Trial Selection Theory and Evidence: A Review

Keith Hylton
Boston University School of Law

Haizhen Lin
Indiana University - Kelley School of Business

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Keith N. Hylton
Haizhen Lin

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TRIAL SELECTION THEORY AND EVIDENCE: A REVIEW

Keith N. Hylton*
Haizhen Lin**

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Abstract: Trial selection theory consists of models that attempt to explain or predict the characteristics that distinguish cases that are litigated to judgment from those that settle, and the implications of those characteristics for the development of legal doctrine and for important trial outcome parameters, such as the plaintiff win rate. This paper presents a review of trial selection theory and evidence. We start with a review of the literature, and then present a model that includes Priest-Klein and asymmetric information theories as special cases. We conclude with a review of the empirical evidence.

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* Honorable Paul J. Liacos Professor of Law, Boston University, knhylton@bu.edu.
** Assistant Professor, Indiana University, Kelley School of Business
I. Introduction

This paper presents a review of trial selection theory. We use the term “trial selection theory” to refer to models that attempt to explain or predict the characteristics that distinguish cases that are litigated to judgment from those that settle, and the implications of those characteristics for the development of legal doctrine and for important trial outcome parameters, such as the plaintiff win rate. Using this definition, trial selection theory can be said to have started with Priest and Klein (1984).

Trial selection theory is important for many reasons. People often refer to plaintiff win rates in an attempt to assess whether the law works as it should in certain areas of litigation. Low plaintiff win rates are often cited as a sign that the law favors defendants, and conversely. Trial selection theory is useful in any effort to draw reliable inferences from trial outcome statistics.

Another reason trial selection theory is useful is that it helps us understand how litigation influences the path of the law. If, for example, the most uncertain cases are the ones that go to trial, then the law will not exhibit a pro-plaintiff or pro-defendant bias over time. If, on the other hand, the cases that go to trial tend to be those with facts that favor defendants, then we will observe legal rules that exhibit a pro-defendant bias.

On a more confounding level, trial selection theory implies that legal analysts have to read court decisions with care, in order to avoid confusing characteristics of the sample of litigated cases with characteristics of all legal disputes. If the cases that make it all the way to litigation form an unrepresentative sample of legal disputes, then certain features of decided cases may be unreliable signals of the decision-making process of courts. For example, a legal analyst who observes that all of the cases in which defendants are held negligent involve facts in which the reasonable level of precaution is difficult to determine might draw the conclusion that courts find the negligence standard difficult to apply, when in fact the easy-to-determine negligence cases never went all the way to judgment.

The best known trial selection theory is the “divergent expectations” model of Priest and Klein. According to the theory of Priest and Klein only the most uncertain

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1 On the political uses of win rate data see, e.g., Daniels and Martin (1995).
disputes (i.e., coin tosses) make it all the way to a court judgment, and as a result plaintiff win rates tend toward fifty percent unless the parties have asymmetric stakes. The best known alternative to the divergent expectations theory is the informational asymmetry theory, which holds that plaintiff win rates will tend toward fifty percent only when neither party has the informational advantage, and otherwise the win rate will be greater for the informed party. However, the divergent expectations and asymmetric information theories are by no means the only possible models of trial selection.²

Part II presents a review of the literature. Part III presents a general model that includes Priest-Klein and asymmetric information theories as special cases. Part IV discusses practical considerations in asymmetric information models of litigation. Part V discusses empirical evidence on trial selection theory.

II. Literature Review

The trial selection literature consists of two parts. One consists of studies of the economics of the settlement decision. The other consists of studies of the selection of disputes for litigation and the implications of that process for important parameters such as the rate of plaintiff victory.

A. The Settlement Decision

The foundation for much of the literature on the economics of settlement is the Landes-Posner-Gould settlement model,³ which implies that settlement occurs when the difference between the plaintiff’s and the defendant’s predictions of the judgment (divergence in expectations) is less than the total cost of litigation. The LPG model is based on a rationality (or incentive compatibility) constraint on settlements: a settlement has to be perceived by the plaintiff and by the defendant as improving his position relative to litigation. The LPG condition is assumed to be both a necessary and sufficient

² See, e.g., Eisenberg and Farber, and discussion inside.
condition for settlement. The model ignores questions of strategic behavior and informational asymmetry.

Much of the literature examining the economics of settlement builds on the LPG framework. Shavell (1982), setting out the most complete early formal analysis of the litigation-settlement decision, suggests that litigation results from excessive optimism on the part of plaintiffs and defendants.

The literature on the economics of settlement has been expanded significantly by incorporating asymmetric information and strategic behavior. The first article to introduce strategic behavior and informational asymmetry was Png (1983), followed closely by Bebchuk (1984). The informational asymmetry framework introduced in the Png and Bebchuk articles assumed that the defendant has an informational advantage in litigation. However, Png’s is a signaling model in which the informed defendant makes the settlement offer, while Bebchuk’s is a screening model in which the uninformed plaintiff makes a settlement demand. The asymmetric information models demonstrate that there are cases litigated under conditions that would not lead to litigation in the LPG model.

The asymmetric information literature of settlement has expanded significantly since the Png and Bebchuk articles. Spier (1992) examines the path of settlement negotiations over stages. Daughety and Reinganum (1993) present a model that incorporates different informational advantage assumptions and examine the implications for settlement and trial. Hay (1995) examines the influence of discovery on settlement negotiations.

B. Selection Hypothesis or Effect

The second major strand of literature on the economics of trial selection is a set of articles focusing on the selection hypothesis (or selection effect) introduced by Priest and Klein (1984). The selection framework of Priest and Klein, assumes that parties in litigation have symmetric information and does not explicitly incorporate strategic behavior. The Priest-Klein selection hypothesis holds that only the most uncertain disputes go all the way to a judgment in litigation. The resulting win rate for plaintiffs is
fifty percent, because trials are just as uncertain as coin tosses. If, on the other hand, parties have asymmetric stakes, the plaintiff win rate may exceed or fall below fifty percent under the Priest-Klein model. Priest and Klein introduced empirical evidence to support their hypothesis. Eisenberg (1990) found significant deviations from the fifty percent hypothesis.

The selection hypothesis literature, like the settlement literature generally, has been expanded by the incorporation of strategic behavior and asymmetric information. The first paper to consider the implications of asymmetric information for the selection hypothesis was Hylton (1993). The second paper was Shavell (1996). Since the analysis in Hylton was largely informal, the Shavell article introduces the first formal model of the selection hypothesis in the context of informational asymmetry.

Hylton (1993) concluded that the Priest-Klein fifty-percent hypothesis was correct in the informational symmetry setting, but that plaintiff win rates would deviate from fifty percent in the information asymmetry setting. Specifically, plaintiff win rates should be less than (greater than) fifty percent when defendants (plaintiffs) have the informational advantage in litigation. Hylton argued that the empirical evidence presented in Eisenberg (1990) on plaintiff win rates supports this hypothesis.

Shavell, building on the screening model of Bebchuk (1984), concluded that any win rate percentage could be observed, and that there was no clear tendency for the plaintiff win rate to be less than or greater than fifty percent in the context of informational asymmetry. Shavell found that the differential settlement incentives tended to depress plaintiff win rates when the defendant had the informational advantage, but found no basis for concluding that the win rate in that setting would be less than fifty percent.

Hylton (2002) presents an alternative model of the selection effect within the informational asymmetry context. The alternative model builds on the signaling framework of Png (1987) to analyze the trial outcome parameters under informational asymmetry. The signaling framework delivers results that differ from the screening

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4 For an early critique of the Priest-Klein model, see Wittman (1985). Wittman found that in a more general model there was no tendency toward a fifty percent win rate.
framework employed by Shavell. The results of the signaling model are generally consistent with the informal analysis of Hylton (1993).

More recent literature has attempted to test Priest-Klein and asymmetric information theories of the selection effect, as well as introduce additional theories. Eisenberg and Farber (1996) introduce the litigious-plaintiff hypothesis, which holds that win rates can be understood according to the plaintiff’s cost of litigation, which varies more for individuals than for corporations. Kessler, Meites, and Miller (1996) find that the Priest-Klein model tends to be confirmed in settings that are consistent with its assumptions (symmetric information and symmetric stakes), but that win rates deviate from fifty percent under informational asymmetry and in other contexts. Waldfogel (1998) finds that the empirical evidence supports the Priest-Klein model with deviations from fifty-percent due to asymmetry in litigation stakes.

C. Overview

Many contributions to the trial selection literature do not distinguish the two strands (settlement versus selection effects) identified in the foregoing discussion. Yet it is important to distinguish the general models of litigation and settlement from the models of the selection effect on trial outcomes. Many of the general models of settlement do not yield testable hypotheses concerning trial outcomes. In contrast, the selection effects literature, beginning with Priest and Klein, aims to generate testable predictions on important trial outcome parameters.

In particular, the asymmetric information models of settlement generate substantial variation in their predictions. The signaling approach introduced in Png (1983) and explored in Png (1987) yields different equilibrium outcomes than the screening model introduced in Bebchuk (1984). There is no single asymmetric information model of settlement that produces a set of standard results. Given this, it seems appropriate to either examine asymmetric information models in the context of their particular assumptions, or to attempt to minimize the importance of the assumptions. In the model below, we attempt the latter strategy by introducing uncertainty in the
litigants’ predictions. The model below reconciles Priest-Klein and asymmetric information hypotheses.

III. Model
A. Assumptions

In this part we will set up a simple model of trial selection, based on Hylton (2006), that includes the Priest-Klein model as a special case. The first component of this model is the Landes-Posner-Gould (LPG) rationality condition. Under the LPG model, parties choose to litigate rather than settle a dispute if and only if

\[(P_p - P_d) > \gamma\]  

(1)

where \(P_p\) = plaintiff’s estimate of the probability of a verdict in his favor, \(P_d\) = defendant’s estimate of the probability of a verdict in plaintiff’s favor; \(\gamma = C/J\), where \(C\) = the sum of the plaintiff’s litigation cost \((C_p)\) and the defendant’s litigation cost \((C_d)\), and \(J\) = the value of the judgment. We assume that the settlement cost is zero. If the LPG litigation condition (1) holds, the set of mutually beneficial settlement agreements is empty, so the parties choose to litigate.\(^5\)

The second basic component of this model is the assumption that each party’s predictions can be modeled as the sum of a rational estimate and an idiosyncratic error term

\[P_p = P'_p + \epsilon_p\]  

(2)

\[P_d = P'_d + \epsilon_d\]  

(3)

If \(\Omega_p\) represents the information set of the plaintiff, and \(\Omega_d\) represents the information set of the defendant, then \(P'_p = E(P_p | \Omega_p)\), \(P'_d = E(P_d | \Omega_d)\), \(E(\epsilon_p | \Omega_p) = 0\), \(E(\epsilon_d | \Omega_d) = 0\).

\(^5\) For an asymmetric information model in which the LPG condition continues to determine litigation outcomes, see Hylton (2002). By relying on the LPG framework, we are assuming that the nonexistence of a mutually beneficial settlement is the main determinant of litigation.
The third basic component of the model is a specification of the plaintiff’s and the defendant’s rational estimates of the probability of a verdict in favor of the plaintiff. Let $W = \text{probability that the defendant in a legal dispute violated the legal standard}$. Let $Q_1 = \text{probability that a defendant who has violated the legal standard will be found innocent (type-1 judicial error)}$. Let $Q_2 = \text{probability that a defendant who has not violated the legal standard will be found guilty (type-2 judicial error)}$. So that courts are at least as accurate as coin tosses, we will assume that $1 - Q_1 > Q_2$. The plaintiff’s rational estimate of a verdict in the plaintiff’s favor can be expressed as a function of the compliance and judicial-error probabilities:

$$P'_p = W_p(1 - Q_{ip}) + (1 - W_p)Q_{2p}, \quad (4)$$

where $W_p = E(W | \Omega_p)$, $Q_{ip} = E(Q_i | \Omega_p)$, $Q_{2p} = E(Q_2 | \Omega_p)$. Similarly, $P'_d = W_d(1 - Q_{id}) + (1 - W_d)Q_{2d}$.

We focus on two types of information set immediately below. One is the case in which the litigant has minimal case-specific information and forms a rational estimate of the likelihood of a verdict on the plaintiff’s side using that minimal information. This is the case of the uninformed litigant. The other is the case in which a litigant has private information and knows whether the defendant complied with the legal standard. For example, an uninformed malpractice plaintiff will know that he has been injured, but will not know whether the injury is due to the defendant’s negligence. An informed malpractice defendant will know not only that he has injured the patient, but also whether or not he was negligent.

In the case of the uninformed litigant, we will assume that his rational predictions are accurate and equal to the true case-specific probabilities of compliance and of error (given minimal case-specific information). Thus, if the plaintiff is uninformed, his prediction is the objective probability of a verdict in favor of the plaintiff, i.e., $P'_p = W(1 - Q_i) + (1 - W)Q_2$. Similarly, if the defendant is uninformed $P'_d = W(1 - Q_i) + (1 - W)Q_2$. To simplify, let us label the objective probability of a verdict in the plaintiff’s favor

$$\nu = W(1 - Q_i) + (1 - W)Q_2 \quad (5)$$
If one of the parties has private information on compliance, his estimate of $W$ is equal to 1 in the case of non-compliance, or 0 in the case of compliance. Thus, to take one example, if the defendant is informed and innocent, $P_d = P'_d = Q_2$.

The fourth component is a *heteroscedasticity assumption* regarding the error variances of the predictions. From the perspective of a litigant, the outcome of a dispute is most uncertain when the rational component of the litigants’ prediction is equal to $\frac{1}{2}$. This is the case in which the outcome of the dispute is viewed by the litigant as a coin toss; the litigant may have a great deal of information on the case, but the sum total of his information leads him to believe that a finding of guilt (or liability) is just as likely as a finding of innocence (non-liability). Consistent with Priest and Klein (1984), we therefore assume that the variance of the prediction error term is a function of the rational component of the litigant’s prediction, and that the variance reaches a maximum when the rational component is $\frac{1}{2}$ and with minima at 0 and 1 (see Figure 1 below).

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6 Wittman (1985) emphasizes the importance of the heteroscedasticity assumption in the Priest-Klein analysis.
B. Frequency of Litigation

The probability of litigation is

\[ f = \text{prob}(P_p - P_d > \gamma) \]  \hspace{1cm} (6)

which, given (2) and (3), is

\[ f = \text{prob}(\varepsilon_p - \varepsilon_d > \gamma - \Delta), \]  \hspace{1cm} (7)

where \( \Delta = P'_p - P'_d \). We assume that the error difference \( \varepsilon_p - \varepsilon_d \) is generated by a truncated normal distribution with mean zero and standard deviation \( \sigma \), where \( \varepsilon_p - \varepsilon_d \in [-1-\Delta, 1-\Delta] \). The variance of the error difference can be decomposed \( \sigma^2 = \sigma^2_p + \sigma^2_d - 2\rho \).

Based on the foregoing, the frequency of litigation is given by

\[ f = 1 - G \]  \hspace{1cm} (8)

where \( G \), which is the probability of settlement, is

\[ G(\gamma - \Delta; -1-\Delta, 1-\Delta) = \frac{\Phi\left(\frac{\gamma - \Delta}{\sigma}\right) - \Phi\left(\frac{-1-\Delta}{\sigma}\right)}{\Phi\left(\frac{1-\Delta}{\sigma}\right) - \Phi\left(\frac{-1-\Delta}{\sigma}\right)}. \]  \hspace{1cm} (9)

The heteroscedasticity assumption implies that as the degree of uncertainty concerning the judgment increases (as reflected in the variance terms in the denominator), the probability of litigation rises (Priest and Klein, 1984).\(^7\)

The frequency of litigation function combines features from several models of the litigation process. Note that as the cost of litigation rises relative to the judgment – i.e.,

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\(^7\) This result is in Hylton (2006) but is based on a non-truncated normal, which is technically inappropriate. The same result holds for the truncated case, but the proof is complicated; we have explored it in a separate paper (in progress).
as γ increases – the probability of litigation falls, a prediction of the Landes-Posner-Gould framework. The Priest-Klein model is also incorporated by the assumption of heteroscedastic prediction-error variances. Over-optimism appears as a factor that generates litigation (Shavell, 1982). Over-optimism is incorporated in the model by assuming a negative correlation between prediction errors, which reduces σ (because \(\sigma^2 = \sigma^2_p + \sigma^2_d - 2\rho\)). When the correlation between the parties’ prediction errors is negative, plaintiffs overestimate the size of the judgment while defendants underestimate the size of the judgment.

1. Priest-Klein Case

Under the Priest-Klein analysis, litigation is driven by uncertainty and the plaintiff win rate equals 50 percent. The reason is that only disputes that are as uncertain as coin tosses make it all the way to judgment.

The frequency of litigation function \(f\) can generate the analysis of Priest and Klein when the rational predictions of the plaintiff and the defendant are the same (\(P'_p = P'_d\), or \(\Delta = 0\)). In this case, the key factor leading to litigation is uncertainty, as reflected in the error variance in the denominator of (9). The Priest-Klein model assumes uncertainty regarding trial-outcome predictions increases as the defendant’s conduct comes closer to the legal standard, which implies that the rational component of the trial-outcome prediction is 50 percent (\(P'_p = P'_d = \frac{1}{2}\)).

A precise description of the Priest-Klein theorem within the context of this model can be achieved by examining the plaintiff’s win rate. The average plaintiff win rate takes into account the frequency of litigation, which is a function of the probability of litigation conditional on \(v\) (the \(f\) function) and the distribution of \(v\). If the distribution of \(v\) is uniform, this can be expressed as:

\[
\bar{\pi} = \int_0^1 vf(v)dv
\]

(10)
Given the assumptions on the error variances (see Figure 1), \( f \) is symmetric around \( v = \frac{1}{2} \).

Under these assumptions \( \bar{\pi} = \frac{1}{2} \).\(^8\)

2. Asymmetric Information Case

There are two asymmetric information cases to consider: where the defendant has the informational advantage and where the plaintiff has the informational advantage.

When the defendant has the informational advantage, the frequency of litigation will depend on the defendant’s type. If the plaintiff is uninformed and the defendant is innocent, \( P'_p = W(1-Q_1) + (1-W)Q_2 \), \( P'_d = Q_2 \). Thus, \( \Delta_I = W(1-Q_I-Q_2) \). Let \( f_I \) be the probability of litigation evaluated at \( \Delta_I \). If the defendant is guilty, \( P'_p = W(1-Q_1) + (1-W)Q_2 \), \( P'_d = 1-Q_1 \), and \( \Delta_G = -(1-W)(1-Q_I-Q_2) \). Let \( f_G \) be the probability of litigation evaluated \( \Delta_G \). In the nontruncated normal case examined in Hylton (2006), it is immediately clear that the frequency of litigation is larger for cases involving innocent defendants, i.e., \( f_I > f_G \). In the truncated case, the same result holds in most cases.\(^9\) This is because guilty defendants settle their cases at a higher rate than the innocent.

The average win rate, when the defendant has the informational advantage, is

\[
\bar{\pi}_2 = \int [Wf_G(1-Q_I) + (1-W)f_I Q_2] dv
\]

Because the frequency of litigation is greater for innocent defendants, the average win rate expression implies that instead of a tendency toward 50 percent, the average win rate when the defendant has the informational advantage will tend toward some level less than 50 percent, i.e., \( \bar{\pi}_2 < \bar{\pi} \).

Now suppose the plaintiff has the informational advantage. There are two cases to consider: when the plaintiff deserves to win (meritorious plaintiff), and when the plaintiff deserves to lose (non-meritorious plaintiff). In the non-meritorious case, the

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\(^8\) For a sketch of this special case, see Hylton (2006), but the argument is incomplete and the more general problem of ascertaining the conditions under which the Priest-Klein result holds is not examined in that paper. We examine the Priest-Klein model in a more general setting in a separate paper in progress.

\(^9\) The proofs have been omitted from this paper, and are presented in a separate paper.
plaintiff brings a claim that deserves to be called frivolous. The plaintiff brings it because he knows that with probability \( Q_2 \) he will be awarded damages by the court.

In the meritorious plaintiff case, the probability of litigation \( f_I \) where \( \Delta_I = (1-W)(1-Q_1-Q_2) \). In the non-meritorious case the probability of litigation is \( f_G \) where \( \Delta_G = -W(1-Q_1-Q_2) \). The pairing between the uninformed defendant and the informed and meritorious (innocent) plaintiff is more likely to litigate than that of the frivolous (guilty) plaintiff. The reason is that the guilty plaintiff tends to settle his claim. This leads to high win rates, exceeding fifty percent.

The foregoing analysis can be summarized in the form of a simple proposition offered in Hylton (1993):

**Divergent Expectations/Asymmetric Information Selection Hypothesis:** If neither the plaintiff nor the defendant has the informational advantage in litigation, the plaintiff win rate will tend toward fifty percent. If the defendant (plaintiff) has the informational advantage, the plaintiff win rate will be less than (greater than) fifty percent.

This proposition provides a general selection theory based on the parties’ possession of information relevant to the probability of a verdict for the plaintiff. The Priest-Klein hypothesis is a special case that holds in the absence of a substantial informational disparity.

### IV. Strategic Behavior Models of Litigation: Some Practical Considerations

As we noted at the outset, the signaling and screening approaches in the literature have generated different implications in the models analyzing the selection effect. The screening model generates no clear implication with respect to the level of the plaintiff win rate (Shavell, 1996). The signaling model, however, generates results more in line with the view that informational asymmetry leads to predictable deviations from the fifty percent plaintiff win rate prediction. Neither approach clearly yields the Priest-Klein model’s fifty percent prediction – though the prediction is consistent with the signaling model. The model presented in the previous section has the desirable feature of generating the Priest-Klein prediction and also including the asymmetric information models as special cases.
The success of the foregoing model in delivering the Priest-Klein prediction raises the question whether the screening approach is preferable to the signaling model in the analysis of selection effects. There are good reasons to prefer either the signaling model or a different version of the screening model than that used in the analysis of litigation outcomes.

First, if one considers the nature of litigation as a transaction, it seems intuitive that the signaling model should be preferred to the screening model. The screening model is especially appropriate in the case of an uninformed actor that must set a contract term for many informed actors on the other side of the contract: e.g., an insurer setting terms for uninsured (Rothschild & Stiglitz, 1976), a bank setting the interest rate on a loan (Stiglitz and Weiss, 1981), an employer setting the wage, or an airline setting the price of a plane ticket. In these settings, the uninformed actor can be said to have acted first, and is more or less forced by the circumstances to choose the contract term without being able to observe signals that would allow him to sort the contracting parties by type. The screening model provides a useful description of the informed actor’s incentives, and the general characteristics of the market equilibrium.

In the litigation context, there is no plausible sense in which the plaintiff or the defendant acts first, or is forced by the circumstances to choose a contract term (settlement offer) before observing any signals identifying the type of the other party. When the plaintiff makes a settlement demand, he is not setting a price for some faceless mass of counterparties; settlement involves a one-on-one bargaining relationship. The plaintiff can and typically does observe some signals from the defendant that would lead him to update his beliefs about the defendant’s guilt. While the screening model is well suited to the scenarios in which it was originally applied, its appropriateness in the case of litigation is questionable.

One argument in favor of the screening model is that it leads to simple outcomes. The screening models, in contrast, generate complicated results with more than one equilibrium outcome. However, the simplicity advantage of the screening model has to

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10 In a general assessment of signaling and screening models, Stiglitz and Weiss (1994) conclude that history and knowledge of the particular setting should inform decisions on the type of asymmetric information model.

be balanced against the cost of using such a model in the litigation setting. The screening model delivers general statements that offer a broad brush view of the outcome (e.g., litigation will occur), but it does not offer specific testable predictions that are useful in the analysis of selection effects in litigation.

V. Empirical Evidence

In this part we examine the empirical evidence on trial selection theory. Before examining the evidence, a few preliminary points are in order.

First, although trial selection theories are distinguishable from models of settlement, there is a close connection between the two. The divergent expectations (Priest-Klein) and asymmetric information selection theories are, as the model in the previous part shows, derivable from settlement models.

Indeed, one could generate a selection theory based on any particular variable that plays a role in the settlement decision. In settlement models, such as the LPG framework \([P_p - P_d > \gamma]\), the settlement decision is influenced by several major factors: the parties’ predictions of the outcome of trial, the expected judgment, and the litigation costs borne by the parties. Each of these factors imparts some influence on the decision to go to trial. It follows that each of these factors also imparts some influence on the rate at which plaintiffs win at the trial level. The litigious-plaintiff hypothesis of Eisenberg and Farber employs variation in the parties’ costs of litigation to generate a theory of trial selection (see also Langlais, Chopard, and Cortade, 2008). One could also use the variation in the plaintiff’s award to generate a theory of selection (Miceli, 2009).

What distinguishes the Priest-Klein and asymmetric information theories is that they focus on the parties’ trial outcome expectations and generate testable predictions on key trial outcome parameters. The best example is the Priest-Klein model, which generates a prediction that plaintiffs will win fifty percent of trials (unless stakes are asymmetric). Theories of selection based on variation in litigation costs or in the
expected judgment are unlikely to generate equivalently strong testable predictions on the key trial outcome parameters.\textsuperscript{12}

The other preliminary point worth noting is that the divergent expectations and asymmetric information models apply across a broad spectrum of hypotheses concerning factors that might influence trial outcomes. Suppose, for example, that one hypothesizes that trial judges are biased in favor of plaintiffs.\textsuperscript{13} Under the Priest-Klein model, that should not lead to a prediction of a higher win rate for plaintiffs, as long as the bias is public information. If the bias is public information, both plaintiffs and defendant will take it into account in settlement discussions, and the fifty percent win rate prediction will still be observed. Other than asymmetric stakes, only unexpected shocks – say, an unannounced change in the decision standard – will cause the plaintiff win rate to deviate from its fifty percent tendency.

Similarly, informational asymmetry could be present in many different forms relevant to litigation. The common assumption is that the defendant knows more about the facts of his own compliance with the legal standard than does the plaintiff (Png, 1983; Bebchuk, 1984). But either party could have an informational advantage with respect to some variable that influences the trial outcome. Consider possible judicial biases. If the plaintiff has private information with respect to the bias of a particular judge, that information will influence the plaintiff’s settlement conduct and impart an upward influence on plaintiff win rates (Hylton, 2006).

Asymmetric information theories could operate on a wide array of variables influencing the trial outcome and could be consistent with a wide array of trial outcome parameters (win rate, trial rate, etc). The defendant could have an informational advantage with respect to the facts of the case, while the plaintiff could have an informational advantage with respect to judicial biases. If the informational advantages are roughly the same on both sides, the conditions could be equivalent to the equal information assumption of Priest-Klein. If the advantages are not the same, then an analyst would have to assess whether the effect of one type of informational advantage

\textsuperscript{12} For example, the litigious-plaintiff hypothesis of Eisenberg and Farber (1997) generates the prediction that on average individual plaintiffs will win less than corporate plaintiffs, but this offers no prediction on the win rate level.

\textsuperscript{13} See, e.g., Eisenberg and Heise (2009), at 125.
dominates. An empirical test would have to start by specifying the variable with respect to which information is asymmetric, and a prediction of the selective effect that variable will have as a result of informational asymmetry.

A. Win Rate Observations

There are now several studies that present win rate patterns across several case categories (property, torts, malpractice, etc). These studies allow researchers to examine win rate evidence directly to check for consistency with a particular selection theory. Deviations from fifty percent can be explained under the Priest-Klein theory by asymmetric stakes. Alternatively, deviations from fifty percent can be explained by the asymmetric information model.

1. Across case categories

Hylton (1993) argues that win rates tended in general to conform with the Priest-Klein prediction but that substantial deviations were observed in pockets in which one party was likely to have a significant informational advantage. The most obvious pockets are medical malpractice and product liability litigation, where defendants are likely to have a significant advantage with respect to information on their own compliance with the legal standard. Win rates for medical malpractice and products liability are consistently less than fifty percent (Eisenberg, 1990). Products liability is governed largely by the “risk-utility” standard, which is a type of negligence test that focuses on the incremental risk and incremental utility presented by the defendant’s design in comparison with a safer alternative. The standard gives the defendant an informational advantage over the plaintiff. Similarly, the negligence standard for medical malpractice, which is based on the doctor’s compliance with medical custom, gives the doctor an informational advantage over the plaintiff.

Win rates for contract actions tend to be greater than those for tort actions (Eisenberg, 1990, p.357). This is consistent with the asymmetric information theory. Tort actions often involve defendants with private information on their own compliance
with the legal standard. Contract actions, in comparison, generally look at the conduct of both parties in relation to objective rules governing offer and acceptance. Since defendant-side informational advantage is more common in the tort setting, lower plaintiff win rates are predicted under the informational asymmetry model. The asymmetric stakes theory, on the other hand, could explain this pattern only if plaintiffs generally have greater stakes in contract than in tort actions.

2. Within case categories

Even within the products liability category, win rate patterns appear to be consistent with the asymmetric information theory. When the plaintiffs bring products liability claims based on contract—e.g., a claim that the product failed to perform as warranted—plaintiff win rates tend to be greater than fifty percent.\textsuperscript{14} Products liability claims based on tort law tend have win rates less than fifty percent (Eisenberg 1990). The asymmetric information model suggests that the key difference between product-liability contract and product-liability tort actions is that the defendant does not have an informational advantage under the legal standard used in the contract actions (Hylton, 2006).\textsuperscript{15} In contrast to the asymmetric information theory, the stakes theory fails to explain the pattern of win rates observed within the products liability category. If defendants have greater stakes in these cases, as the stakes theory posits, they should tend to win more often than plaintiffs both in product-liability tort actions and in product-liability contract actions. However, one observes the opposite in the case of product-liability contract actions.

B. Other Observations of Trial Outcome Parameters and More Sophisticated Tests

\textsuperscript{14} Eisenberg (1990) reports .57 in the case of contract-based actions, .25 for tort-based actions.

\textsuperscript{15} Those standards come in essentially two varieties: express and implied warranty rules. Express warranties are simply the terms of the contract, and there is no reason to believe that either party has an informational advantage in reading the contract. However, contract law doctrines generally favor the consumer in these cases. Since state courts are rather idiosyncratic in this regard, it is quite possible that lawyers on the plaintiff's side, who are more likely than the product seller's lawyers to be familiar with the law and the behavior of juries in their jurisdiction, generally have the best prediction of the effective legal standard. In the case of implied warranties, the court's determination of a contract breach will often depend on the type of use to which the consumer put the product. In these cases, the plaintiff-consumer is again likely to have an informational advantage.
Several recent studies have examined other trial outcome parameters or conducted more sophisticated tests of selection theories.

Waldfogel (1998) presents an empirical model that attempts to test the degree to which the divergent expectations and asymmetric information theories are consistent with data on trial outcomes. The study concludes that the evidence is consistent with the divergent expectations theory but not with the asymmetric information theory.

The core empirical test in the Waldfogel article involves an examination of the correlation between trial rates and the plaintiff win rate. He argues, based on the Bebchuk model, that the asymmetric information theory implies a positive relationship between the trial rate and the plaintiff win rate, and a positive relationship between the plaintiff win rate and the size of the award. He finds evidence of a negative relationship in both cases and concludes that the asymmetric information model is rejected.

The usefulness of the empirical strategy of Waldfogel depends on the extent to which the screening model (Bebchuk model) serves as a complete account of the asymmetric information theory. However, the screening model, we have argued, does not serve as a complete account of the asymmetric information theory. Indeed, given the strong incentives for and low cost of signaling in the litigation context, the screening provides a rather incomplete account of the asymmetric information theory. Hence, Waldfogel’s approach should be regarded as inconclusive because it rejects an incomplete version of the asymmetric information theory.

Eisenberg and Heise (2009) present evidence that defendants appear to win at the appellate level more frequently than do plaintiffs. The “defendant advantage” result appears at first glance to be inconsistent with trial selection theories. The evidence of a defendant advantage appears to hold for several categories of litigation. The defendant advantage result appears to be inexplicable on the basis of the Priest-Klein model. Moreover, the nearly uniform result appears to be inconsistent with the informational asymmetry theory, since that theory would imply variation according to case category.

On closer inspection, the defendant advantage result does not appear to be inconsistent with trial selection theories. Trial and appellate courts have different areas of competence; with trial courts resolving factual issues and appellate courts resolving
issues of law. Given these differences, it is not difficult to see how a settlement process that produces Priest-Klein results at the trial level might still generate the appearance of a defendant advantage at the appellate level.

Other things equal, plaintiffs will tend to push forward at the trial level with cases that they perceive as strong on factual grounds (e.g., sympathetic plaintiff), even if they are weak on legal grounds. Such a strategy would be successful for plaintiffs in the vast majority of cases in which it is employed, because relatively few defendants will have an incentive to appeal a trial court decision. Of the cases that are generated from this particular process, defendants will gain an advantage at the appellate level precisely because the appellate court will focus on the law rather than the particular facts of the case.

In some respects, this theory is supported by the data presented in the Eisenberg and Heise article. The defendant advantage result is particularly strong for torts cases, which generally comply with the Priest-Klein hypothesis at the trial level. Thus, at the trial level, the Priest-Klein hypothesis is confirmed, while at the appellate level, the “defendant advantage” hypothesis is confirmed. In case categories where informational asymmetry is present, such as medical malpractice and products liability, Eisenberg and Heise find no evidence of a defendant advantage. This suggests that appeals from medical malpractice and products liability cases tend to be based on law, with respect to which neither party has an informational advantage. Trial court decisions in these areas reflect the superior information of defendants. Appellate decisions fail to reflect or to be suggestive of any informational advantage for either side.

Moreover, the defendant advantage result reported by Eisenberg and Heise is particularly strong for jury trials, which suggests that plaintiffs are assuming that sympathetic facts will give them the strongest chances in front of juries.16 The defendant advantage hypothesis receives weak confirmation at best in the case of bench trials.17

Kessler, Meites, and Miller (1996) use a multimodal empirical examination of the selection hypothesis. Specifically, they estimate a regression model that includes variables that they argue should explain deviations from the fifty percent win rate

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16 Eisenberg and Heise, at 142
17 Id.
prediction. Their results are consistent with both the divergent expectations and asymmetric information hypotheses.

The difficult part of such a study is the creation of variables that effectively distinguish the effects of various selection influences. Among the selection influences included in the regression model of Kessler, Meites, and Miller are informational asymmetry, stakes asymmetry, and biased legal standards. These three influences are difficult to distinguish. For example, Kessler, Meites, and Miller describe medical malpractice as an area in which stakes are asymmetric. However, medical malpractice is clearly a category in which informational asymmetry favors defendants. It is unclear, in their framework, which coding approach would be correct for the medical malpractice category. Given that three of the variables in their model (information asymmetry, stakes asymmetry, and biased standard) are at least partially measuring informational asymmetry, their results can be read as providing empirical confirmation for the combined divergent expectations/information asymmetry proposition presented in the conclusion of the theory discussion in this paper.

Siegelman and Waldfogel (1999) present an alternative multimodal regression approach to selection theory. They focus on three determinants of litigation identified in the Priest-Klein model: the decision standard, the variance in the parties’ predictions of the decision standard, and the asymmetry of stakes. They also estimate a second model that includes a proxy for the asymmetry in variance predictions (asymmetric uncertainty). They find that the four parameter model performs better in explaining the win rate and the trial rate than does the three parameter model.

The Siegelman and Waldfogel results are broadly consistent with those of Kessler, Meites, and Miller. Their inclusion of an asymmetric uncertainty measure should be viewed as an attempt to include a proxy for informational asymmetry. In addition, some of the observations that they code for asymmetric stakes could probably

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19 Hylton (1993) confronts the same problem, but argues that the data are more consistent overall with the asymmetric information hypothesis than with the differential stakes hypothesis.
20 The same problem is present in Eisenberg and Farber (1997). The litigious plaintiff hypothesis is confirmed by finding that plaintiff win rates are lower when the plaintiff is an individual. But case in which the plaintiff is an individual will overlap considerably with cases in which the defendant has an informational advantage.
be coded more accurately as informational asymmetry. The results should be interpreted as confirming the divergent expectation/asymmetric information theory.

V. Conclusion

If this review has appeared at times to argue in favor of a simple and bold statement of the selection hypothesis, that is by design. Priest and Klein offered a spare model with a bold and falsifiable proposition: plaintiff win rates should tend toward fifty percent unless the litigating parties have asymmetric stakes. Some of the more recent contributions, however, have stated the Priest-Klein theory (or divergent expectations selection theory) in a weaker form, weighted down with qualifications, perhaps in order to avoid rejecting it. Selection theory is better advanced, in our view, through the bold statement approach of the Priest-Klein article.

The asymmetric information selection theory holds that win rates will tend toward fifty percent unless one of the parties has the informational advantage, in which case the win rate will be higher for the side with the advantage. We have presented a simple model that communicates the asymmetric information theory, and shows its connection to the divergent expectations model.

These two theories do not exhaust the realm of potential trial selection theories. As we noted earlier, a selection theory can be based on expectations, the amount at stake, or the costs of litigation. The distinguishing feature of the divergent expectations and asymmetric information theories is that they deliver clear predictions on important trial outcome parameters, and for the path through which common law rules evolve (Priest 1980, Priest and Klein (1984), Hylton 2006).

As the selection literature has expanded, empirical tests have been employed to distinguish the importance of divergent expectations and asymmetric information as determinants of trial outcomes statistics. Although the results of the empirical tests appear to confirm both theories to some extent, the empirical work so far has to be considered preliminary. The main difficulties are: (1) attempting to construct an empirical framework that embodies a richer model of information-based selection, and
(2) coding variables that distinguish information from other influences (e.g., stakes asymmetry).
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