

# An Economic Theory of contract

Lecture 4



EVROPSKÁ UNIE  
Evropské strukturální a investiční fondy  
Operační program Výzkum, vývoj a vzdělávání



MINISTERSTVO ŠKOLSTVÍ,  
MLÁDEŽE A TĚLOVÝCHOVY



# Bargain Theory: An Introduction to Contracts

- The bargaining principle- enforceable if...
- Bargaining-dialogue on a value to agree on a price

*Promisor versus promisee*

- Reciprocal inducement
- Consideration

contract incomplete until the promisee gives something to promisor to induce the promise → contract enforceable

- Bargain and fairness (the value of a promise X the value of a consideration)



# What should be the Remedy for the Breach of Enforceable Promises?

- How well the promise have been if the promise had been kept?
- Expectation damages=the damage measure
- The fact of bargain establishes enforceability
- The expected value of a bargain measures damages (example of trip, Chevy and Cadillac, grasshopper)



# Criticism of the Bargain Theory

- Bargain theory-denies enforcement of the contract, when the promise did not arise from a bargain, (example of seller and his offer)
- The promiser and promisee want the promise to be enforceable
- *Dogmatic theory X Responsive theory*
- bargain theory calls for the routine enforceability of any bargain (even deceptive), courts would not enforce
- Overinclusive bargain theory X underinclusive bargain theory



# An Economic Theory of Contract

- ▶ Pareto-efficient law=responsive law, economic efficiency requires enforcing a promise

## **Cooperation and Commitment**

-many exchanges instant and simultaneous X deferred exchanges (the passage of time)

*Example: Agency game*

The first player decides to put a valuable asset under the control of the second player

The second player decides whether to adopt „Cooperation“ or „Appropriation“

# Agency Game without Enforceable Contract

		Second player (agent or promisor)	
		Cooperate	Appropriate
First player (principal or promisee)	Invest	.5      .5	-1.0      1.0
	Don't invest	0      0	0      0



# Agency game without contract

- ▶ **Parties cannot make an enforceable contract**

- appropriation is always better, final solution for 1st player is not to invest

- ▶ **Parties can make an enforceable contract**

- the best move is to cooperate for the 2nd player, investing is the solution

# Agency Game with Enforcable Contract

		Second player	
		Perform	Breach
First player	Invest (contract)	.5	-.5
	Don't invest (no contract)	0	0





# Agency Game with Contract

- *An enforceable contract converts a game with a non-cooperative solution into a game with a cooperative solution, (invest and perform). And to convert games with inefficient solutions into games with efficient solutions. This is a purpose of contract law.*
- Commitment achieved by foreclosing the opportunity to appropriate (high cost of liability for breach), Example: Chinese army commitment and no retreat
- The second player makes credible commitment provided that the first player knows the second player payoffs, if he knows he recognizes that cooperation is in the second player's best interest
- What promises should be enforced? (Examples: trip, chevy, deceptive offer)

# Information and Performance

- ▶ Contract law may help to deal with asymmetric information (crafting rules of formation and enforcement to encourage efficient disclosure of information)
- ▶ **The remedy** -the price paid by the promisor for breaching the contract, (the higher the price, the stronger the commitment)
- ▶ **Perfect expectation damages**

*Promisor's cost of performing > promisor's liability for breaching → breach*

*Promisor's cost of performing < promisor's liability for breaching → perform*

*Promisor's cost of performing > promisee's benefit from performing →  
efficient to breach*

*Promisor's cost of performing < promisee's benefit from performing →  
efficient to perform*



# Information and Performance

- Perfect expectation damages-compensation for breach, it restores the promisee to the position that he would have enjoyed if the promise had been kept, the promisor thereby internalizes the costs of breach.
- This creates incentives for efficient performance and breach-the promisor will perform
- the promisor will perform if performance is more efficient than breaching and the promisor will breach, if it is more efficient than performing

# Optimal Performance

		Second player		
		Perform (costs 0)	Perform (costs 1.5)	Breach
First player	Invest (contract)	.5	-1.0	-.5
	Don't invest (no contract)	0	0	0



# Optimal Performance

- ▶ performing is sometimes more efficient than breaching and not performing is sometimes more efficient than performing
- ▶ First player's payoff equals 0 if she doesn't invest. The best move is to invest.
- ▶ Second player-the best strategy is to perform, when costs are zero and breach when it costs 1.5.
- ▶ the contract to specify perfect expectation damages preferred rather than alternative remedy-efficient level of commitment to performance by the promisor
- ▶ if damages below the best level-the promisor breaches too often, if above the best level-requires the promisor to perform when it is too costly, this will make him reluctant to create the contract



# Reliance

- **Reliance**-change in the promisee's position induced by the promise, it increases the value of performance to the promise

-a gamble that increases the gain from performance and the loss from breach

## Optimal reliance

- *The expected gain from additional reliance equals the increase in the value of performance to the promise multiplied by the probability of performance.*
- *The expected loss from additional reliance equals the increase in the loss from breach to the promise multiplied by the probability of non-performance*
- *Efficiency requires more reliance if the expected gain exceeds expected loss*

## Optimal Reliance-agency game with variable reliance and no enforceable contract

		Second player	
		Perform	Breach
First player	Invest & low reliance	.5	1.0
	Invest & high reliance	.5	1.0
		.5	-1.0
		.6	-2.0



# Optimal Reliance

- Efficiency requires maximization of payoffs, which happens in southwest cell, but condition is performance of the second player. If the second player breaches, then efficiency requires low reliance of the first player otherwise high reliance.
- Optimal reliance is high when performance is certain and optimal reliance is low when performance is uncertain.
- The tipping point (the expected net payoff from low reliance = the expected net payoff from high reliance)



## Optimal Reliance-agency game with variable reliance, enforceable contract and simple expectation damages

		Second player	
		Cooperate	Breach
First player	Invest & low reliance	.5	-.5
	Invest & high reliance	.5	-1.6
		.6	.6



# Optimal Reliance-agency game with variable reliance, enforceable contract and simple expectation damages

- Simple expectation damages-the promisee always relies to full extent, (they remove the risk to full extent)
- Always rely on high reliance, regardless of the probability of breach (will receive always compensation)
- If expectation damages measured in better way, then overreliance might be reduced

## Optimal Reliance-agency game with variable reliance, enforceable contract and perfect expectation damages

		Second player	
		Cooperate	Breach
First player	Invest & low reliance	.5	-.5
	Invest & high reliance	.6	-.5



# Optimal Reliance-agency game with variable reliance, enforceable contract and perfect expectation damages

- If breach is likely, the first player has incentive for low reliance, if performance is likely, the first player has an incentive for high reliance
- Overreliance in this case causes excessive harm from breach (southeast cell)
- The ideal law-compensates the victim of a breach only for actual losses up to a loss from optimal reliance, a victim must bear any additional losses
- Reliance by the promise foreseeable by the promisor if it equals the amount that the promisor could reasonably expect under the circumstances, (if uncle could not foresee, he is not responsible)

# Default Rules and Transaction Costs

- ▶ When contract is silent about a risk, it has a **gap**

*Inadvertent gaps* -contract says nothing about a possibility of...

*Deliberate gaps* -gap left with intention

- ▶ **Rational gaps**

- Ex-ante risks-the risk or future losses during contract

- ex-post losses-losses after making the contract

- **Gap-Filling** -courts may fill gaps by imputing a term to a contract (acting as if parties had negotiated a term)

- explicit terms

- implicit terms=gap-filling terms=default terms

- sometimes in conflict

Replacing inefficient default terms with efficient default terms-ability to minimize transaction costs, (example of strike)



# Hypothetical Bargains

- Simple rule for courts to follow in order to supply efficient default terms for a contract
- „hypothetical bargain“-consist in the terms parties would have reached if they had filled the gaps in the contract by negotiation
- „majoritarian“ default terms
- Courts fill gaps by imputing terms of hypothetical bargain-parties receive contract from the court and can minimize transaction costs by filling gaps or leaving them
- The court should respond to gaps by the most efficient form of cooperation and must divide a surplus from cooperation
- Must also determine damages for late performance

# Perfect Contracts and Market Failures

- ▶ **Individual Rationality** (-incompetency-inability to conclude enforceable contract)

*Duress*-if beneficiary of promise extracted it by threats (God father)

*Necessity*-if promise extracted from a desperate promisor (surgeon and gas in desert)

*Reason of impossibility*-manufacturer may be excused for non-delivery (factory burnt down)

*Coercion*-

- ▶ **Transaction costs**

-*spillovers*-(*externalities*)-

refusal to enforce contract-derogation of public policy, (pay policeman reward for his service) or unenforceable business contracts (cartels), X illegal performance enforceable (company fails to supply good which damages environment)

-*asymmetric information*-doctrines that excuse promise-fraud, culpa in contrahendo=failure to disclose, (warning about hidden dangers, frustration of purpose, (kings parade), mutual mistake (rusty chevy)

-*monopoly*- doctrine of unconscionability, lesion, situational monopolies (Ploof and Putnam)



# Six purposes of Economic Theory of Contract Law

- 1) to enable people to cooperate by converting games with non-cooperative solutions into games with cooperative solutions
- 2) To encourage the efficient disclosure of information within the contractual relationship
- 3) to secure optimal commitment to performing
- 4) to secure optimal reliance
- 5) to minimize TC of negotiating contracts by supplying efficient default terms and regulations
- 6) to foster enduring relationships, which solve the problem of cooperation with less reliance on the courts to enforce contracts



# Rationality, Transaction Costs, and Regulatory Doctrines of Contract Law

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## *ASSUMPTION*

## *IF VIOLATED, CONTRACT DOCTRINE*

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### **A. Individual Rationality**

1. stable, well-ordered preferences
2. constrained choice

1. incompetency; incapacity
2. coercion; duress; necessity; impossibility

### **B. Transaction Costs**

1. spillovers
2. information
3. monopoly

1. unenforceability of contracts derogating public policy or statutory duty
  2. fraud; failure to disclose; frustration of purpose; mutual mistake
  3. necessity; unconscionability or lesion
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# Relational Contracts: The Economics of the Long-Run

- ▶ Repeated game- -the first player (principal) invests by placing some funds under the control of the second player (agent) and game repeated indefinitely, the first player (principal) invests by placing some funds under the control of the second player (agent)

# Relational Contracts: The Economics of the Long-Run

Payoffs to second player (agent) when first player (principal) plays tit for tat.

	round	$n-1$	$n$	$n+1$	$n+2$	$n+3$	$n+4$	$n+5$	$n+6$
Strategy of second player	appropriate	...	1	0	0	1	0	0	...
	cooperate	...	.5	.5	.5	.5	.5	.5	...

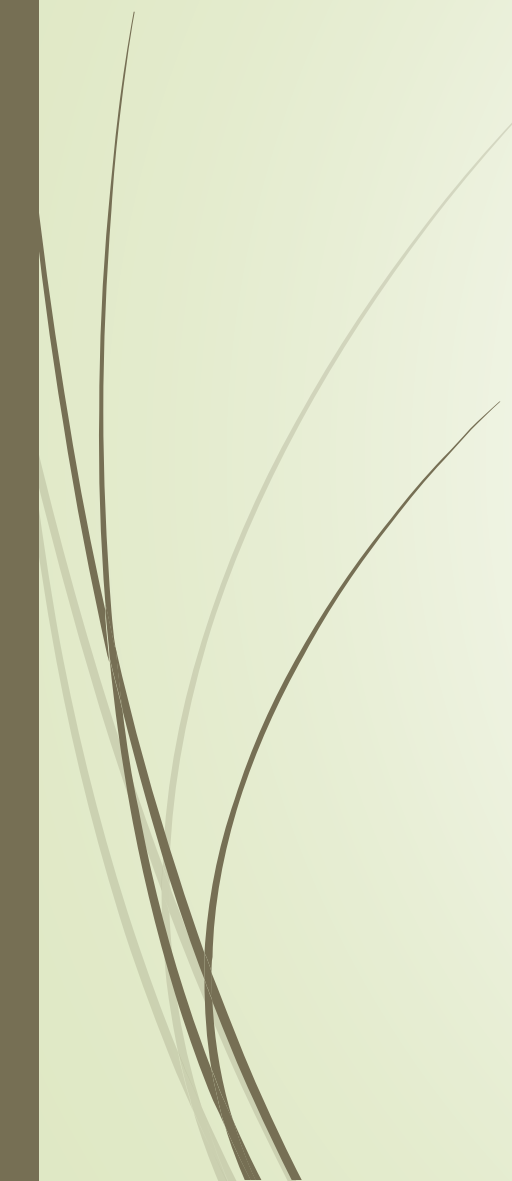


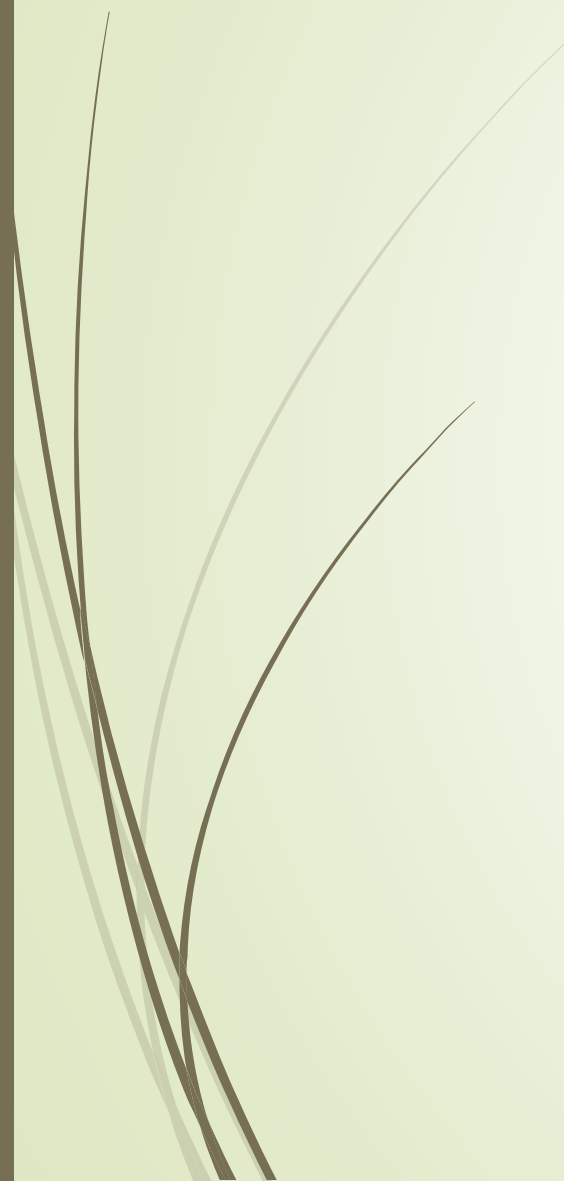

# Summary of Principal Agent Theory

- *Figure 6.1-problem of cooperation, the principal will not invest unless the agent has an incentive to cooperate*
- *Figure 6.2 legal solution to the problem, which makes enforceable contract, it solves the problem by increasing costs of appropriation to agent*
- *Figure 6.7 non-legal solution to the problem, form of an enduring relationship, it solves the problem by enabling principal to retaliate when the agent appropriates*



# Others

- ▶ Endgame problem
  - ▶ Tentative commitments
  - ▶ Law of long-run relations
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Národohospodářská fakulta VŠE v Praze



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