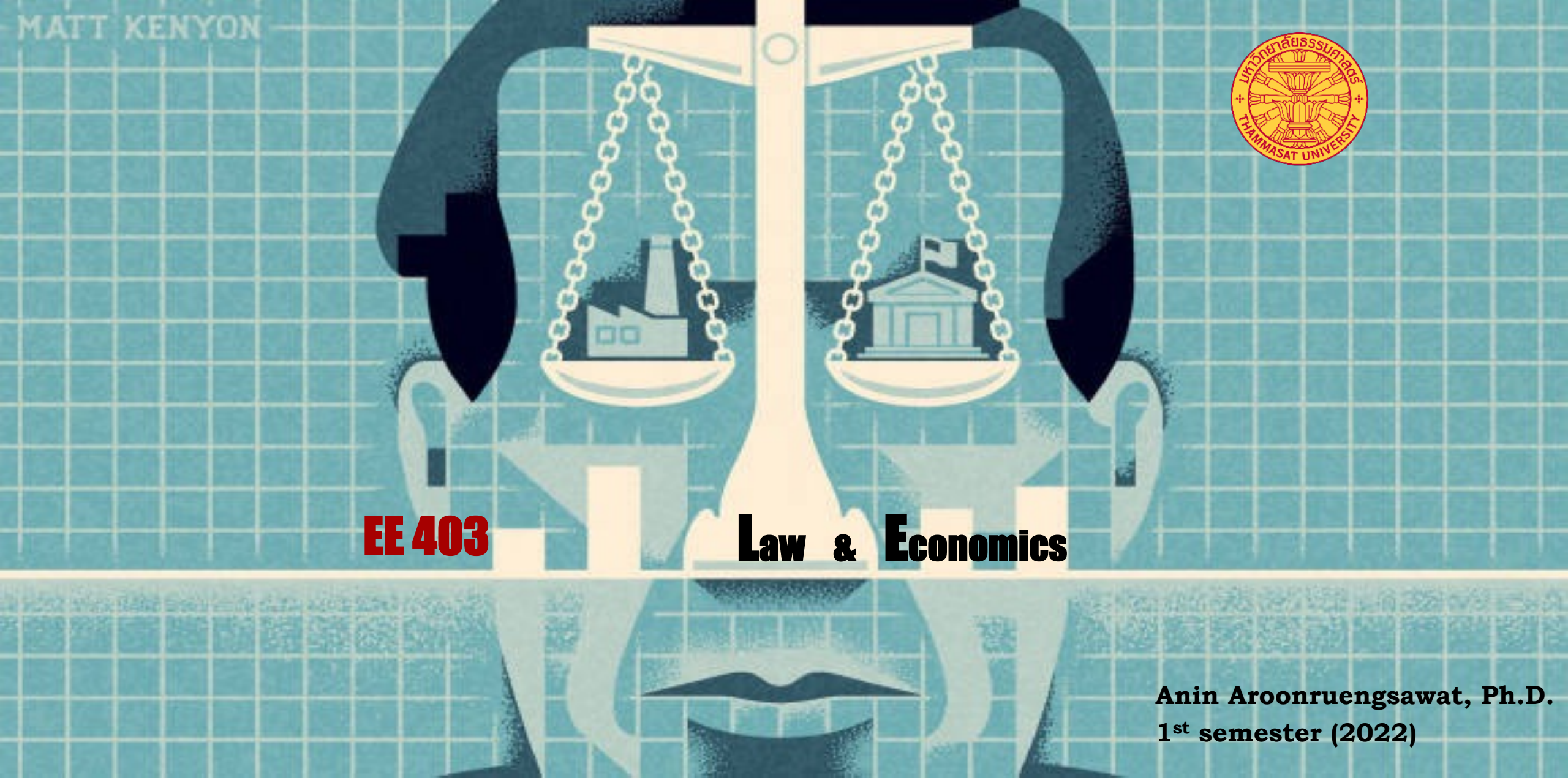


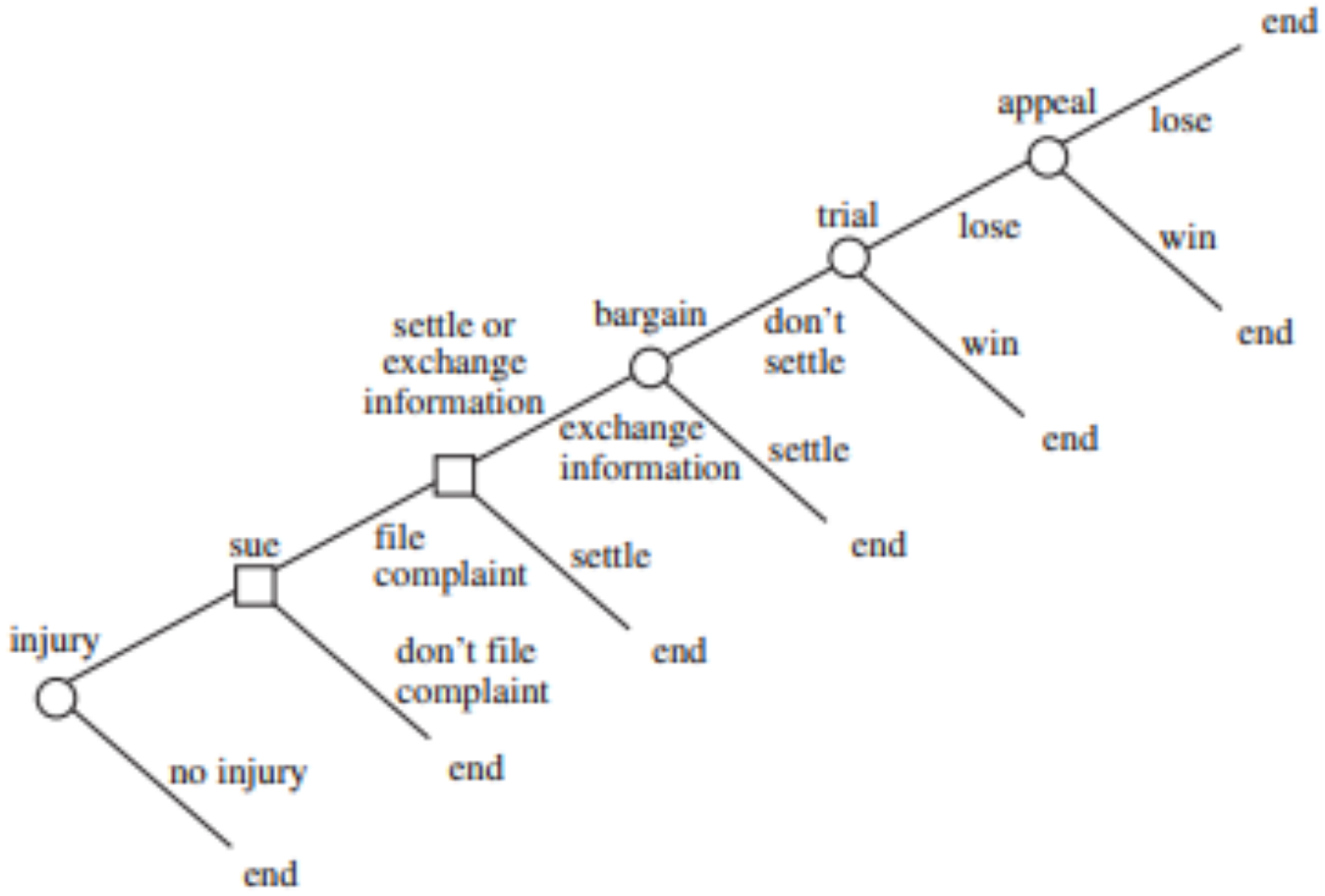
EE 403 Law & Economics

Anin Aroonruengsawat, Ph.D.

1st semester (2022)

Economics of Legal Process

An Economic Theory of the Legal Process



The Goal of the Legal Process: Minimizing Social Costs

- Administrative cost: the costs to everyone involved in passing through the stages of a legal dispute, such as the costs of filing a legal claim, exchanging information with the other part, bargaining in an attempt to settle, litigating, and appealing.
- Error cost : the legal process sometimes makes errors in applying law. For example, the wrong party may be held liable, or the right party may be held liable but for the wrong amount.

- *We assume that the economic objective of procedural law is to minimize the sum of administrative costs and error costs.*

$$\min SC = c_a + c(e)$$

Minimizing Social Costs

- Assume that the parties settle out of court on the same terms that a trial would have produced.
- Because the results of settlement or trial are the same by assumption, the error costs (*if* there is an error) of settlement equal the error costs of trial.
- The administrative costs of the settlement, however, are much lower than those of a trial ➔ the settlement saves social costs.
- In general, settlements that replicate the results of trials reduce the social costs of resolving disputes.

Minimizing Social Costs

- Error costs are more difficult to understand and measure, because measuring an error requires a standard of perfection.
- In reality, courts have imperfect information, which causes them to make mistakes when applying law.
- Imagine a court that possesses *perfect* information about the facts and the law for every case it decides.
- *"perfect-information judgment"* denote *j**.

Minimizing Social Costs

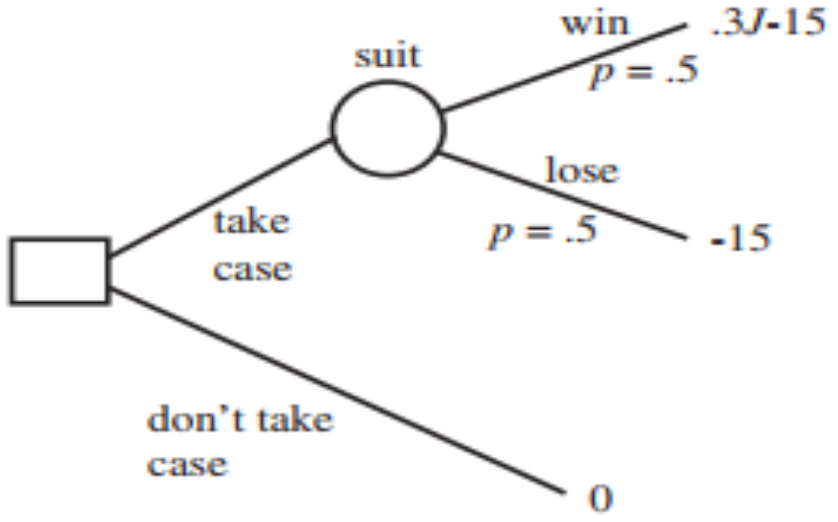
- The difference between the perfectinformation judgment, *j**, and the actual judgment, *j*, *equals* *the extent of the court's error concerning damages* .
- **Example** the perfect information judgment *j** might award the owner of an automobile the exact cost of replacing the engine destroyed by a defective fuel additive, which equals, say, $2,500. If the actual judgment equals $2,000, then the extent of the error equals j* - j = $500

Minimizing Social Costs

- The *extent* of the error, however, does not necessarily equal its *social cost.*
- The social cost of an error depends additionally upon the distortions in incentives caused by the error.
- If perfect compensation equals $2,500 and actual compensation equals $2,000, the error of $500 may cause the manufacturer to lower quality control.
- Lowering quality control saves the manufacturer, say, $1,000 and causes, say, an additional $10,000 in losses to the owners of products.
- In this example, the social cost of the error $c(e)$ equals the *net* loss of $9,000 from lower quality control: c($500) = $9000

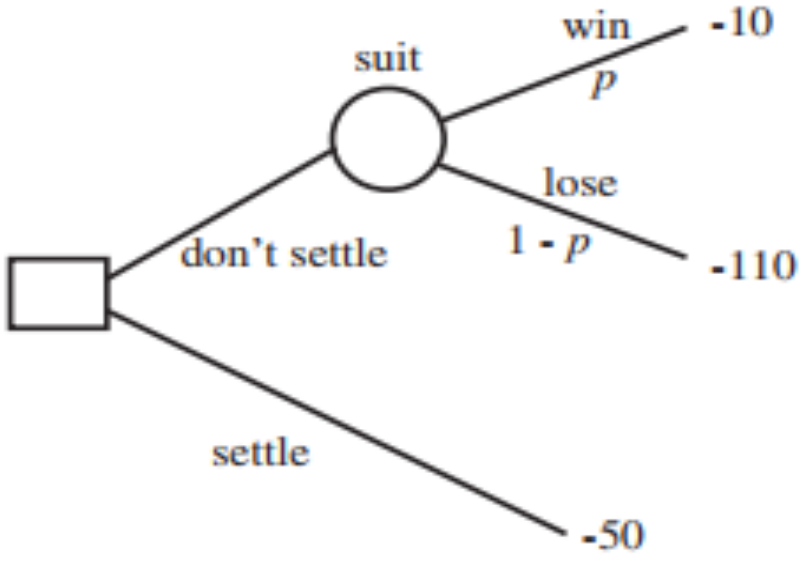
Why Sue? Decision Trees

- A client asks a lawyer to take his case and offers to pay the lawyer 30 percent of the court's judgment as the lawyer's fee.
- If the court's judgment is *j*, then the lawyer gets 0.3*j*.
- Assume that the probability that the plaintiff will win is 0.5.
- If the plaintiff loses, the lawyer gets 0. The lawyer estimates that the time he will spend on the case is worth 15. What is the lowest value of the court's judgment at which the lawyer expects to gain by taking the case?



Why Sue? Decision Trees

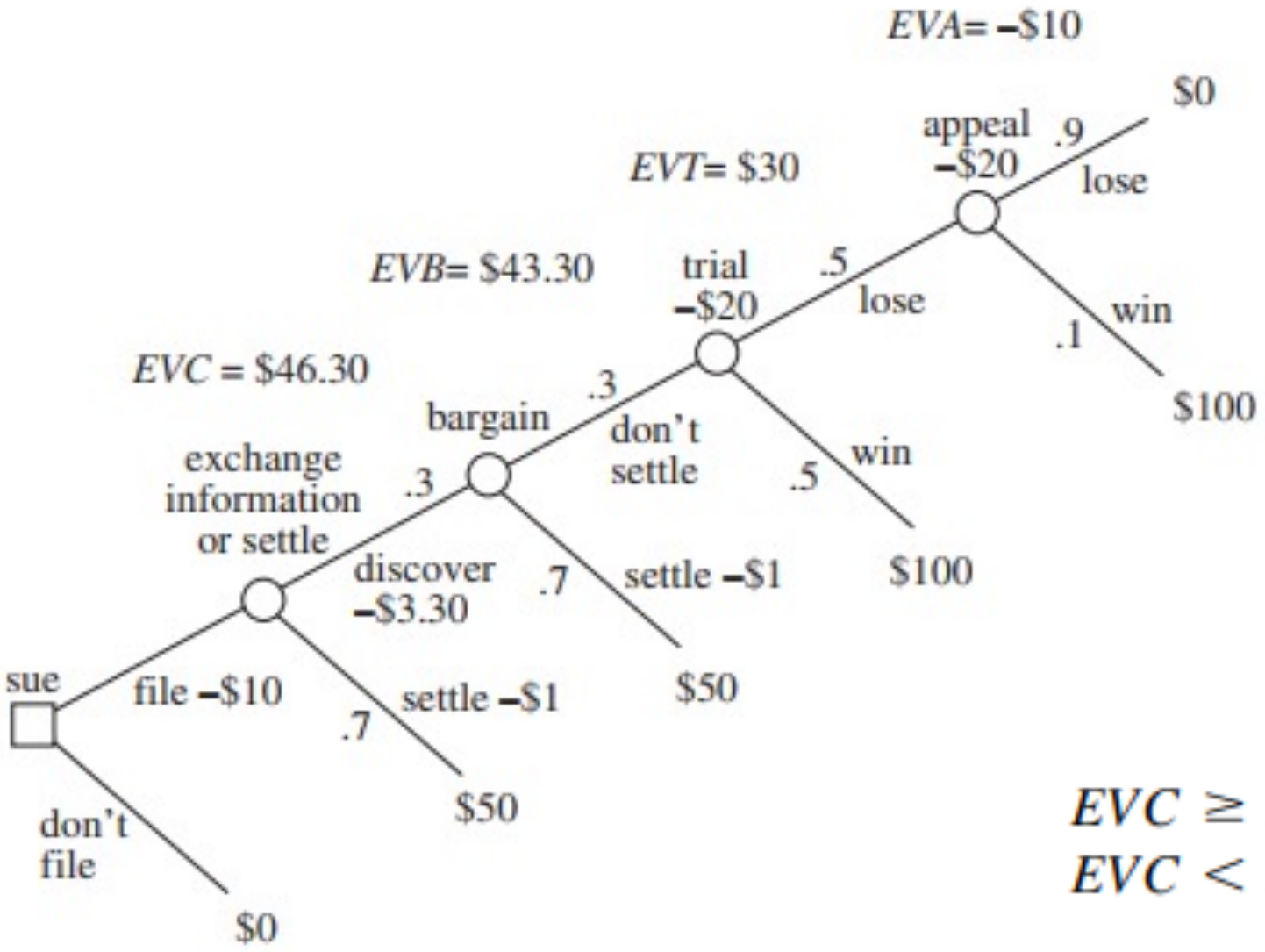
- A business allegedly causes a consumer to suffer harm of 100. The consumer offers to settle the dispute for 50. If the business refuses, it will face a suit that will cost it 10 to litigate. If it loses at trial, the business will have to pay the consumer 100. What is the lowest probability of the consumer winning at which the business expects to gain by settling the case?



Computing the Value of a Legal Claim

- To decide whether to initiate a suit, a rational plaintiff compares the cost of the complaint and the expected value of the legal claim.
- The expected value of the legal claim (*EVC*) depends upon what the plaintiff thinks will occur after filing a complaint.

Computing the Value of a Legal Claim

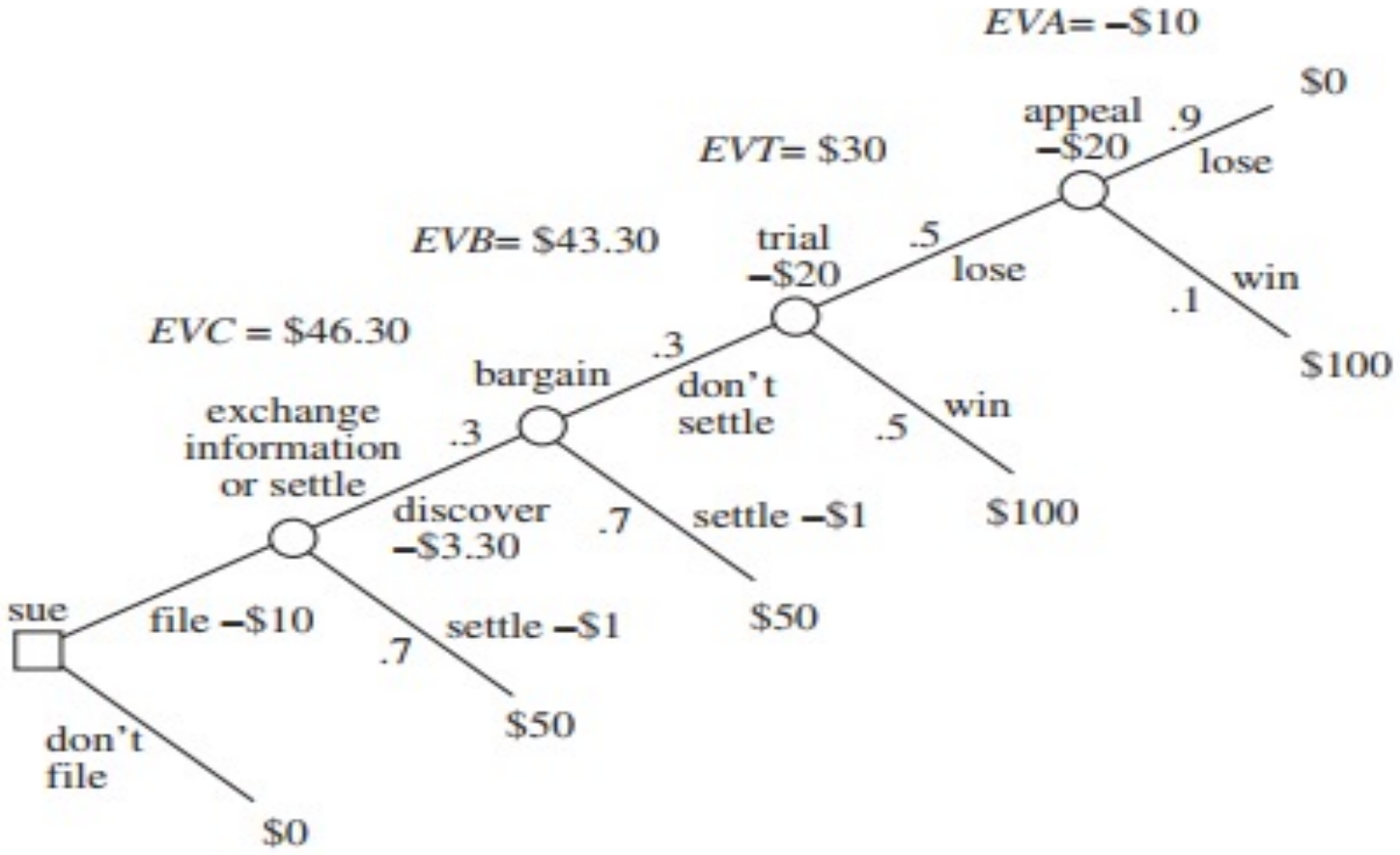


In America, each side usually pays his own legal costs.

In Europe (and much of the rest of the world), the loser usually pays most of the winner's legal costs.

$EVC \geq FC \rightarrow$ file legal complaint;
$EVC < FC \rightarrow$ do not file legal complaint.

Computing the Value of a Legal Claim



Exchange of Information

- Why do some complaints end up being tried rather than settled?
- Trials occur because the parties have different expectations about its outcome:
- The parties are relatively optimistic
  - The plaintiff expects liability and a large judgment, and
  - The defendant expects no liability or a small judgment.
- the parties cannot agree on the terms for settling out of court.

Exchange of Information

- Assume that a bus collides with a pedestrian. The bus company admits fault, but the parties disagree over damages.
- The bus company, which believes that the pedestrian suffered minor injuries, predicts that a trial will cost it $1,000 and result in a judgment of $1,500, thus costing a total of $2,500.
- The pedestrian, who suffered a serious injury, predicts that a trial will cost $1,000 and result in a judgment of $15,000, thus resulting in a net gain of $14,000.

Exchange of Information

- *If the plaintiff's expected value of the judgment at trial exceeds the defendant's expected value of the judgment at trial, we say that the parties are relatively optimistic.*
- the plaintiff will reject an offer to settle for less than $14,000.
- the defendant will reject a demand to settle for more than $2,500.

Exchange of Information

- Conversely, relative pessimism makes settlement easy
- The bus company, which knows that the pedestrian had surgery, believes that a trial will cost it $1000 and result in a judgment of $15,000, thus costing a total of $16,000.
- The pedestrian knows that the surgery corrected a preexisting condition, not an injury caused by the accident. Therefore, the pedestrian predicts that a trial will cost $1,000 and result in a judgment of $1,500, thus resulting in a net gain of $500
- The bus company's false pessimism about a trial will cause it to accept a settlement offer of, say, $10,000, which far exceeds what the pedestrian believes can be had at trial

Exchange of Information

- In many suits, the defendant knows less than the plaintiff about the extent of the injury, and the plaintiff knows less than the defendant about the extent of the defendant's precautions against the accident.
- If the defendant overestimates the plaintiff's injury, and the plaintiff overestimates the defendant's precaution, then both parties are relatively pessimistic; so, settlement is easy.
- If the defendant underestimates the plaintiff's injury, and the plaintiff underestimates the defendant's precaution, then both parties are relatively optimistic; so, settlement is difficult.

Exchange of Information

- The law may require the party making a complaint to tell the other side what it will prove in court in the event that a trial occurs.
- In the United States, the law compels each side to answer questions about the case asked by the other side. This practice is called *discovery*, because one party has the right to discover certain facts known to the other party.
- In contrast, in Europe the judge can ask the parties for any relevant information, but the parties are limited in their ability to ask questions on their own.
- “Does the voluntary pooling of information promote settlements out of court?”
- “Does involuntary pooling of information promote more settlements beyond the number achieved by voluntary pooling?

Bad News Is Free

- In general, *the parties tend to disclose information voluntarily before trial to correct the other side's relative optimism, thereby promoting settlements.*
- In our example: the pedestrian might voluntarily provide medical records to prove to the bus company that the accident caused serious injuries.
- Similarly, *the parties tend to withhold information that would correct the other side's relative pessimism, thereby promoting settlements.*

- voluntary pooling of information tends to correct false optimism and to leave false pessimism uncorrected, both of which promote settlements out of court.

Involuntary disclosure

- Parties withhold information that would correct the other side's false pessimism.

- Being compulsory, discovery tends to uncover the information that was withheld, thus correcting false pessimism thereby causing them to demand better terms to settle out of court.

Voluntary disclosure ➔ corrects false optimism ➔ causes settlement

Involuntary disclousure ➔ corrects false pessimism ➔ causes trails.

The Differing Perceptions, or Optimism Model

- According to this model, litigants can disagree about the outcome of a trial based on different opinions
- Let P_p denote the plaintiff's assessment of her probability of winning at trial, and let P_d denote the defendant's assessment of this same probability. (In other words, P_d is the defendant's assessment of his probability of *losing* at trial.)
- Also let J equal the monetary judgment that the plaintiff will recover if she wins (an amount that both parties agree on), and let C_p and C_d be the costs of trial for the plaintiff and defendant, respectively.
- For simplicity, we assume that settlement is costless, though our conclusions hold as long as settlement is less costly than trial

The Differing Perceptions, or Optimism Model

- the expected value of trial for the plaintiff to be $P_pJ - C_p$ (assume that the amount is positive)
- However, the plaintiff would prefer to settle for any offer S such that

  $S >= P_pJ - C_p$.
- the expected <u>cost</u> of trial to the defendant as $P_dJ + C_d$. Thus, the defendant will settle for any amount

  $S <= P_dJ + C_d$.
- a settlement is *feasible* if there exists a settlement amount that is simultaneously preferred to trial by both parties; that is, if there exists an S such that

The Differing Perceptions, or Optimism Model

$$P_pJ - C_p \leq S \leq P_dJ + C_d$$

$$P_pJ - C_p \leq P_dJ + C_d$$

$$(P_p - P_d)J \leq C_p + C_d$$

If $P_p = P_d$ then $C_p + C_d \geq 0$

if the parties have symmetric beliefs, a settlement is always feasible because they have a joint interest in avoiding the costs of trial.

Settle Condition

$$(P_p - P_d)J \leq C_p + C_d$$

- First, a trial is less likely the higher are the costs of trial.
- Second, a trial is more likely the larger is the difference P_p - P_d .
- This reflects the role of optimism in encouraging trials.
- Specifically, a trial is more likely the larger is the plaintiff's assessment of her probability of winning and the smaller is the defendant's assessment of his probability of losing.
- Finally, given P_p - P_d > 0, a trial is more likely the larger is J, the expected judgment at trial.
- This implies that cases are more likely to go to trial the larger are the stakes of the case.

The Asymmetric Information Model

- suppose that the plaintiff has private information about her probability of winning at trial.
- Specifically, suppose there are two types of plaintiffs in the population of plaintiffs, those with a high probability of victory at trial (P_h)and those with a low probability of victory at trial (P_l) where $P_h > P_l > 0$.
- Plaintiffs know their own probabilities of victory so they can calculate their expected returns at trial.
- for a “high” type, this return is $P_hJ - C_p$,
- for a “low” type it is $P_lJ - C_p$,
- *and* $P_hJ - C_p > P_lJ - C_p$.

The Asymmetric Information Model

- Defendants, however, cannot observe an individual plaintiff's type, though they know the fraction of each type in the population.
- Let a be the fraction of high probability types. Thus, when facing a particular plaintiff, a defendant can only calculate the average probability of plaintiff victory, given by

$$\bar{P} = aP_h + (1 - a)P_l$$

- the defendant's expected cost of going to trial with a random plaintiff is $\bar{P}J + C_d$

The Asymmetric Information Model

- Note first that if the defendant offers an amount greater than or equal to the value of trial to a high-type plaintiff, $P_hJ - C_p$, *both types will accept the offer and no trial.*
- This type of outcome is referred to as a *pooling strategy* because the defendant treats both types of defendants alike.
- Assume that when the defendant employs this strategy, he offers exactly

$S_h = P_hJ - C_p$, which is the lowest amount that the high-type plaintiff would accept.

Under this strategy, the defendant's average cost per case is just $P_hJ - C_p$, and there are no trials.

The Asymmetric Information Model

- The defendant may be able to lower his expected cost by adopting a different strategy. Suppose that he offeres $S_l = P_l J - C_p$.
- Low-type plaintiffs are just willing to accept this amount but high types will reject and go to trial.
- This is referred to as a separating strategy because it treats the two types of plaintiffs differently. (low type settle and high types go to trial)
- Since the defendant does not know which type of plaintiff he is facing when he makes the offer, his expected cost of this strategy is

$$a(P_h J + C_d) + (1 - a)(P_l J - C_p)$$

The Asymmetric Information Model

- Trials only occur under the asymmetric information model (and then only with high-type plaintiffs) when the defendant chooses the separating strategy over the pooling strategy.
- The defendant prefers the separating strategy (trials) if his expected costs are less than his cost under the pooling strategy, $P_h J$ - C_p

$$\frac{1-a}{a}(P_h - P_l)J > C_p + C_d \qquad \text{Trial condition}$$

Given “a” : trials become less likely as the costs of trial increase and more likely as the stakes increase.