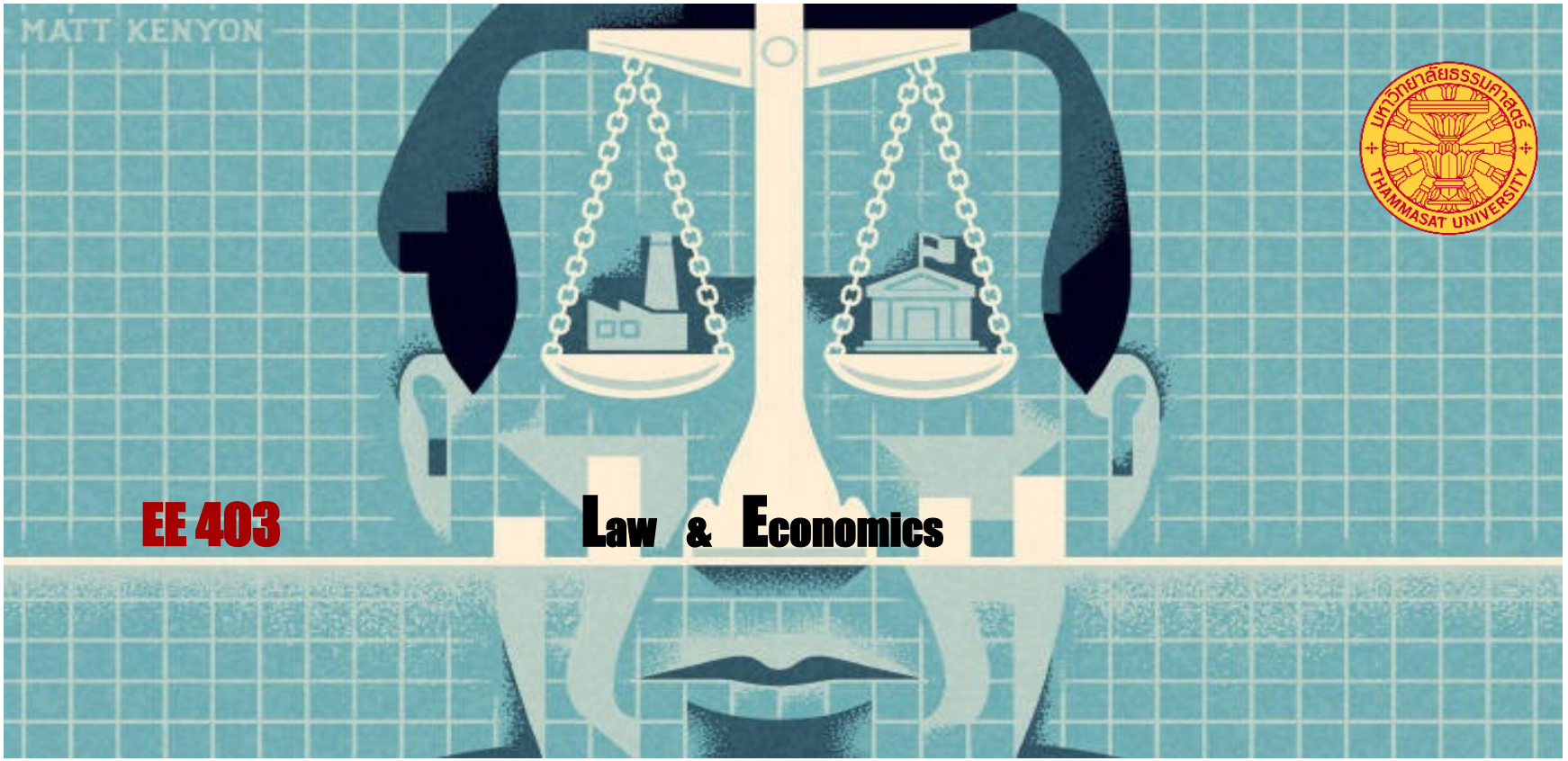


Economics of Contract Law 1

Anin Aroonruengsawat, Ph.D.

Timing of transactions

- When two parties want to reallocate rights…
  - I want to buy your used car
  - You want to "buy" my permission to have a noisy party
  - Neighbors want to pay a factory to pollute less

- Some transactions happen all at once
  - I hand you a check for $3500, you hand me the keys to your car
  - There might be search costs and bargaining costs but no enforcement costs

Lots of transactions don't take place all at once

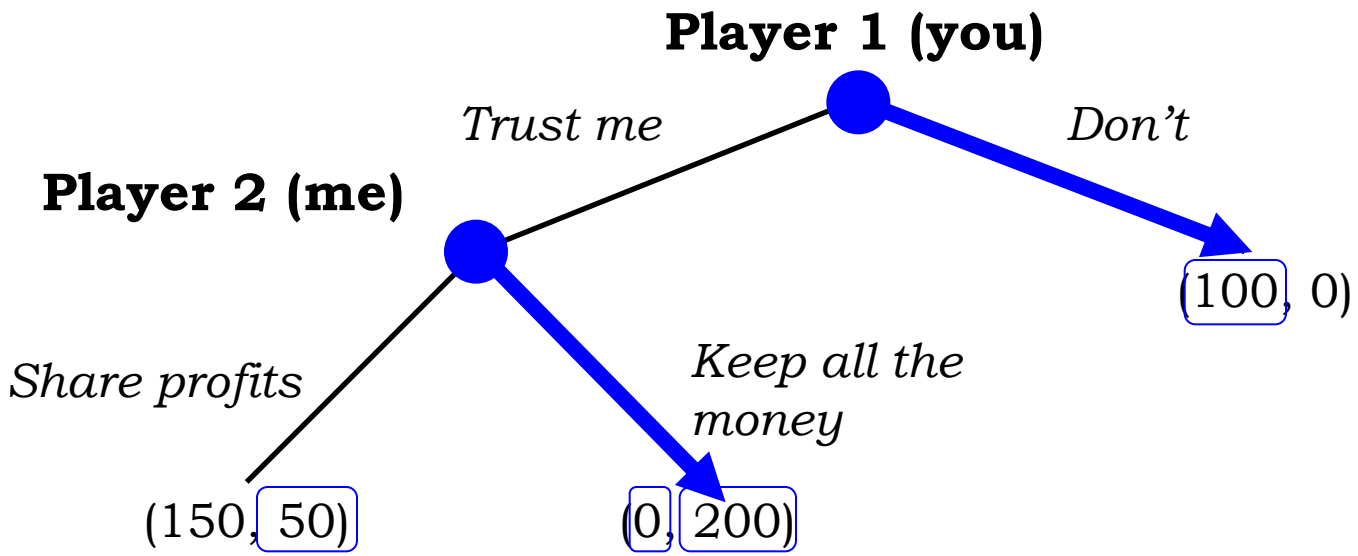
- I'm flying to Chiangmai for New Year vacation. I pay in advance.
- I am buying a promise of a flight. Bangkok Airways promise to fly me to Chiangmai

- I hire someone to paint my house
- If I wait till the end to pay him, how will he know I'll pay?
- If I pay him at the beginning, how will I know he'll show up?
- I could pay him each day for that day's work
- But if a half-painted house is worthless to me, he could threaten to quit in the middle, and I might have to agree to pay him more

This is what contracts are for

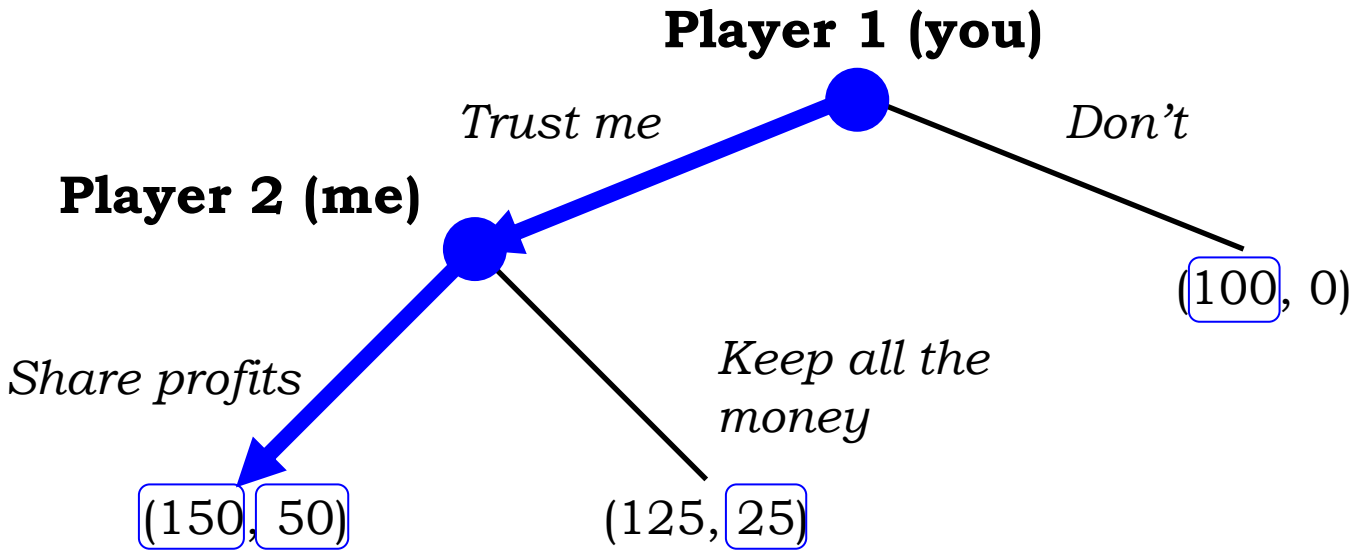
- A contract is a **promise** which is legally binding.
- They solve the problem of how to achieve cooperation or trade when transactions don't occur all at one time by giving a way to make a promise legally enforceable.
- I can promise the painter I'll pay him once the house is done, and he'll know this promise is good
- Then he can paint my house, knowing he'll get paid in the end
- So contracts are legally binding promises, which allow for trade in situations where transactions don't take place all at once

Example: the agency (trust) game



- If you lent me $100, I could invest and double our money. I promise to give you back $150 and keep $50 for myself.
- But if we look at my incentives here once you've given me the money, I have no reason to give you your money back
- Since you anticipate this problem, you refuse to trust me.
- It's not just that you're worse off because you can't trust me; **I'm worse off too**

Solution: legally binding promises



- Suppose we can sign a contract. I am punished if I run off with the money
- Suppose a court steps in and forces me to give you back your $150, and charges each of us an additional $25 fee for doing so
- This changes the payoffs, so the game looks like above.
- Purpose of contract law: to allow trade in situations where this requires **credible promises**

Contract: a legally binding promise

- Point of contracts: to enable trade when transactions aren't concluded immediately.

- Obvious question: which promises should be legally binding, and which should not?

What types of promises should be enforced by the law? Examples from the textbook.

- "The rich uncle of a struggling college student learns at the graduation party that his nephew graduated with honors. Swept away by good feeling, the uncle promises the nephew a trip around the world. Later the uncle reneges on his promise. The student sues his uncle, asking the court to order the uncle to pay for a trip around the world."

- "One neighbor offers to sell a used car to another for $1000. The buyer gives the money to the seller, and the seller gives the car keys to the buyer. To her great surprise, the buyer discovers that the keys fit the rusting Chevrolet in the back yard, not the shiny Cadillac in the driveway. The seller is equally surprised to learn that the buyer expected the Cadillac. The buyer asks the court to order the seller to turn over the Cadillac."

What types of promises should be enforced by the law? Examples from the textbook.

- "A farmer, in response to a magazine ad for "a sure means to kill grasshoppers," mails $25 and receives in the mail two wooden blocks with the instructions, "Place grasshopper on Block A and smash with Block B." The buyer asks the court to require the seller to return the $25 and pay $500 in punitive damages."

For efficiency, what promises should be enforced?

- In general, efficiency requires enforcing a promise if both **the promisor and the promisee wanted it to be enforceable** when it was made

- The first purpose of contract law is to **enable people to cooperate** by **converting games with noncooperative solutions into games with cooperative solutions**
  - enable people to convert games with inefficient equilibria into games with efficient equilibria

Contract law can serve a number of other purposes as well: Information

- Private/asymmetric information can hinder trade
  - Car example (George Akerloff, "The Market for Lemons")
- Contract law could help
  - You could offer me a legally binding warranty.
  - Or, contract law could impose on you an obligation to tell me what you know about the condition of the car.
  - Forcing you to share information is efficient, since it makes us more likely to trade
- The second purpose of contract law is to **encourage the efficient disclosure of information** within the contractual relationship.

Question:

- If a contract is a promise…
- what should happen when that promise gets broken?
  - could be: I signed a contract with no intention of living up to it
  - but could be: I signed a contract in good faith, intending to keep it but circumstances changed, making performance of the contract less desirable, maybe even inefficient!
  - so what should happen to me if I fail to perform?

Breach

- A and B sign a contract
  - A agree to pay B $350,000
  - B agree to build A an airplane
  - A value the plane at $500,000;
    B expect building it to cost $250,000

  (social welfare = 5-2.5+3.5-3.5 = 2.5

- Lots of things could happen…
  - Price of materials could go up, increasing B costs to $700,000…
    …making it inefficient to build A a plane
  - Costs could increase to $400,000, it's still efficient to build A the plane, but B doesn't want to.
  - Another buyer could arrive and offer B $600,000 for the plane
  - B could break his arm, making it impossible for B to build the plane

Breach

- A contract is a promise
- **Breach of contract** is when promisor fails to keep promise
  - To make a promise legally binding, there has to be some consequence when it is broken
- So, **what should happen when a contract is breached**?
  - If penalty is too small, contract law has no bite
  - If penalty is too large, promises might get kept even when that becomes inefficient
  - **Can we design the law to get breach of contract only when it's efficient to breach?**

When is breach of contract efficient? (Social planner perspective)

Efficiency:

Social benefit of breach	>	Social cost of breach	→	Efficient to Breach
Social benefit of breach	<	Social cost of breach	→	Efficient to Perform

- Social benefit of breach: promisor saves cost of performing
- Social cost of breach: promisee loses benefit from promise

When is breach of contract efficient? (Social planner perspective)

Efficiency:

Promisor's cost to perform	>	Promisee's benefit from performance	→	Efficient to Breach
Promisor's cost to perform	<	Promisee's benefit from performance	→	Efficient to Perform

- Social benefit of breach: promisor saves cost of performing
- Social cost of breach: promisee loses benefit from promise

How do we expect promisors to behave?

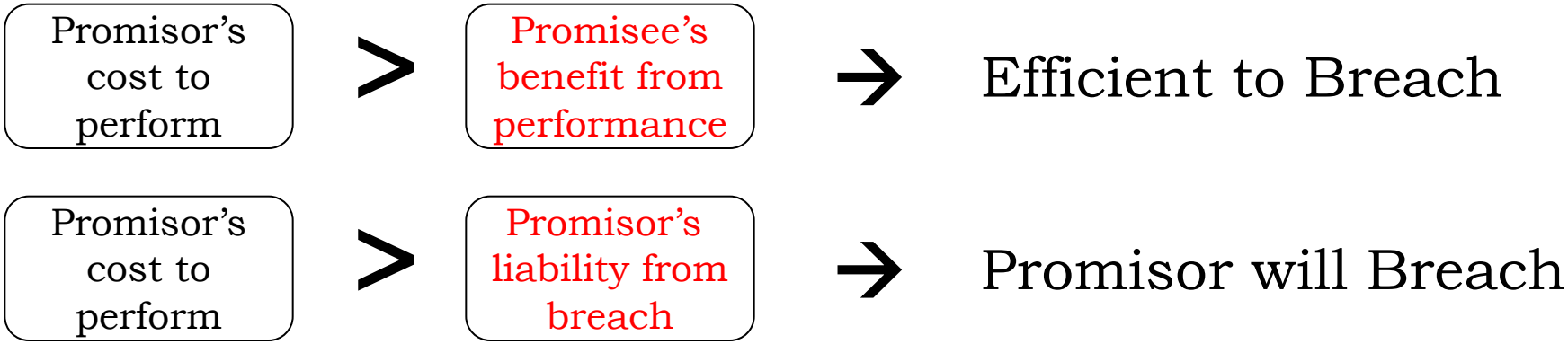
Efficiency:

Promisor's cost to perform	>	Promisee's benefit from performance	→	Efficient to Breach
Promisor's cost to perform	<	Promisee's benefit from performance	→	Efficient to Perform

Design the law to get only efficient breach of contract.

Promisor's cost to perform	>	Promisor's liability from breach	→	Promisor will Breach
Promisor's cost to perform	<	Promisor's liability from breach	→	Promisor will Perform

Can we design the law to get only efficient breach of contract?



- If we set **liability from breach** = **promisee's benefit** from performance, promisor will breach exactly when it's efficient
  - When a promisor breaches a contract, he should owe a penalty **exactly equal to** the benefit the promisee expected to receive
  - This is **expectation damages**

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Airplane example

- Plane worth $500,000 to A, agree to price of $350,000, B's cost of building the plane changes
- Expectation damages: How much do B owes A if B fail to deliver the plane? (150,000)
- Whenever cost is less than $500,000…
  - B is better off keeping promise.
    - If B keeps promise, B- payoffs = 350,000 – cost of building the plane
    - If B breaches, B- payoffs = -150,000 (paying the expectation damages)
    - So, as long as cost of building the plane < 500,000 ➔ B'd better keep promise.
  - And it's efficient for B to build A the plane
    - If the plane is built, the SW = 500,000 – cost of building + B's revenue– A's expense. (SW > 0)
- Whenever cost is above $500,000
  - B is better off breaking promise and paying damages
  - And it's efficient for B to break promise (SW < 0)

Another way to think about expectation damages: eliminating an externality

- If B breach contract, B impose externality on A
  - A expected payoff of $150,000 if B performed…
  - …so if B breach, A is $150,000 worse off

- If B have to pay A $150,000 if B breach, then B **internalize the externality**
  - Now B action no longer affects A payoff
  - (A get the same surplus of $150,000, whether or not B build the plane.)
  - No more externality → B choose efficiently when deciding whether to perform or breach

What would happen under other remedies? (not expectation damages)

- Plane worth $500,000 to A, agree to price of $350,000, B-cost of building the plane changes
- No penalty
  - If costs rise to $400,000, B'll choose to breach…
    - B only receive 350,000
  - …but performance would be efficient
    - If the plane is built, the SW = 500,000 – 400,000 + seller's revenue– buyer's expense. (SW > 0)
- Penalty for breach is $1,000,000
  - If costs rise to $700,000, B'll choose to perform…
    - If B keep promise, B payoffs = 350,000 – 700,000 = -350,000
    - If B breach, B payoffs = -1,000,000
  - …but breach would be efficient
    - If the plane is built, the SW = 500,000 – 700,000 + seller's revenue– buyer's expense. (SW < 0)

Only expectation damages guarantee efficient breach

Another reason the remedy for breach matters: **investment in performance**

- Many things promisors can do to reduce likelihood they will have to breach a contract

- If promisor agreed to build a house, he can…
  - Buy materials ahead of time and store them in a warehouse
  - Spend more time lobbying (or bribing!) local government to ensure he can get required permits.
  - Pay his assistant well, so he's less likely to quit.

- Some of these things may be hard to observe/verify, so impossible to build them into the contract itself.

Another reason the remedy for breach matters: **investment in performance**

- Expectation damages (and only expectation damages) will lead to efficient level of these investments
  - If promisor internalizes the cost of breach…
  - …then he receives the full benefit of these investments,
  - along with paying their full cost,
  - so to minimize private cost, he chooses efficient level

So now we've seen three things contract law can accomplish…

1. Facilitate non-simultaneous trade when trust is required
   - Turn games with inefficient equilibrium into games with efficient equilibrium

2. Encourage efficient disclosure of information

3. Secure efficient level of breach, and efficient level of investment in performance
   - Via expectation damages