratio of the litigants' expenditures and settlement decisions. A second factor, one that we doubt is as significant, concerns the view is that defendants have lower costs of capital and so can better finance additional expenditures.

⁸ Consider the case where at the equilibrium expenditure levels under the American rule, the defendant believe that the plaintiff's probability of success is 0.2, while the plaintiff believes this probability is 0.8. The marginal cost of additional expenditures would be 0.2 for each, and if the anticipated marginal product of expenditures were the same, each would increase expenditures by the same amount with the result that the true probability would not be affected. If this scenario is generalized, however, plaintiffs should be viewed as having irrational expectations given their low average win rate.

⁹ In principle the differential cost effect could be offset by the effects of the higher stakes in the English rule. However, because the stakes for each party increase by the same absolute amount, the greater stakes by themselves should lead each party to increase their spending by roughly equal amounts. Thus, unless the parties' expenditures differ in terms of their effectiveness in influencing the outcome, the greater stakes under the English rule will have a neutral effect on litigated outcomes.

Our second line of inquiry into behavioral changes concerns finders of fact. Under the English rule, judges and juries may be reluctant to impose liability on plaintiffs for their opponents' legal costs. The bias in medical malpractice claims may be strong because most plaintiffs, even those with weak legal claims, have suffered an injury. This suggests the following:

Hypothesis IIa: Plaintiffs as a group will win a higher percentage of litigated claims under the English rule because finders of fact will bias their decisions in favor of plaintiffs to avoid imposing liability for defendants' legal costs.

If this pro-plaintiff bias is found in outcomes, a complementary hypothesis follows concerning dollar judgments:

Hypothesis IIb: To avoid making plaintiffs liable for legal costs, the courts will increase the frequency of small dollar judgments.

We note that our convention is to group related hypotheses with the same Roman numeral and to identify hypotheses concerning plaintiff win rates in litigated cases with the letter a.

B. Improved Claim Quality under the English Rule.

A substantial overlap exists in the sets of positive expected value claims under the English and American rules. The prior literature indicates, however, that the English rule adds claims in which the probability of success is high and the potential award is low. English rule plaintiffs proceeding with high-probability claims will, in the extreme, ignore their legal costs and file all positive award claims. At the same time, the English rule discourages claims in which the probability of success is low and the potential award is high, as plaintiffs with such claims will face higher expected legal costs than they do under the American rule.¹⁰ Provided

¹⁰ These changes in plaintiff incentives to file can be illustrated in a simple case, where p is the plaintiff's belief concerning the likelihood that the plaintiff will win if the case goes to trial, A is the potential award, and X and Y refer to the legal costs of the plaintiff and defendant, respectively. The plaintiff's expected gains from pursuing a claim under the alternative rules follow:

American Rule:

that plaintiffs' expectations concerning their probabilities of success correlates reasonably well with the courts' assessments of merit, these differential incentives to file claims are consistent with the conventional view that the English rule improves claim quality.¹¹

The anticipation of greater expenditures at trial also will affect plaintiffs' incentives to proceed with potential claims. As we have argued,¹² a positive expected-value claim under the American rule may become a negative expected-value claim under the English rule because of increases in either party's legal costs. Hause (1989) analyzes this and other relationships in a simulation where changes in legal costs influence the plaintiff's decision to file a claim under alternative cost-allocations. While aspects of the relationships between claim characteristics and the incentives to increase expenditures are not known, the prospect of more costly litigation is likely to strengthen the positive effect of the English rule on claim quality.

Because the cost of filing a claim is low, the improvements in quality may not be manifest in the set of filed claims, and instead will be reflected in the set of claims to which plaintiffs and their counsel commit significant resources. In this regard, it should be noted that plaintiffs frequently choose to drop their claims.¹³ In general, dropping a claim becomes attractive when a plaintiff's assessment of the claim weakens or expectations of a settlement give way to the prospect of a costly trial. Plaintiffs do not, however, retain the certain right to

$$\text{Plaintiff's expected gain} = pA - X \quad [1a]$$

English Rule:

$$\text{Plaintiff's expected gain} = pA - (1 - p)(X + Y) \quad [2a]$$

For cases where p is greater than .5, the plaintiff's expected gain tends to rise under the English rule, and where p is less than .5, the plaintiff's expected gain tends to decrease. The statements are strictly true when the parties spend equal amounts ($X = Y$), but are subject to qualifications concerning possible differences in the parties' expenditures: If defendants outspend plaintiffs (Y exceeds X), then a switch to the English rule is less attractive from the plaintiff's perspective.

¹¹ For relevant discussions see Rosenberg and Shavell (1985), Reinganum and Wilde (1986), and Bebchuk (1991).

¹² Snyder and Hughes (1990, pp. 350-352).

¹³ Except for P'ng (1987) and Nalebuff (1987), dropped claims have not received much attention.

unilaterally drop their claims in fee-shifting regimes. Rather, plaintiffs become liable for defendants' fees when it becomes clear that the defendant has prevailed.¹⁴ In practice, this means that plaintiffs who continue with discovery, enlist expert witnesses, and so move further into the litigation process become more exposed to the liability. As a result, plaintiffs will assess periodically whether they should drop their claim, either to avoid or limit their liability.¹⁵

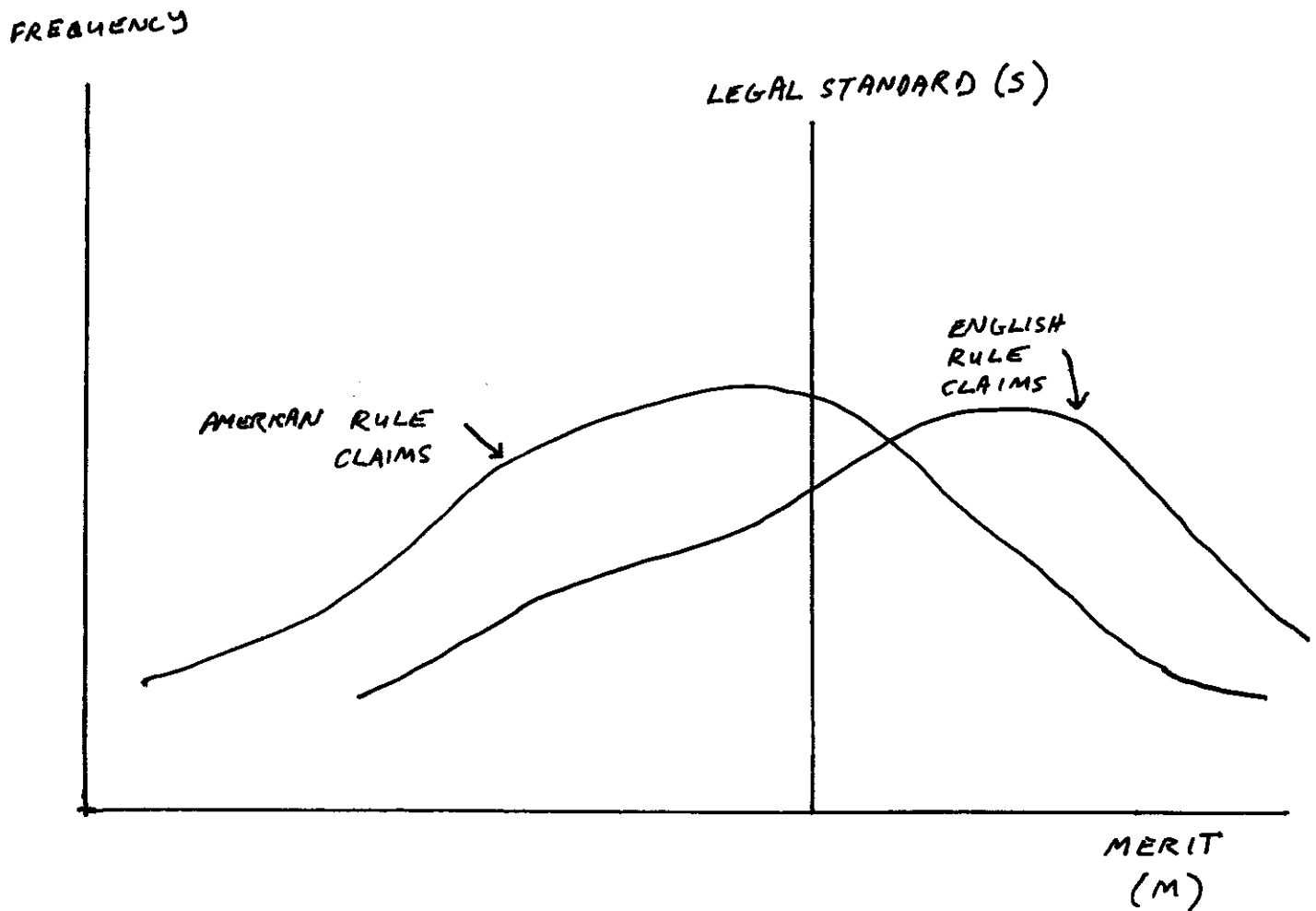
This discussion indicates that the set of claims plaintiffs pursue, i.e., file and choose not to drop, under the English rule should include fewer frivolous claims and more high merit claims. Improved claim quality, which probably cannot be observed directly, may contribute to a higher plaintiff success rate at trial. Figure 1, which depicts the legal standard (S) and the distribution of claims by merit (M), illustrates this effect. (Merit can be thought of as the defendant's fault in tort claims or as the defendant's estimated market share in antitrust claims.) Claims with merit values in excess of S would, if litigated, generate verdicts against defendants. Plaintiff decisions favoring the selection of higher merit claims entail a shift in the distribution of claims to the right. Provided there is no offsetting change in S, the higher quality claims under the English rule will increase the relative frequency of plaintiff wins if all claims were litigated.

But whether plaintiffs will fare better in the cases that actually go to trial depends, of course, on the selection of litigated cases from the set of claims not dropped. If this selection process is random, then the shift to higher quality claims will increase the plaintiff win rate at trial. More generally, if the selection process is "loose" -- meaning claims with a wide range of merit will be selected for litigation, then the same will hold true. One reason the selection process may not obscure completely the improvement in claim quality is that not all defendants would view plaintiffs passing the threshold of liability for legal costs as a clear indicator of quality. Thus, we state the following:

¹⁴ For further detail on this point, see Snyder and Hughes (1990, pp. 352-3 and footnotes 16 and 17).

¹⁵ Our prior research indicated that the drop probability rose from 0.435 to 0.539 for claims with average observable characteristics. Rf. Snyder and Hughes (1990, p. 364).

Figure 1. Distribution of Claims (in terms of Merit)



Legend: Plaintiffs will win disputes to the right of the legal standard (S) if litigated. Rf.
Priest and Klein (1984, p. 8).

Hypothesis IIIa: Because plaintiffs will file and proceed with higher quality claims under the English rule, as a group they will win a higher percentage of claims at trial.

An improvement in the quality of claims not dropped will also be reflected in the terms by which claims are settled. Thus, this line of argument also suggests a complementary hypotheses regarding settlements:

Hypothesis IIIb: Because plaintiffs will file and proceed with higher quality claims, the dollar value of settlements will rise on average under the English rule.

C. Selection of Cases for Trial.

Early analyses of the English rule's effect on settle-versus-litigate decisions focused primarily on settlement rates. Shavell (1982) and Posner (1986) show that going to trial becomes more likely under the English rule. According to the optimism model they use, settlements are reached when the defendant's expected cost from litigating exceeds the plaintiff's expected gain. Under the English rule, this gap between the offer and ask declines when the parties are relatively optimistic (the necessary condition for going to trial), because they anticipate shifting their fees to the other party. To be more precise, the settlement gap decreases by an amount equal to the parties' collective underestimate of their expected legal costs.¹⁶

¹⁶ This can be illustrated by providing statements for (i) the defendant's expected cost, and (ii) the probability that the defendant's expected cost exceeds the plaintiff's expected gain. Continuing with the notation introduced in footnote 10 and defining q as the defendant's belief regarding the likelihood that the plaintiff will prevail if the case goes to trial, we have the following:

American Rule:

$$\text{Defendant's Expected Cost} = qA + Y \quad [3a]$$

$$\text{Pr[Settle]} = \text{Pr}[(q - p)A + (X + Y) > 0] \quad [4a]$$

English Rule:

$$\text{Defendant's Expected cost} = qA + q(X + Y) \quad [5a]$$

$$\text{Pr[Settle]} = \text{Pr}[(q - p)A + (q - p)(X + Y) + (X + Y) > 0] \quad [6a]$$

More recently, Bowles (1987) and Hause (1989) analyzed the effects of greater litigation expenditures under the English rule on settle-versus-litigate decisions. In principle, the prospect of more costly litigation could counteract the optimism effect discussed above, leading to a net improvement in settlement prospects.¹⁷ In our prior research we found indirect support for the existence of an expenditure effect.¹⁸ However, after correcting for the non-random selection of claims not dropped, we found that fee-shifting on net reduced settlement prospects. Thus, our evidence indicates a dominant optimism effect.¹⁹

While the issue of how cost-allocation rules influence settlement rates is of great interest, the relevant issue here is how settle-versus-litigate decisions under a fee-shifting rule affect the subset of claims selected for litigation and their characteristics. Will the set of litigated claims under the English rule differ systematically? In the balance of this section, we explain that an application of Priest and Klein's (1984) seminal work on the selection process generates the prediction that the plaintiff's win rate will increase under the English rule. This "selection hypothesis" and the "claim quality hypothesis" discussed immediately above are not mutually exclusive: A shift to the English rule both may lead to an improvement in claim quality and lead

When the parties are optimistic such that $(q - p)$ is negative, a comparison of 4a and 6a indicates that the chances of settlement decline under the English rule because of the parties' collective underestimate of their expected legal costs, $(q - p)(X + Y)$.

¹⁷ Using the notation in footnotes 10 and 16 and denoting the increments in plaintiff and defendant expenditures on lawyers in litigated cases as ΔX and ΔY , the overall change in the settlement gap from a switch to the English rule from the American rule is $(q - p)(X + Y) + (1 - p + q)(\Delta X + \Delta Y)$. The first term captures the optimism effect when the parties $(q - p)$ is negative. The second term indicates that the anticipation of higher expenditures encourages settlement.

¹⁸ We estimated a regression on defense expenditures in litigated cases. When we corrected for the non-random selection of litigated cases, we found that the predicted increase in defense expenditures exceeded the observed increase in the selected set of litigated cases, suggesting that the parties tended to settle cases where increases in defense expenditures at trial would be above-average. Rf. Snyder and Hughes, p. 375.

¹⁹ Fee-shifting also could alter the timing of expenditures during the litigation process. If most of the increase in expenditures occurs before going to trial, then these prior expenditures become, in effect, part of the potential award. In addition, added expenditures early in the litigation process may reduce the marginal costs of going to trial. Thus, in principle, the greater expenditures induced by the English rule might not counteract the optimism effect and could contribute to it. This interpretation of evidence on settlement rates is not, however, consistent with the evidence discussed in footnote 18.

to a different selection of litigated claims. The selection hypothesis, however, predicts an improvement in the plaintiff win rate even if the underlying distribution of claim quality in the set of claims not dropped remains the same. Clearly, the possibility that selection at the settle-versus-litigate stage alone could affect win rates cautions against making inferences about overall claim quality from observed changes in litigated outcomes. Fortunately, however, the analysis yields a further prediction regarding the dollar value of settlements, allowing us to distinguish the selection hypothesis from the quality hypothesis.

Priest and Klein (1984) begin with a distribution of initial disputes according to merit, as was illustrated in Figure 1.²⁰ By assumption the parties agree on the award conditional on a verdict, but may have different estimates of claim merit. Their fundamental insight follows: A given difference between the plaintiff's and the defendant's estimate of merit will generate a larger divergence in the parties' beliefs as to the plaintiff's probability of success when their estimates of merit are close to the decision standard. In contrast, when the estimates are far from the decision standard, the parties may disagree about claim merit, but they will agree that the probability of a plaintiff verdict is either quite small or very large.

Since a divergence in beliefs as to the plaintiff's probability of securing a verdict is the necessary condition for litigation, the cases selected for trial will be close to the decision rule. It follows that the proportion of plaintiff victories at trial will approach 50 percent regardless of the legal standard applied.²¹ Consistent with our earlier comments, however, Priest and Klein show that the observed outcomes may deviate from the 50 percent level if the selection process is not tight, in which case the shape of the frequency distribution around S will influence the observed rate of plaintiff verdicts.

Priest and Klein show that the 50 percent prediction applies when the stakes in the dispute are symmetric, i.e., the difference between winning and losing at trial is the same for the

²⁰ Priest and Klein (1984, p. 7) assume that the initial distribution is given exogenously and that the decision standard is independent of the specific dollar amounts at stake.

²¹ Priest and Klein (1984, p. 17).

plaintiff and defendant. Where the stakes are asymmetric, the win rate in litigated cases will diverge from 50 percent in favor of the litigant who has more at stake. In their view, "(d)ifferent stakes are likely to be the principal source of differences from the 50 percent benchmark."²² In medical malpractice litigation, where hospitals and physicians are concerned with reputation effects, defendants typically have more at stake than plaintiffs. Such defendants are willing to pay more to settle claims out of court, and their offers rise by more when they believe that the plaintiff has a high likelihood of winning.²³ Providing that defendants' expectations correlate with merit, higher merit cases will be settled with greater frequency, and observed win rates at trial will favor the defendant. In terms of Figure 1, the asymmetry in stakes predicts that the typical litigated case will be selected from left of the legal standard, S . The greater the asymmetry, the further the typical claim is from the standard and the lower the plaintiff's probability of success at trial.

Under the English rule, reputation's role does not change: Defendants who stand to suffer a reputation loss at trial will increase their settlement offers and will do so by more when they believe that the plaintiff's likelihood of success at trial is high. But the censoring role of reputation is not as strong under the English rule because fee-shifting increases the effective stakes, and in so doing, broadens the set of cases selected for litigation. As the discussion of the optimism model in Section II indicated, a switch to the English rule reduces the settlement gap where litigation is possible, and thus can negate the effects of the potential reputation loss on defendant offers.²⁴ As a result a greater frequency of cases where the plaintiff has a relatively good chance of winning will go to trial:

²² Priest and Klein (1984, p. 219, footnote omitted).

²³ Hughes (1989) finds differences in the likelihood of a settlement across defendant type (e.g., surgeons, hospitals) that may be consistent with reputation effects.

²⁴ Denoting R as the defendant's potential reputation loss from an adverse litigated outcome and using the notation introduced in footnotes 10 and 16, the conditions for litigation involving reputation effects follow:

Litigate under the American Rule if:

$$(p - q)A - (X + Y) - qR > 0$$

[7a]

Hypothesis IVa: The English rule will weaken the censoring effect of defendants' reputations in selecting cases for trial where the plaintiffs' chances of success are low. The different selection of cases under the English rule will generate a higher percentage of plaintiff wins at trial.

We emphasize that this hypothesis predicts that a different slice of the distribution of the claims not dropped will be selected for litigation under the English rule.²⁵ An increase in plaintiff win rates is fully consistent with no change in the overall quality of claims that reach the settle-versus-litigate stage under the English rule. However, if the underlying distribution does not change, the different selection of cases for trial would reduce the average quality of settled claims. This follows from the substitution toward higher quality litigated claims (closer to S). Provided that inframarginal effects are not offsetting, this substitution effect will reduce the dollar value of settlements:

Hypothesis IVb: If the underlying distribution of claims with respect to merit is unchanged, the selection of higher merit claims for trial under the English rule will reduce the average quality of settled claims. Thus, along with the higher win rate at trial, the English rule will lead to a reduction on average in the dollar value of settlements.

Wittman (1988) has analyzed the selection of litigated cases taking into account differences in the parties' beliefs as to both the probability that the plaintiff will prevail at trial

Litigate under the English Rule if:

$$(p - q)A - (X + Y)(1 - p + q) - qR > 0 \quad [8a]$$

Consistent with Salop and White (1986 at 1026), each condition indicates that as q (the defendant's belief regarding the plaintiff's probability of success at trial) rises, litigation becomes less likely. But, holding constant R , X , Y , A and the extent of optimism, i.e., the difference between p and q , a switch to the English rule relaxes the condition for going to trial. Thus, for some values of q and p , the reputation effect produces a settlement under the American rule, but does not under the English rule. The set of cases which proceed under the English rule will include a greater frequency of cases in which plaintiffs' chances of success are relatively high.

²⁵ This logic also suggests that the optimism effect induced by the English rule will counteract the positive effects of defendants' concerns about reputation on settlement rates. But Hypotheses Ib and IIb concerning the dollar value of settlements offer the better way to distinguish the selection hypothesis from the quality hypothesis. Given the range of considerations that affect settlement decisions, e.g., the timing of expenditures on legal cost, evidence on settlement rates can be interpreted in several ways.

and the potential award. He shows that the "expectation differential" that may cause litigation is increasing in awards. One comparative static result, consistent with Landes (1971), is that holding the probability estimates constant, the chances of litigation rise with the potential award. Under his distributional assumptions, cases with low probabilities of success that go to trial are likely to have relatively large potential awards, since the latter is necessary to generate a divergence of opinion.²⁶ It also follows that the claims selected for trial, as compared to settled claims, will have a more negative correlation between probabilities of plaintiff success and awards. Thus, Wittman's analysis suggests that low plaintiff win rates may not be due to asymmetric stakes.

Wittman's insights regarding the negative correlation between dollar awards and probabilities suggest some further implications for our analysis. If, as the prior theoretical literature predicts, the English rule generates relatively more low award claims, the expectation differential that may cause litigation falls. Going to trial in this circumstance requires either (i) greater differences of opinion regarding awards or, (ii) greater differences of opinion regarding probabilities.²⁷ Regarding the latter, the Priest and Klein assumption (one of two that Wittman considers) is that the variance in beliefs about the probabilities is greatest when the plaintiff's chances are about 50 percent. As a result, the lower award cases ending in litigation will be concentrated around the decision rule. If initially the plaintiff win rate is below 50 percent, the win rate will increase. Again, this selection effect may occur even if the distribution of claims according to merit is constant. A second set of selection hypotheses follows:

Hypothesis Va: If lower award claims constitute a greater proportion of the claims litigated under the English rule, then the average probability of a plaintiff verdict will be higher (closer to 50 percent).

²⁶ See Wittman at pp. 335-7. This argument requires that litigation costs do not rise in proportion with potential awards. One empirical suggestion follows from the proposition: When analyzing plaintiff's success rates, it is important to control for the size of the potential award. Our empirical analysis includes variables that control for the severity of the plaintiff's injury.

²⁷ See Wittman's proposition 7, p. 335.

Hypothesis Vb: If lower award claims constitute a greater proportion of the claims litigated under the English rule, then the average dollar judgment conditional on a verdict in favor of the plaintiff will fall.

Again, the prediction from Hypothesis Va, that plaintiff win rates will increase under the English rule, is not distinguishable from the claim quality hypothesis (IIIa) or the primary selection hypothesis (IVa). However, Hypothesis Vb indicates that the higher win rates should be accompanied by lower plaintiff judgments conditional on verdicts.

D. Implications.

Two general implications follow from our analysis. First, cost-allocation rules may have substantial effects on the set of claims filed and subsequent aspects of the litigation process.²⁸ The operative rule may influence the parties' behavior, the plaintiff's expected gain and the defendant's expected cost from going to trial, settle-versus-litigate decisions, and, finally, the outcomes at trial. The second related implication is that, with a change in cost-allocation rules, the observed changes in litigated outcomes will reflect behavioral effects at trial as well as selection effects -- changes in the set of claims proceeding through antecedent stages of the litigation process.²⁹ Our discussion in Section II emphasized that plaintiff decisions to proceed

²⁸ For a general discussion of when initial assignments of liability matter, see Demsetz (1972). In this setting, it should be noted that the parameters determining the range of potential settlements are endogenous and, moreover, there is likely to be uncertainty about how these values would change if the cost-allocation rule were changed. In such circumstances, transactions costs limit the opportunities for bargaining, and, given the wealth effects described, liability rules do matter. Donohue (1991, p. 1109) has argued the opposite, claiming that "litigants can simply choose the fee-allocation rule that generates greater total expected wealth, and this choice will be unaffected by the legal standard." Donohue's analysis, however, ignores the influence of the initial liability assignment on the set of observed claims. Thus, while Donohue finds fault with Shavell and Posner for taking the legal environment as given, Donohue's analysis should be faulted for taking the set of cases filed as given. The set of private antitrust claims filed under the current regime of treble damages and one-way fee shifting in favor of plaintiffs, for example, would not resemble the set filed under a loser-pays rule. Donohue notes that lawyers do not engage in such negotiations, but predicts that they will do so in the future because (now) it is known that such negotiations could yield Pareto improvements.

²⁹ Our prior empirical research shed some light on the behavioral and selection effects induced by the English rule. We estimated jointly an equation for plaintiff decisions to drop their claims and an equation for whether the parties settled or litigated the remaining claims. The English rule exerted strong pressure on plaintiffs to drop claims. Moreover, changes in the unobserved characteristics of the claims not dropped increased the probability of settlements. Taking into account the effects on the set of claims not dropped and changes in settle-versus-litigate decisions, i.e., selection effects and behavior effects, the probability of litigation under the English rule declined from 18.9 percent to 12.4 percent for claims with average observable characteristics. Conversely, the probability of

with claims will depend on unobservable claim characteristics, the most important being merit. The higher quality of claims under the English rule may improve win rates. But the same effect could occur without an improvement in claim quality if changes in settle-versus-litigate decisions yielded a different selection of litigated claims.

The econometric issue raised by the sequence of litigant decisions (file or not, drop or not drop, settle or litigate) is similar in spirit to the sample selection problems examined by Heckman (1979). Sometimes little can be done to account for selection effects when evaluating litigated outcomes. For example, because the set of potential claims cannot be observed, the selection effects associated with filing decisions can only be inferred by reasoned guesswork.³⁰ Selection effects that occur after the filing of claims are, in contrast, somewhat easier to assess, and in recent years researchers have developed a variety of empirical techniques for this purpose.³¹

Fortunately, a final econometric solution to the selection issues is not critical to our empirical investigation. Appropriate corrections for selection would help reveal whether evidence that the English rule improved plaintiff prospects in litigated cases reflected an improvement in the quality of claims plaintiffs pursue (consistent with Hypothesis IIIa) or was

settlement increased from 81.1 percent to 87.6 percent. Snyder and Hughes (1990, pp. 364-5). This change is consistent either with the English rule causing plaintiffs to drop a larger percentage of claims that would have gone to trial under the American rule, or encouraging plaintiffs to proceed with claims that could be settled.

³⁰ In principle, a comparison of claim characteristics over the short and long run could reveal deterrent effects of tort reforms. In the short run, reforms and changes in legal rules primarily affect incentives to file claims from a given set of potential claims. In the long run, the observed effects are due to both the change in incentives and changes in the set of potential claims. See Hughes and Snyder (1989) for a discussion of these issues.

³¹ One approach (cf. Danzon and Lillard, 1986; Lillard, Viscusi, and Danzon, 1990) is to develop a set of structural equations for key stages of the litigation process. Estimation of these typically requires some cross-equation restrictions. The bivariate probit with selection estimator that we have used (cf. Hughes, 1989; Snyder and Hughes, 1990; and Snyder, 1990) requires fewer restrictive assumptions, but only can be used to estimate reduced-form equations that correct for selection effects at one antecedent stage, e.g., the effects of drop decisions on settle-versus-litigate decisions. A trivariate probit with selection estimator could be used to account for selection at two antecedent stages, but it is difficult to implement. In addition, there may not be a natural error structure between the settle-versus-litigate regression and the litigated outcome regression. In contrast, assuming that plaintiffs drop their claims when their ask is negative, a plaintiff's decision to proceed places conditions on the error structure in the settlement equation. Finally, procedures using Mill's ratio terms (cf. Heckman, 1979) can be used to correct for selection, but only in linear equations.

due only to selection effects at the settle-versus-litigate stage (Hypothesis IVa). These views can be distinguished, however, by evaluating directly the effects of the English rule on settled claims. The claim quality hypothesis (IIIb) predicts an increase in dollar settlements, while the selection hypothesis (IVb) predicts, conditional in an improvement in plaintiff's prospects in litigated cases, a decline in the value of settled cases.

III. Empirical Analysis.

In this section we first describe the data concerning Florida's experiment with the English rule and then report results on litigated outcomes, dollar judgments (awards) in litigated cases, and the dollar value of settlements. We defer a discussion of the findings until Section IV.

A. Florida's Experiment and Data Description.

Florida adopted a mandatory fee-shifting rule for medical malpractice cases for the period June 1980 - September 1985. The statute required that counsel notify their clients in writing of their potential liability, and, like fee-shifting rules elsewhere, relieved indigent parties of the obligation to pay the winner's legal fees.³² Florida's experiment offers, to our knowledge, the only opportunity for a within-jurisdiction evaluation of alternative cost-allocation rules.³³ Fortunately, it is a good opportunity. The experiment was a reasonable length -- long enough to yield substantial data, yet short enough to hope that not too many background factors had changed.³⁴ Moreover, because of the state legislature's rapid pace of enacting and repealing reforms in search for solutions to the severe problems arising from the growth in medical malpractice claims, the effects of the English rule can be distinguished from other tort reforms.

³² For details on the Florida law, see Snyder and Hughes (1990, pp. 353, note 17, and pp. 355-6).

³³ For insights into the problems with cross-jurisdictional comparisons, see Mause (1969).

³⁴ These might include new legal rules and standards of evidence, changes in the contractual relationship between insurers and physicians, and changes in medical technology.

To evaluate the effects of the rule change, we collected data on 16,674 closed claims where the unit of observation is a claim against an individual defendant, either physician or hospital. Approximately 14 percent of the observations are Florida claims collected by the National Association of Insurance Commissioners (NAIC).³⁵ These claims were closed during the period 1975-78 and are American rule claims. The balance of the data are from the Florida Department of Insurance (DOI). Since October 1, 1985, these reports have provided the same information and level of detail as the NAIC records. Specifically, the records identify claim characteristics, such as the severity and location of the injury, the legal fees of defendants, the dollar amounts paid by insurers to settle claims out-of-court, and the dollar judgments in litigated cases.³⁶ From these data we can also infer how claims were disposed, i.e., whether they were dropped, settled, or litigated. The critical advantage derived from combining the two data sets is that we can distinguish empirically the American rule from a reform package that was enacted when the English rule was repealed. It should also be noted that while the English rule was repealed for claims filed after October 1, 1985 (the date of the new DOI reporting requirements), more than half of the claims closed during the period for which we have DOI data -- October 1985 to September 1990³⁷ -- were governed by the English rule.

We supplemented the combined data set by defining dummy variables for the various tort reforms that applied to claims during the relevant period. These are limits on contingent fees, pretrial review panels, and requirements that plaintiffs obtain expert advice concerning the merit of their claims. In addition, in two instances the Florida legislature passed multiple reforms simultaneously. We account for the two reform packages with composite dummy variables.

³⁵ The NAIC collected claims data from all states. Medical Malpractice Closed Claim Study: Final Compilation. National Association of Insurance Commissioners, 1980, Brookfield WI. .

³⁶ There is no overlap in the data sets since an observation is included only in the particular year when the claim is closed.

³⁷ Note that, compared with the data used in Snyder and Hughes (1990), we have expanded our data set to include two additional years.

Table 1 provides the means of all the variables for the 1560 litigated cases, the 6368 settled cases, and the balance of 8476 dropped claims. By definition the plaintiffs received no dollar compensation from the claims dropped. The average settlement was \$82,960 in 1980 dollars and the average judgment (including plaintiff losses) was \$49,727.

B. Empirical Results.

1. Litigated Outcomes.

Overall, plaintiffs won judgments in 17.2 percent of the 1560 claims that went to trial.³⁸ The low win rate may surprise some, but is in line with other empirical studies. The plaintiff win rate, for example, in private antitrust claims over different time periods ranges from 11 to 30 percent.³⁹ One interpretation of the figure here is that a reputation for winning cases at trial is highly valued by defendant insurance companies who seek (i) to discourage claims, (ii) to settle the vast majority of the claims plaintiffs pursue for small amounts.

The plaintiff win rate in the subset of 694 American rule claims is 11.4 percent and in the subset of 866 English rule claims is 21.6 percent. Thus, the averages indicate a sizeable percentage increase in plaintiff wins under the English rule. Table 2 reports the average plaintiff win rate by severity category along with the level of defense expenditures for both American and English rule claims. The pattern is quite consistent: Plaintiff win rates, despite higher average defense expenditures, are higher under the English rule in all categories except SEV 8 (grave and permanent injury).

To assess more carefully the effect of the English rule, we estimated a probit model and a linear probability model where the dependent variable equals 1 if the plaintiff prevailed at trial

³⁸ This figure would understate the true win rate if plaintiffs obtained other types of relief, e.g., negating plaintiff's liability for medical bills. Our data do not suffer, however, from this particular type of confusion.

³⁹ Baxter (1980) found that private antitrust plaintiffs won about 15 percent of litigated cases. Salop and White (1986) derived two different win rates, 11 and 28 percent, for different definitions of litigated cases during the period 1973-83. Kauper and Snyder (1986) report a 30 percent win rate. Similarly low rates have been found in product liability claims.

and 0 if the defendant prevailed. The set of independent variables includes dummy variables for other tort reforms, dummy variables for injury severity, and nine additional variables to account for the identity of the defendant, the plaintiff's age, and the location of the accident. Finally, we include a dummy variable for the observations derived from the NAIC study.

Table 3 reports three regressions on litigated outcomes. Each specification indicates that the English rule has a positive and significant on plaintiff prospects at trial. The first probit equation yields a predicted increase of 8.2 percent for an average case. The coefficient in the second OLS regression indicates that the probability of the defendant being held liable is 8.7 percent higher in English rule cases. According to this regression, the plaintiff's probability of success in American rule cases with average characteristics is 12.3 percent and in English rule cases is 20.9 percent. Table 3 and later tables do not report estimated coefficients for the variables that identify physician characteristics, plaintiff characteristics, and the location of the injury. None was statistically significant in the regressions.

One motive for estimating the linear probability model is that Mill's ratio terms to correct for the non-random selection of litigated claims can be added to the regression, permitting a direct comparison to the uncorrected results. We have attempted to estimate a model similar to that estimated by Ham (1982),⁴⁰ where two Mill's ratio terms are added to the regression equation to correct for two types of selection. The first would account for the selection process that determines the set of claims not dropped. (Plaintiffs dropped 47.5 percent of the 16,674 claims in our full sample.) The second would account for the selection of litigated cases from the set of claims not-dropped. We encountered severe difficulties with multicollinearity with this approach.⁴¹ However, we estimated a linear model that includes a single Mill's ratio term

⁴⁰ See also Maddala (1983, pp. 282, 386).

⁴¹ The Mill's ratio terms are nonlinear transformations of the set of independent variables used in the selection equations. We have succeeded only in estimating regressions that include the English rule variable and subsets of the other tort reform variables.

that corrects for the non-random selection of litigated cases from the set of not-dropped claims.⁴² According to these estimates (the third regression in Table 3), the English rule has a slightly stronger effect, but estimated coefficients in the two OLS regressions are not different in statistical terms and the coefficient on the Mill's ratio term (LAMBDA) is not significant. We note that this does not rule out important selection effects at earlier stages, e.g., filing and the drop decision.

2. Judgments and Settlements.

Since both the claim quality hypothesis and the selection hypotheses predict an increase in plaintiff win rates at trial, distinguishing among them requires an evaluation of changes in judgments (awards at trial) and settlements. The average judgment (not conditioned on a verdict) is substantially higher in English rule cases (\$69,390) versus American rule cases (\$25,190). These averages reflect, of course, the higher win rate. English rule judgments conditional on a verdict against the defendant are, however, also higher. Table 4 indicates that the average is \$321,346 in English rule cases and \$215,828 in American rule cases. Comparing the percentage of judgments in dollar categories, we note as well that overall distribution of English rule judgments is shifted to the higher dollar categories.

Table 5 reports three regression results on the natural log of plaintiff judgments (in 1980) in litigated cases. We added \$1 to the observed judgments to permit the natural log transformation in the cases plaintiffs lost. These results confirm the point above. The first OLS regression indicates that the English rule increases judgments by statistically significant 117 percent.⁴³ However, because of the large number of zero awards, a Tobit model is appropriate.

⁴² The probit selection equation on settle-versus-litigate decisions indicates that the English rule increased settlement prospects. The results are similar to Table 2 and Figure 3 in Snyder and Hughes (1990).

⁴³ In evaluating these results, questions may arise concerning the possible role of systematic trends in real awards. But we note that (i) the NAIC variable that distinguishes between the earlier American rule claims is not significant, (ii) American rule cases account for 38 percent of the balance of the later DOI cases that went to trial, and (iii) the English rule claims dominate the claims closed in early years covered by the DOI data set. In other words, the English rule claims tend to come from the middle of the sample period.

The second regression, estimated using Tobit, indicates a six-fold increase in judgments under the English rule. The last regression, also estimated using Tobit, includes a Mill's ratio term to correct for the non-random selection of litigated claims. The estimate for the English rule is not statistically different from the non-corrected specification, nor is the coefficient on the Mill's ratio term statistically significant. As before we attempted to estimate a linear model that also corrects for selection at the drop stage, but could not do so.

What happened to settlements? Table 6 shows the cut-off values for the quartiles of the distribution of settlements under the American and English rule. The data clearly show that settlements under the English rule tend to be higher. For example, the range of American rule settlements in the second quartile is \$3,750 - 11,089. This overlaps only slightly with the English rule settlements in the second quartile, which range from \$8,000 to \$27,500.

Finally, Table 7 reports OLS results on the natural log of the dollar compensation paid in settled cases. Because our definition of settled cases requires that the dollar award is positive, there is no mass point of zero observations requiring a Tobit model. The estimated coefficient on the English rule is positive and statistically significant, indicating that the rule increases dollar compensation by 30 percent. Table 7 also reports a linear regression that corrects for the non-random selection of settled cases from the set of claims not dropped. In this specification, the English rule coefficient increases marginally, but again the coefficient on the Mill's ratio term is not statistically significant.

IV. Assessing the Empirical Results.

Our regression results indicate that plaintiffs who go to trial under the English rule stand a better chance of prevailing and receive higher judgments. In addition, plaintiffs receive more compensation in settled cases. A cogent explanation for these results is that fee-shifting leads potential plaintiffs to exercise more care in proceeding with claims, and, as a result, that English rule claims differ in terms of unobservable characteristics. In prior research, we argued that the higher settlement rate under the English rule was consistent with this view. Our findings

here broaden the idea: Plaintiffs who proceed despite the threat of fee-shifting anticipate a greater likelihood of settlement and improved prospects at trial. Thus, the results support Hypothesis IIIa and the view that one of the primary benefits of the English rule is that plaintiffs choose to pursue higher quality of claims.

Awareness of selection effects at the settle-versus-litigate stage cautions against drawing inferences from results concerning litigated cases. The weaker censoring effect of defendants' reputations in the context of fee-shifting, for example, generated the prediction of a higher plaintiff win rate with a given distribution of claims with respect to merit (Hypothesis IVa). This line of argument, however, also predicted a decrease in the value of settled claims due to the selection of higher merit litigated claims (Hypothesis IVb). This is contradicted by our results on settlements, which rose by 30 percent in English rule cases. Thus, the combination of effects -- higher plaintiff win rate and higher valued settlements -- does not square with an explanation that relies only a change in settle-versus-litigate decisions.

One might try to maintain the selection hypothesis by appealing to the English rule's inframarginal effects on settlement offers. Indeed, the English rule would be expected to increase defendant's offers in cases where the defendant's chances at trial were poor and the prospective increases in litigation costs were large.⁴⁴ But from the low observed win rates at trial, the opposite inframarginal effects are expected for the settled cases that are close, in terms of the distribution of merit, to those selected for trial. Consistent with our earlier comment, our results do not constitute a rejection of the general and accepted proposition that litigated claims are a selected subset of the claims not dropped. Nor does our analysis imply a rejection of proposition that asymmetric stakes explain observed win rates. Rather, our findings reject the narrower proposition that the changes we observe are consistent with an unchanged distribution of claim quality among the set of claims not dropped.

⁴⁴ Using the notation in footnote 10, the defendant's expected cost under the English rule $[qA + q(X + Y)]$ will be higher than under the American rule $[qA + Y]$ if q is less than .5. The expected cost also tends to rise with increases in total legal costs under the English rule.

Similar logic also leads to the rejection of the selection hypotheses concerning an increase in low dollar value cases. While Hypothesis Va predicts a higher win rate, the complementary hypothesis (Vb) predicts a lower average judgment conditional on a verdict. The distribution of plaintiff judgments, as summarized in Table 4, indicate the opposite: Conditional on a verdict, judgments are substantially higher in English rule cases. The regressions on all litigated judgments reported in Table 5, while not directly relevant, also points to a rejection of the proposition that a different selection of litigated cases could alone explain the improvement in plaintiff prospects at trial.

While our discussion of settlement decisions and the selection of litigated claims has been couched in terms of the optimism model, these issues and our empirical findings also can be viewed in light of the literature that analyzes litigation as games involving asymmetric information. Bebchuk (1984) developed the basic framework where the defendant has superior information about claim quality and the plaintiff makes a demand that leads either the settlement or litigation. It follows that, from the plaintiff's point of view, the selection of cases for trial is adverse, as defendants with stronger cases will reject the plaintiffs' demands. Observing that plaintiffs' credibility at the pre-trial stage depends on their willingness to pursue litigation when settlement fails, Nalebuff (1987) showed that plaintiffs may be forced to raise their demands in order to obtain a less adverse selection of cases for litigation.

Our findings are consistent with the proposition that the English rule tightens the credibility constraint identified by Nalebuff, provided that in equilibrium plaintiffs can drop some claims without rendering their settlement demands incredible. By weakening plaintiff's threat to pursue some cases to trial, the English rule would lead plaintiffs to raise their demands, which is supported by our empirical findings regarding the value of settlements. By dropping a higher proportion of claims, which is also consistent with our results, the remaining litigated claims can be of higher average merit. This in turn yields the improvement in plaintiffs'

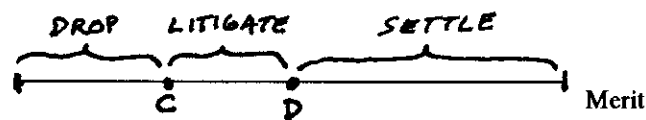
prospects at trial.⁴⁵ The principle that has guided our analysis applies to the game theoretic framework: The overall quality of the set of claims not dropped must improve to produce the combination of results observed.⁴⁶

What further can be said about the effects of the English rule? To the extent that the higher rate of plaintiff wins also reflects changes in behavior at trial, our analysis should calm concerns that the changes in expenditures decisions would adversely affect plaintiffs. Defense expenditures in English rule cases were higher (rf. Table 2), but the natural consequence of the lower private marginal costs of defense expenditures is not reflected in the outcome results. Thus, Hypothesis Ia is rejected.

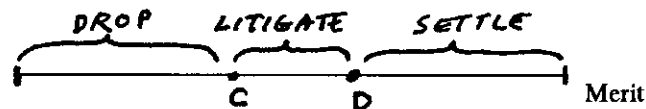
To the extent behavioral changes at trial account for the increase in the plaintiff win rate, Hypothesis IIa gains support. Further inspection of the results, however, does not support the notion that the finders of fact would avoid imposing liability for fees on plaintiffs by reaching verdicts with a low dollar judgments (Hypothesis IIb). As indicated in Table 4, the percentage of

⁴⁵ With a given the distribution of filed claims, these effects can be depicted as follows where claim merit determines claim value:

American Rule:



English Rule:



The English rule leads plaintiffs to adjust both their settlement demands (D) and the cut-off (C) for the decision to drop claims.

⁴⁶ Further theoretical analysis of the drop-versus-not-drop decision is needed. As discussed above, at some point during the litigation process, plaintiffs operating under the English rule lose the right to drop their claims. This decision node may produce a second so-called deadline effect, at which point the degree of information asymmetry is likely to be more severe. If plaintiffs make early settlement demands to avoid potential liability for fees, there may be several effects on settlements. Defendants who are more vulnerable will settle at this stage and do so cheaply, but the cases they settle may be of higher merit. Settlements that occur later in the litigation process are less likely to be influenced by the information asymmetry. As a result, plaintiffs who proceed beyond the 'liability node' may be able to extract higher settlements relative to claim merit.

judgments in the low dollar amount categories falls under the English rule. Thus, we do not find support for this form of nullification, i.e., finding liability when the facts dictate otherwise.

V. Conclusion.

Our findings from Florida's experiment with fee-shifting indicate an improvement in plaintiffs' prospects in litigated cases and an increase in plaintiff compensation in settled cases. Consistent with our prior finding that the English rule increased the frequency of dropped claims, we believe that these results reflect an improvement in the quality of claims that plaintiffs pursue under the English rule. To be more precise, the improvement in plaintiff prospects appear to be due to a different selection of claims at the filing and drop-versus-not-drop stages, rather than a different selection at the settle-versus-litigate stage.

These results may not change critics of the English rule into proponents, nor should they necessarily do so. Our findings cannot disprove the claim that the English rule systematically distributes wealth from some plaintiffs to defendants. The enhanced settlements and higher expected judgments are consistent with improved claim quality, but say nothing about whether plaintiffs, holding quality constant, are better off under the English rule. Indeed, it is unlikely that an answer along these lines could be provided because the rule affects claim value in different ways. Almost certainly, fee-shifting rules deters and harms many plaintiffs, and at the same time encourages others. Finally, in regards to the improved prospects at trial, it is important to bear in mind that even under the English rule plaintiffs in our sample win far less than half of the litigated cases, and that the losses become more costly because (i) the defendants' costs shifted to plaintiffs, and (ii) the plaintiffs' own costs probably increase. Thus, even if one believes claim quality improves under the English rule and sees no evidence of defendants gaining an advantage from greater trial expenditures, the English rule may not be appealing.

But if one can generalize from the results, they point to some benefits. The English rule probably strengthens enforcement of conduct that is clearly unlawful. It also probably reduces low merit claims and especially nuisance suits. The natural question is why these benefits do not

play a more significant role in the choice of cost-allocation rules in the U.S. Part of the answer probably lies with the requirement that if fees are to be shifted, they must be regulated, either by the courts or by legislatures. In addition, a public interest rationale for the American rule may exist. Landes and Posner (1976), for example, forward the view that the stock of precedents is a public good. Because getting to the Supreme Court is costly for plaintiffs with innovative claims and would be more so under the English rule, the American rule may generate a more valuable stock of precedents. Whatever the merit of these speculative comments, a complete analysis of the political appeal of the American rule is a worthy topic for future research.

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Table 1. Sample Means

Number of Observations	Litigated Claims 1560	Settled Claims 6368	Dropped Claims 8746
Legal Reforms			
English rule	0.56	0.44	0.42
Contingent fee limit	0.42	0.13	0.19
Review panels	0.10	0.07	0.10
Merit review	0.08	0.25	0.34
Reform package 1 ^a	0.88	0.86	0.86
Reform package 2 ^b	0.10	0.27	0.37
Injury Severity			
1 No injury/legal issue	0.07	0.03	0.10
2 Insignificant temporary	0.06	0.08	0.11
3 Minor temporary	0.18	0.24	0.23
4 Major temporary	0.09	0.11	0.10
5 Minor permanent	0.14	0.13	0.10
6 Significant permanent	0.13	0.10	0.09
7 Major permanent	0.07	0.05	0.03
8 Grave permanent	0.04	0.04	0.02
9 Death	0.22	0.22	0.22
Defendant type			
General practitioner	0.12	0.13	0.07
Physician/no surgery	0.14	0.10	0.13
Physician/minor surgery	0.08	0.08	0.10
General surgeon	0.07	0.06	0.05
Surgical specialist	0.29	0.24	0.23
Anesthesiologist	0.02	0.03	0.03
Osteopath	0.02	0.02	0.02
Hospital	0.26	0.34	0.48
Other			
Defense Expenditures	\$18,004	\$9,464	\$1,749
Hospital injury	0.80	0.77	0.82
Office injury	0.15	0.18	0.14
Other injury	0.05	0.05	0.04
Plaintiff life expectancy	31.9	27.5	27.1
NAIC	0.12	0.16	0.18
Plaintiff Compensation			
Judgments in litigated cases	\$49,727	--	--
Settlements	--	\$82,960	--

^a Combines modification of the collateral source rule, provision for periodict payment of damage awards, judicial review of damage awards, and the locality rule.

^b Combines limits on punitive damages, itemization of jury awards, and mandatory pretrial conferences.

**Table 2. Plaintiff Win Rates at Trial and Defense
Expenditures by Claim Severity**

<u>Severity Category</u>	<u>American Rule Cases</u>	<u>English Rule Cases</u>
SEV 1	5.0% \$6,672 n=60	4.7% \$16,346 n=64
SEV 2	7.5% \$6,597 n=40	8.3% \$11,013 n=48
SEV 3	4.3% \$7,109 n=117	16.9% \$14,411 n=160
SEV 4	12.2% \$11,471 n=74	38.5% \$17,597 n=65
SEV 5	17.3% \$10,646 n=98	17.5% \$21,772 n=94
SEV 6	15.9% \$12,573 n=88	30.6% \$22,164 n=111
SEV 7	4.2% \$21,573 n=48	33.9% \$31,237 n=62
SEV 8	25.0% \$44,850 n=20	20.9% \$53,126 n=43
SEV 9	13.7% \$15,029 n=146	18.1% \$26,078 n=199

Table 3. Regression Analysis of Litigated Outcomes

Dependent Variable = 1 if plaintiff wins, 0 otherwise.

Probit Model

Independent Variables	Coefficient	Standard Error	T-ratio	(Sig.Level)
ENG	0.361	0.100	3.60	(0.0003)
FEE	-0.708	0.393	-1.80	(0.0718)
REV	0.418	0.124	3.36	(0.0008)
MERIT	0.603	0.393	1.53	(0.1251)
PACK 1	0.611	0.673	0.98	(0.3641)
PACK 2	-0.296	0.363	-0.82	(0.4146)
SEV2	0.295	0.281	1.05	(0.2941)
SEV3	0.482	0.225	2.15	(0.0318)
SEV4	1.060	0.233	4.55	(0.0000)
SEV5	0.820	0.225	3.65	(0.0002)
SEV6	1.037	0.224	4.64	(0.0000)
SEV7	0.931	0.246	3.79	(0.0001)
SEV8	0.970	0.274	3.54	(0.0004)
SEV9	0.776	0.217	3.58	(0.0003)
NAIC	0.409	0.679	0.602	(0.5470)
CONSTANT	-2.288	0.723	-3.17	(0.0015)

Number of observations 1560
 Log-Likelihood -651.77
 Restricted (Slopes=0) Log-L. -699.7
 Chi-Squared 95.76 (0.0000)

Table 3. Regression Analysis of Litigated Outcomes (Continued)

Dependent Variable = 1 if plaintiff wins, 0 otherwise.

Linear Probability (OLS) Model

Independent Variables	Coefficient	Standard Error	T-ratio	(Sig.Level)
ENG	0.087	0.023	3.79	(0.0002)
FEE	-0.109	0.072	-1.53	(0.1274)
REV	0.114	0.032	3.58	(0.0004)
PACK 1	0.113	0.139	0.82	(0.4126)
PACK 2	-0.053	0.071	-0.74	(0.4613)
MERIT	0.117	0.080	1.46	(0.1456)
SEV2	0.037	0.051	0.72	(0.4690)
SEV3	0.073	0.040	1.81	(0.0706)
SEV4	0.213	0.046	4.65	(0.0000)
SEV5	0.141	0.042	3.36	(0.0008)
SEV6	0.206	0.043	4.82	(0.0000)
SEV7	0.179	0.049	3.63	(0.0003)
SEV8	0.187	0.059	3.16	(0.0016)
SEV9	0.132	0.040	3.35	(0.0008)
NAIC	0.081	0.140	0.58	(0.5631)
CONSTANT	-0.060	0.147	-0.41	(0.6823)
Number of observations			1560	
R-Square			0.06	
F (26,1533)			3.63 (0.0000)	

Table 3. Regression Analysis of Litigated Outcomes (Continued)

Dependent Variable = 1 if plaintiff wins, 0 otherwise.

Linear Probability (OLS) Model, with Mill's Ratio term correcting for non-random selection of litigated claims from set of claims not dropped.

Independent Variables	Coefficient	Standard Error	T-ratio	(Sig.Level)
ENG	0.119	0.032	3.64	(0.0003)
FEE	-0.006	0.100	-0.06	(0.9541)
REV	0.053	0.052	1.03	(0.0004)
PACK 1	0.215	0.161	1.34	(0.1806)
PACK 2	0.022	0.090	0.25	(0.8065)
MERIT	0.201	0.101	1.99	(0.0466)
SEV2	0.203	0.123	1.66	(0.0972)
SEV3	0.235	0.115	2.04	(0.0414)
SEV4	0.375	0.117	3.19	(0.0009)
SEV5	0.281	0.103	2.73	(0.0064)
SEV6	0.338	0.099	3.43	(0.0006)
SEV7	0.291	0.092	3.12	(0.0015)
SEV8	0.351	0.125	2.80	(0.0051)
SEV9	0.289	0.112	2.59	(0.0097)
NAIC	0.274	0.195	1.40	(0.1610)
LAMBDA	-0.303	0.200	-1.53	(0.1274)
CONSTANT	0.141	0.202	0.70	(0.4851)

Number of observations 1560
R-Square 0.04
F (27,1532) 3.60 (0.0000)

Table 4. Distribution of Plaintiff Judgments in Litigated Cases

All Litigated Cases

Number of cases = 1560; Average judgment = \$49,727
 Number with zero judgments = 1292 (82.8%)
 Number with positive judgments = 268 (17.8%); Average judgment \$289,443; Median = \$100,000.

Distribution of positive judgments (J):

J < 10k	10k ≤ J < 50k	50k ≤ 100k	100k ≤ J < 200k	J > 200k
12.3%	14.6%	12.3%	22.4%	38.4%

Cases Litigated under the American Rule

Number of cases = 694; Average judgment = \$25,190
 Number with zero judgments = 613 (88.3%)
 Number with positive judgments = 81 (11.4%); Average judgment \$215,828; Median = \$63,750.

Distribution of positive judgments (J):

J < 10k	10k ≤ J < 50k	50k ≤ 100k	100k ≤ J < 200k	J > 200k
18.5%	21.0%	12.3%	14.8%	33.3%

Cases Litigated Under the English Rule

Number of cases = 866; Average judgment = \$69,390
 Number with zero judgments = 679 (78.4%)
 Number with positive judgments = 187 (21.6%); Average judgment \$321,346; Median = \$112,400.

Distribution of positive judgments (J):

J < 10k	10k ≤ J < 50k	50k ≤ 100k	100k ≤ J < 200k	J > 200k
11.2%	11.8%	12.3%	25.7%	39.0%

Table 5. Regression Analysis of Plaintiff Judgments in Litigated Cases

Dependent Variable = Natural log of judgments (1980 dollars).

OLS Model				
Independent Variables	Coefficient	Standard Error	T-ratio	(Sig.Level)
ENG	1.172	0.269	4.36	(0.0000)
FEE	-0.684	0.843	-0.81	(0.4168
REV	1.165	0.376	3.10	(0.0019)
MERIT	1.117	0.944	1.18	(0.2368)
PACK 1	-0.301	1.629	-0.19	(0.8532)
PACK 2	-0.547	0.839	-0.65	(0.5141)
SEV2	0.056	0.604	0.09	(0.9265)
SEV3	0.800	0.475	1.69	(0.0920)
SEV4	2.179	0.538	4.05	(0.0001)
SEV5	1.538	0.492	3.13	(0.0018)
SEV6	2.624	0.502	5.23	(0.0000)
SEV7	2.192	0.578	3.79	(0.0002)
SEV8	2.640	0.693	3.81	(0.0001)
SEV9	1.666	0.465	3.58	(0.0003)
NAIC	-0.525	1.650	-0.32	(0.7502)
CONSTANT	0.777	1.731	0.45	(0.6535)
Number of observations			1560	
R-Square			0.07	

Table 5. Regression Analysis of Plaintiff Judgments in Litigated Cases (Continued)

Dependent Variable = Natural log of judgments (1980 dollars).

Tobit Model				
Independent Variables	Coefficient	Standard Error	T-ratio	(Sig.Level)
ENG	6.402	1.608	3.98	(0.0001)
FEE	-6.600	5.776	-1.14	(0.2532)
REV	6.001	2.084	2.88	(0.0039)
MERIT	1.965	1.167	1.70	(0.0877)
PACK 1	1.285	9.752	0.13	(0.8952)
PACK 2	-4.917	5.810	-0.85	(0.3974)
SEV2	1.630	4.483	0.36	(0.7161)
SEV3	7.262	3.396	2.14	(0.0325)
SEV4	14.936	3.617	4.13	(0.0000)
SEV5	11.977	3.427	3.50	(0.0005)
SEV6	15.931	3.438	4.63	(0.0000)
SEV7	13.782	3.772	3.65	(0.0003)
SEV8	15.744	4.205	3.74	(0.00020)
SEV9	12.038	3.309	3.64	(0.0003)
NAIC	-6.231	10.01	-0.62	(0.5338)
CONSTANT	-21.14	10.76	-1.96	(0.0495)
Number of observations			1560	
R-Square			0.07	

Table 5. Regression Analysis of Plaintiff Judgments in Litigated Cases (Continued)

Dependent Variable = Natural log of judgments (1980 dollars).

Tobit Model, with Mill's Ratio term correcting for non-random selection of litigated claims from set of claims not dropped.

Independent Variables	Coefficient	Standard Error	T-ratio	(Sig.Level)
ENG	7.486	4.006	1.87	(0.0616)
FEE	-3.331	7.940	-0.42	(0.6748)
REV	2.967	3.820	0.77	(0.4374)
MERIT	11.107	8.771	1.27	(0.2054)
PACK 1	-2.664	11.01	-0.24	(0.8088)
PACK 2	-2.611	6.587	-0.40	(0.6918)
SEV2	6.735	10.37	0.65	(0.5161)
SEV3	12.067	10.22	1.18	(0.2379)
SEV4	19.852	12.31	1.61	(0.1069)
SEV5	16.275	10.51	1.55	(0.1215)
SEV6	19.855	11.11	1.79	(0.0739)
SEV7	17.252	9.716	1.77	(0.0758)
SEV8	20.839	12.25	1.70	(0.0890)
SEV9	16.735	10.98	1.52	(0.1276)
NAIC	-2.001	13.16	-0.15	(0.8792)
LAMBDA	-2.865	2.286	-1.253	(0.2102)
CONSTANT	2.68	2.335	1.15	(0.2505)
Number of observations			1560	
R-Square			0.07	

Table 6. Distribution of Settlements

	All Cases	American Rule	English Rule
1st Quartile	\$1 - 5,000	\$1 - 3,750	\$1 - 8,000
2nd Quartile	\$5,000 - 18,750	\$3,750 - 11,089	\$8,000 - 27,500
3rd Quartile	\$19,000 - 80,000	\$11,500 - 62,000	\$27,500 - 100,000
4th Quartile	\$80,000 - 4.1M	\$62,000 - 2.23M	\$100,000 - 4.1M

Table 7. Regression Analysis of Settlements

Dependent Variable = Natural log of settlements paid to plaintiffs (1980 dollars).

OLS Model

Independent Variables	Coefficient	Standard Error	T-ratio	(Sig.Level)
ENG	0.301	0.082	3.66	(0.0003)
FEE	-0.193	0.115	-1.69	(0.0920)
REV	-0.207	0.129	-1.61	(0.1084)
MERIT	0.124	0.207	0.60	(0.5503)
PACK 1	-0.518	0.210	-2.47	(0.1370)
PACK 2	0.126	0.193	0.65	(0.5145)
SEV2	-0.015	0.185	-0.08	(0.9342)
SEV3	0.826	0.168	4.92	(0.0000)
SEV4	1.641	0.180	9.14	(0.0000)
SEV5	1.707	0.176	9.72	(0.0000)
SEV6	2.314	0.182	12.75	(0.0000)
SEV7	2.985	0.205	14.55	(0.0000)
SEV8	3.462	0.213	16.29	(0.0000)
SEV9	2.262	0.169	13.37	(0.0000)
NAIC	-0.950	0.222	-4.27	(0.0000)
CONSTANT	8.450	0.281	30.05	(0.000)
Number of observations			6368	
R-Square			0.18	
F(26,6341)			51.9 (0.0000)	

Table 7. Regression Analysis of Settlements

Dependent Variable = Natural log of settlements paid to plaintiffs (1980 dollars).

OLS Model, with Mill's Ratio term correcting for non-random selection of litigated claims from set of claims not dropped.

Independent Variables	Coefficient	Standard Error	T-ratio	(Sig.Level)
ENG	0.356	0.095	3.74	(0.0002)
FEE	-0.118	0.133	-0.89	(0.3719)
REV	-0.276	0.143	-1.93	(0.0535)
MERIT	0.222	0.226	0.98	(0.3256)
PACK 1	-0.347	0.258	-1.35	(0.1774)
PACK 2	0.240	0.218	1.10	(0.2704)
SEV2	0.252	0.292	0.87	(0.3867)
SEV3	1.088	0.277	3.93	(0.0001)
SEV4	1.905	0.286	6.66	(0.0000)
SEV5	1.944	0.266	7.31	(0.0000)
SEV6	2.536	0.260	9.74	(0.0000)
SEV7	3.178	0.263	12.10	(0.0000)
SEV8	3.735	0.313	11.93	(0.0000)
SEV9	2.523	0.277	9.11	(0.0000)
NAIC	-0.635	0.347	-1.83	(0.0669)
LAMBDA	-0.836	0.697	-1.20	(0.2301)
CONSTANT	7.759	0.644	12.06	(0.000)
Number of observations			6368	
R-Square			0.18	
F(27,6340)			50.0	(0.0000)