Law and Economics

The Economics of the Litigation Process

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Introduction

- So far, we mostly discussed the cost of legal processes abstractly.
  - e.g. informational requirements in Tort Law.

- In this chapter, we model explicitly how the costs of the litigation process might affect outcomes in civil cases.

Structure of Lawsuit

0. Dispute (accident, breach, etc.)
1. The alleged victim decides whether to file a legal claim.
2. If Victim files: pre-trial bargaining.
   - Information exchange.
   - Settle or go to trial.
3. If the trial occurs, then Court determines the outcome.

Why do trials occur?

- Assume that
  - litigants are rational,
  - have equal beliefs about the outcome distribution of a trial,
  - risk averse.
- One would expect litigants to replicate the expected outcome with a monetary settlement.
  - Saves costs of trial.
  - Less uncertainty.

- Given Rationality and Risk Aversion: the only reason trials occur is that agents have different beliefs. **Optimism or Asymmetric Information**.

Optimism Model

- Model
  - p: plaintiff's subjective probability of winning.
  - q: defendant's subjective probability of losing.
  - ψ: monetary compensation (transfer) if the defendant is found guilty.
  - C_p: trial cost for plaintiff.
  - C_d: trial cost for defendant.

- **Coasian assumption**: Settlement is costless.

Optimism Model

- Plaintiff's value of going to trial:

$$p \cdot \psi - C_p$$

- We assume (for now) that this is positive.

- Plaintiff prefers to settle if the offer S is high enough. Formally, if

$$S \geq \underline{S} := q \cdot \psi - C_p$$

Optimism Model

- Defendant's value of going to trial:

$$-q \cdot \psi - C_d$$

- Defendant prefers to settle for any offer S that is low enough. Formally,

$$S < \bar{S} := q \cdot \psi + C_d$$

Optimism Model

- A settlement is *feasible* if there exists an S with

$$p \cdot \psi - C_p \leq S \leq q \cdot \psi + C_d$$

- Otherwise, a settlement is not feasible and a trial occurs. This happens when

$$(p - q) \cdot \psi > C_p + C_d$$

- **Observation**: This condition never holds if $q \geq p$.

Asymmetric Information Model

- **Model**:
  - Two types of plaintiff: H (e.g. non CN) or L (e.g. CN).
  - p_H and p_L the respective probabilities of victory at trial.
  - ψ: transfer to the plaintiff if she wins the trial.
  - Defendant doesn't observe plaintiff's type.
  - Defendant know a fraction α are H.
  - Expected probability of losing for defendant:

$$\bar{p} = \alpha \cdot p_H + (1 - \alpha) \cdot p_L$$

- **Bargaining Assumption**: defendant makes a take-it-or-leave-it offer to the plaintiff.

Asymmetric Information Model

- **Pooling 1**: $S = p_H \cdot \psi - C_p$.
  - Both types accept the offer. There is no trial.
- **Separating**: $S = p_L \cdot \psi - C_p$.
  - L-type accepts, H-type rejects and goes to trial.
  - Expected cost:

$$\alpha \cdot (p_H \cdot \psi + C_d) + (1 - \alpha) \cdot (p_L \cdot \psi - C_p)$$

- **Pooling 2**: S low, so that it's rejected by both types.
  - Expected cost:

$$\bar{p} \cdot \psi + C_d$$

  - This is dominated by the separating offer.

Asymmetric Information Model

- Trials occur if
  - the equilibrium features a separating offer,
  - the plaintiff is of type H.

- Defendant makes a separating offer if:

$$\bar{p} \cdot \psi + \alpha \cdot C_d - (1 - \alpha) \cdot C_p > p_H \cdot \psi - C_p$$

- Rearranging:

$$\frac{1 - \alpha}{\alpha} \cdot (p_H - p_L) \cdot \psi > C_p + C_d$$

Discovery

- Transfers don't affect efficiency, but whether trials occur or not does.
- One goal is to reduce the probability of trials, keeping fixed incentives. This reduces total social costs.
- Discovery is one practice that helps in this regard: by bringing the beliefs of the plaintiff and defendant closer.

Incentives to Sue

- Consider the unilateral care model with a strict liability rule.
  - Before, we didn't consider (at least formally) the decision of the victim of whether to sue or not.
  - We are going to add the decision of the victim to sue or not.
- For simplicity, we abstract from the possibility of a settlement.
  - Costs C_d and C_p if the victim sues.
- We will show an incentive misalignment when there are litigation costs.

Incentives to Sue

- If victims file the suit, we know that the injurer will take optimal precautions.

$$\text{social costs} = x^* + p(x^*) \cdot (D + C_p + C_d)$$

  - Notice that optimal precaution is higher than in the case with no costs.
  - The reason is that C_p and C_d are part of the *total damage*.

- If the victim doesn't file the suit, then the injurer takes minimal precautions.

$$\text{social costs} = p(0) \cdot D$$

Incentives to Sue

- It is efficient that the victim files when

$$x^* + p(x^*) \cdot (D + C_p + C_d) < p(0) \cdot D$$

$$x^* + p(x^*)(C_p + C_d) < (p(0) - p(x^*))D$$

- Victim files when:

$$D > C_p$$

  - Plaintiff ignores litigation costs by the defendants.
  - Ignores the (ex-ante) incentives that suits create for accident prevention.

Legal Expenses

- Before we took the costs associated with the trial to be exogenous (independent of the outcome).
- How the costs are split can depend on the outcome.
  - **American Rule**: Each litigant bares its own expenses, regardless of the outcome of the trial.
  - **English Rule**: the loser pays both his own and the winner's expenses.
- **Question**: How do different rules affect the outcomes of the legal process?

American Rule vs English Rule

- For the plaintiff:
  - Expected return from going to trial under American Rule:

$$p \cdot \psi - C_p$$

  - Under English Rule,

$$p \cdot \psi + (1 - p) \cdot (C_d + C_p)$$

  - English is better for him if:

$$(1 - p) \cdot C_d < p \cdot C_p$$

American Rule vs English Rule

- For the defendant:
  - Expected cost from going to trial under American Rule:

$$q \cdot \psi + C_d$$

  - Under English Rule,

$$q \cdot (\psi + C_d + C_p)$$

  - English is better for him if:

$$q \cdot C_p < C_d \cdot (1 - q)$$

American vs English Rule

- Under English Rule:
  - Maximum defendant is willing to offer

$$\bar{S}_e = q \cdot (\psi + C_d + C_p)$$

  - Minimum the plaintiff is willing to accept

$$\underline{S}_e = p \cdot \psi + (1 - p)(C_d + C_p)$$

  - Settlement is feasible iff $\bar{S}_e \geq \underline{S}_e$.

$$q \cdot (\psi + C_d + C_p) \geq p \cdot \psi + (1 - p)(C_d + C_p)$$

$$(p - q) \cdot (\psi + C_d + C_p) \leq (C_d + C_p)$$

American vs English Rule

- As before, common beliefs is a sufficient condition for settlement feasibility.
- If settlement is feasible under English Rule, then feasible under American Rule.
- Thus, with settlements the trial is less *likely* under American Rule.
  - Important assumption: exogenous C_d, C_p.

American vs English Rule

- Plaintiff files suit if sufficiently beneficial to do so.
- He finds the English rule more valuable if p is large enough:

$$p > \frac{C_d}{C_d + C_p}$$

- For low p, plaintiff files more with the American Rule.
- For high p, the opposite is true.

Rule 68

With Rule 68, a plaintiff must pay the defendant's costs when she both

1. refuses a defendant's settlement offer.
2. obtains a judgment that is not more favorable than the rejected offer.

Rule 68

- Model:
  - Similar to the optimism model.
  - Noise recovery at trial: ψ is random with cdf F. (Plaintiff and defendant agree on this distribution.)
  - Let $\bar{\psi}$ be the expected value ofo ψ.
- Plaintiff expected payoff from trial:

$$\underline{S}(S) = p \cdot \bar{\psi} - C_p - p \cdot C_d \cdot \Pr(\psi < S)$$

- Defendants cost:

$$\bar{S}(S) = q \cdot \bar{\psi} + C_d - p \cdot C_d \cdot \Pr(\psi < S)$$

Rule 68

- Is there an S such that $\underline{S}(S) \leq \bar{S}(S)$?

$$\begin{aligned}\underline{S}(S) - \bar{S}(S) &= (p-q)\bar{\psi} - (p-q)C_d \Pr(\psi < S) - (C_p + C_d) \\ &= (p-q)\bar{\psi} - (p-q)C_d F(S) - (C_p + C_d)\end{aligned}$$

- How does this compares with the condition of the original optimism model?

Contingent Fees

- How plaintiff and lawyers split costs can also affect the outcome of litigation.
  - Fixed fee: flat hourly wage.
  - Contingent fee: lawyer covers costs but gets a share b of recovery.
- Contingent fees are common in some settings (like tort litigation).
- Illegal in certain countries.
- What are the benefits and drawbacks?

Contingent Fees

- Benefits:
  - Moral hazard.
  - Cash constraints.
  - Risk aversion.

- Drawbacks:
  - Barratry.

Contingent Fees and Settlement

- Originally, Plaintiff wants to settle if $S \geq p \cdot \psi - C_p$.
- With a contingent fee, Plaintiff wants to settle if $(1-b) \cdot S > (1-b) \cdot p \cdot \psi$.
  - Trial happens too often.

- With a contingent fee, layer wants to settle if: $b \cdot S > p \cdot b \cdot \psi - C_p$.
  - Settlement happens too often.

Frivolous Suits