



Litigation and settlement under judicial agency

Levent Koçkesen, Murat Usman*

Koç University, Turkey

ARTICLE INFO

Article history:

Received 15 November 2011

Received in revised form 29 February 2012

Accepted 31 March 2012

JEL classification:

K00

K41

D82

C78

Keywords:

Litigation

Settlement

Judicial agency

Managerial judges

ABSTRACT

We model the settlement of a legal dispute when the trial outcome depends on the behavior of a strategically motivated judge. A defendant, who is uninformed about the level of harm that he has caused, makes a take-it-or-leave-it offer to an informed plaintiff. If the parties cannot agree on a settlement and the case goes to trial, the judge decides how much effort to exert in discovering the actual damages. We show that, under very general assumptions, this model exhibits multiple equilibria. In some equilibria, the judge exerts less effort and more cases settle out of court, whereas in others the opposite occurs. We also show that the judge prefers the low effort equilibria with high settlement rate and argue that a “managerial judge” could easily steer the parties towards low effort equilibria. This may be deemed undesirable, since in low-effort equilibria, the terms of the settlement heavily favor the informed plaintiff, and this in turn induces over-investment in ex ante preventive care by the defendant.

© 2012 Elsevier Inc. All rights reserved.

1. Introduction

There is a substantial literature on pretrial settlement, but only a few papers explicitly model the trial stage and fewer yet examine the role of the trial judge. A typical game-theoretic analysis assumes that there is asymmetric information about damages (or liability, or both) at the settlement stage, but the truth will come out at the trial, perhaps with some exogenously specified probability.¹ In reality, how much is learned during the trial depends on many factors and the trial judge is one of the most important. Our main contribution is to model the behavior of the trial judge and its effect on pretrial settlement. More precisely, we assume that the probability of discovering the truth depends on how much effort the judge expends during trial and that she chooses her effort strategically.

In our model, a plaintiff who knows the actual damages that he suffered sues a defendant. During the pretrial settlement stage, the defendant, who is uninformed about the level of damages, makes a take-it-or-leave-it settlement offer to the plaintiff. If the

plaintiff rejects this offer, the case goes to trial and the judge awards damages that she deems appropriate. The judge is initially uninformed about the actual damages but she learns the true value with some probability, which increases in her (costly) effort during trial. We assume that she cares about accuracy so that if she discovers the true value, she awards that amount, while if she remains uninformed, she awards the expected damages (after updating her prior beliefs using the fact that the case has come to trial).² The basic tradeoff that the judge faces is simple: effort is costly but it increases the accuracy of her decisions.

We first establish that the equilibrium settlement offer by the uninformed defendant is higher, and hence more cases settle, when the judge is expected to exert lower effort at trial. This follows from the fact that lower effort implies lower accuracy, i.e. a lower likelihood of being awarded the true damages at trial. But then a given reduction in settlement offer leads to a higher increase in the proportion of plaintiff types who go to trial. In other words, when trial accuracy is lower, marginal cost of reducing the offer is higher, which implies higher optimal offers and settlement rates.

We then fully characterize the set of equilibria and show that the model has generically multiple equilibria. This is a novel feature and the intuition is as follows: if the litigants expect high effort from the

* Corresponding author at: Department of Economics, Koç University, Rumelifeneri Yolu, Sariyer 34450, Istanbul, Turkey.

E-mail address: musman@ku.edu.tr (M. Usman).

¹ The best-known models are the screening model of [Bebchuk \(1984\)](#) and the signaling model of [Reinganum and Wilde \(1986\)](#). Both models study ultimatum bargaining games in which either the plaintiff or the defendant has private information about damages or liability. For models with two-sided asymmetric information, see [Friedman and Wittman \(2006\)](#) and [Daughety and Reinganum \(1994\)](#).

² In order to simplify the analysis, we assume that the litigants have a passive role at the trial. [Friedman and Wickelgren \(2010\)](#) investigate a settlement problem similar to ours where the plaintiff can exert effort at the trial to increase his probability of winning.

judge, then more cases go to trial. This means that the variation in damages among the tried cases is large and hence the uninformed judge is likely to make a large error in assigning damages. Therefore, she will indeed have an incentive to exert high effort. Similarly, low effort becomes self-sustaining because in that case fewer cases go to trial and the judge cannot err too much, and this diminishes her incentives for effort.

We also show that the judge and the informed plaintiff are better off in low effort (and high settlement rate) equilibria whereas the uninformed defendant is better off in high effort (and low settlement rate) equilibria. As we argued above, in low effort equilibria both the settlement offer and the settlement rate is higher, i.e. plaintiffs with higher damages go to trial. This implies that the (Bayesian) judge awards a higher amount to the plaintiff if the case comes to trial. Higher trial award and higher settlement offer imply that the plaintiff prefers low effort equilibria while the defendant prefers high effort. The reason why the judge prefers low effort equilibria can be explained as follows. In low effort equilibria, a smaller fraction of plaintiffs come to trial and therefore the variance of damages among the tried cases is small. This implies that the judge will make small mistakes in awarding damages. Therefore, she avoids exerting too much effort and obtains a high payoff. In contrast, in high effort equilibria fewer cases settle and hence the judicial errors can be large. Therefore, she exerts high effort, but if she still remains uninformed she also ends up making larger errors. This implies that she obtains a lower payoff.

We argue that these results are quite relevant for the ongoing debate on the so-called ‘managerial judges,’ i.e. judges who get actively involved in the pretrial stage, presumably to promote and encourage settlement over trial. Schrag (1999) observes that the “proponents of managerial judging identify abuse of the pretrial discovery privilege as a main cause of both high litigation costs and the slow resolution of disputes. Judges can improve outcomes by intervening in the earliest stages of legal disputes.” But there is also a drawback.³ As Resnik (1982) pointed out, the “judges are acting more forcefully. [...] Some warn the parties that the judge would take a dim, and possibly hostile, view of either side’s insistence on going to trial.” Our results suggest that the judge would indeed like to get involved in the pretrial settlement stage and signal that she will select the low equilibrium effort. Even if this signal takes the form of cheap-talk, i.e. simple announcements or hints, it will succeed in selecting the low effort equilibrium. Furthermore, such an announcement is “self-signaling” and “self-committing,” i.e. the judge would make this statement if and only if it is true and she would indeed want to choose low effort if it is believed. Therefore, there is a very strong reason for the litigants to believe this announcement and behave according to the low effort equilibrium.⁴

Even a small degree of self interest on the part of the judges, therefore, can have an enormous impact on settlement rates above and beyond the more commonly considered factors, such as the degree of asymmetric information, the size of the trial awards, the magnitude of trial costs, discovery rules, etc. Furthermore, as we indicated above, in our model higher settlement rates favor the party with the informational advantage. Therefore, settling legal disputes out of court has lower costs but might also have adverse distributional implications, which is precisely the concern raised in Fiss (1984) and Resnik (1982). In other words, there may be good reasons to try and limit judicial involvement in the pretrial bargaining stage.

³ Resnik (1982) and Fiss (1984) are the two widely cited papers against this type of “managerialism.”

⁴ See Farrell and Rabin (1996) on the credibility of pregame cheap-talk messages and a discussion of “self-signaling” and “self-committing.”

There are few other papers in which the trial outcome is dictated by an imperfectly informed judge who rationally updates her beliefs when the case comes to court. But there is no model in which she herself chooses how much information to have.⁵ Daughety and Reinganum (1995) model the settlement stage as an ultimatum bargaining game in which the informed party is the proposer. If the case goes to trial, the judge learns the true damages with an exogenously specified probability, if not, she must infer it from observable actions of the plaintiff and the defendant.⁶ Kim and Ryu (2000) study a similar problem using a screening model (the uninformed party is the proposer) where the judge is assumed to receive a noisy signal about damages.⁷ Finally, Rasmusen (1995) studies a plaintiff’s decision to bring suit when the court assesses true damages with an exogenous error. Anticipating that such errors will influence the pool of plaintiffs who go to trial, the court adjusts the award accordingly, the direction of which depends on whether the error is predictable by the plaintiff.

The rest of the paper is structured as follows. Section 2 lays out the model. Section 3 analyzes the case with exogenous judicial error. In Section 4 we endogenize judicial error by allowing the judge to become better informed by exerting a costly effort. In Section 5 we discuss the policy implications of our analysis. Section 6 contains some discussion about the possible extensions of our model and concludes. All the proofs omitted in the main text are in Section 1.

2. The model

We present a simple model of litigation under strict liability in which a risk-neutral plaintiff claims to be harmed by a risk-neutral defendant.⁸ We let $\theta \in [\underline{\theta}, \bar{\theta}]$ denote the actual damages suffered by the plaintiff and assume that only the plaintiff knows θ , whereas the defendant has probabilistic beliefs about it. We represent his beliefs by a probability distribution function F , with density $f > 0$ and full support on $[\underline{\theta}, \bar{\theta}]$. The parties have the option of settling the issue among themselves, but if they fail to do so, the case goes to trial where the court decides on the case.

A trial is costly for both parties. We let $c_p > 0$ and $c_d > 0$ denote these costs for the plaintiff and the defendant, respectively.⁹ Due to trial costs, the parties have some interest in settling the issue through private negotiations. These negotiations can take many forms and the outcome may depend on the bargaining protocol assumed, especially when the parties have asymmetric information. We employ a very simple and commonly used model and assume that the (uninformed) defendant makes a take-it-or-leave-it settlement offer $s \geq 0$ to the (informed) plaintiff, who either accepts or rejects it.¹⁰ If the offer is accepted, then the payoffs of the plaintiff and the defendant are s and $-s$, respectively. If it is

⁵ For models in which the judge makes systematic errors, see Hylton (2002) and Landeo, Nikitin, and Baker (2006).

⁶ They show that if the judge can observe the plaintiff’s settlement demand, then she uses that information, and this feeds back into the settlement process, resulting in the plaintiff making demands to influence the judge. As the judge’s dependence on such information increases (i.e. as the probability of learning the truth decreases), more and more types of the plaintiff pool by making a high demand.

⁷ They find that when the judge observes the defendant’s offer, the plaintiff rejects a larger set of offers in order to influence the judge’s subsequent beliefs to his advantage.

⁸ Risk neutrality assumption is made only for the ease of exposition. Our main results would go through with minor modifications if the parties were instead risk-averse.

⁹ These costs are incurred regardless of the trial’s outcome.

¹⁰ Spier (1992) considers a finitely repeated version of this model and shows that if all costs are borne at trial, then the equilibrium outcome is equivalent to the single-offer model. In Section 6 we comment on how our results change under different bargaining environments.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات