LAW AND ECONOMICS

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Authors: Ákos Szalai, Károly Mike

Supervised by Ákos Szalai

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Week 1

The institutions of the market (New Institutional Economics) – Coase theorem

Ákos Szalai, Károly Mike

The course

- Objects: the legal system
  - Especially: essential legal institutions of the market (civil law, company law)
  - Other areas (large literature on criminal law; legal procedure – main field of game theory; constitutional law – public choice)
- Methods: economic way of thinking
- Goal (reason) 1: analyzing the effects of legal rules (changes in rules)
- Goal (reason) 2: listing the main questions required to consider before a legal decision (e.g. transferring a property, signing of a contract, funding a company)

Literature

Mandatory:

- Cooter, Robert and Thomas Ulen: Law and economics
- Chapters listing in the syllabus.
- Notes on lectures

Recommended: Two classical textbooks:

- Posner, Richard A.: Economic Analysis of Law (5th edition). New York, Aspen. 1997
- Shavell, Steven: Foundations of Economic Analysis of Law, Belknap Press, 2004

Others:

- Bouckaert, B. and G. De Geest (eds.), Encyclopedia of Law and Economics, Cheltenham, Edward Elgar, 2000 http://encyclo.findlaw.com/tablebib.html
- Coase, R. H., The firm, the market and law
- Friedman, David D.: Law's Order. Princeton–Oxford, Princeton University Press, 2000
- Miceli, Thomas J.: Economics of the Law. New York–Oxford, Oxford University Press, 1997

Example 1
(from past years)

For certain types of products, the law prescribes obligatory warranty periods. These may be enforced either by the consumers, who may file a suit if the product breaks down during the obligatory warranty period, or by a consumer protection authority, which makes trial purchases and fines those producers or retailers who sell their products under contractual terms which do not comply with the law.

Should the law prescribe such obligatory warranty periods?

Should there be a government agency to monitor the implementation of the legal rule? Or is it better simply to make illegal warranty clauses unenforceable in court?

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Example 2
(from past years)

In a country, most (but not all) health care institutions are financed by the government. According to the law, when a physician employed by such an institution makes a professional mistakes (medical malpractice), the institution must pay compensation to the victim. In such a case, the court must consider whether the physician followed the protocol, in the recommended medical procedure. The victim is entitled to damages only if the protocol was not properly followed.

Even if the institution is liable, the damages awarded do not fully compensate the victim. The reason for this is that, in practice, courts do not want to put too high a burden on the state health care system.

Evaluate the court practice!

Example 3

(from past years)

In a legal system, majority shareholders of a corporation have no right to force minority shareholders to sell their shares to them. However, a proposed new law would state that if a shareholder holds at least 75 percent of a company's shares, he may demand that the other shareholders sell their shares to him.

Minority shareholders must fulfill the request. If they debate the share price offered, the court decides the price, on the basis of the company's value on the books.

Evaluate the proposed new law!

What is the economic analysis of law?

Two important issues:

1. Incentives – what is the cost of a similar decision in the *future*?

2. Risk allocation – who should bear the risk?

    a) Risk-bearer test (all or nothing model): who is the better risk-bearer?

    b) Allocate risk optimally among players (not all or nothing decision, divide risks among them)

Logic of law vs. economics

Example:

- Robber: money or life?
- Answer: no money – write a cheque
- Cheque is forbidden
- „Right"?
- Answer in law: yes
  - Against the law, injustice
  - Correct mistake, reestablish normal state of the world
- Economic way of thinking: it depends (on incentives)
  - Pros: reducing robbery (no money and primary intention is not killing)
  - Cons: refusing cheques => more killing during robbery

Structure of the week

I. Coase theorem – definitions

II. Weak Coase theorem

Contract theory of transaction costs

III. Strong Coase theorem

Property right definition of transaction costs

IV. Does the law matter?

I. Coase theorem

If no transaction cost, then whatever is in the law, the free bargaining leads to…

1. Weak version (efficiency hypothesis) :

   …Pareto-Efficiency (cure all misallocations)

2. Strong version (invariance hypothesis)

   …leads to the same outcome (unaffected by legal rules)

Coase article (Problem of Social Cost) is not about the Coase theorem:

   Main conclusion: Transaction cost *always* exists!

   Question: How does it affect the economy, how can it be reduced?

I. Coase theorem – experimental test

Ultimatum bargaining

- A chooses from three options
- Payoffs: 5,0; 4,4; 0,5
- B makes an ex ante offer (e.g. if 4,4, B gives 1 to A)
- Results: 92% 4,4
    - BUT often distributed equally, often A's payoff is less then 5

Critics:

- Small amount,
- Homogeneous players,
- No information, coordination problem (i.e. no transaction cost),
- Distributive justice as motivation?

I. Coase theorem – experimental test

Discomforting externality

– A must drink a disgusting liquid.

Payoffs:

– A always gets (if drinks or not): 10.

– B's payoff depends on drinking: if yes 20, if no 0.

Rule:

– A makes decision about drinking, B makes an ex-ante offer.

Results:

– A drinks in most of cases (16/18).

– Average payoffs to A (after offer) :10 + 9.06.

Critics

– Same as above

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II. Weak Coase theorem – transaction costs

- High transaction cost = mutually-beneficial bargains fail
- Why?
- Answer: contract theory of transaction costs (vs. property right theory of transaction cost)

O. E. Williamson:

- Transaction cost is high if three conditions are met *at same time*:
  - **Specific investment (idiosyncrasy)**
  - **Bounded rationality**:
    - Ability to make a *complete contract*,
  - **Threat of opportunism**

II. Weak Coase theorem – transaction costs

- **Specific investment (idiosyncrasy)**:
  - What loss if cooperation fails?
  - What is the second best bid? (opportunity cost) – What will be the offer at the time of failure (quasi-rent)? How large an investment will duplicate the result in case of a new contractor?
- **Bounded rationality** (more precisely: complete contract):
  - Ability to make a ***complete contract***, i.e ability to define all potential problems ex ante?
  - If yes, we know the potential loss – damages can be defined
- **Opportunism**:
  - If no ex ante solution in contract for a problem and if no full compensation in case of problem – what will be the partner's reaction?
  - If no *trust*, no contract.

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II. Week Coase theorem – transaction costs

If only two?

- No specific investment (no idiosyncrasy) – easy cure for mistakes, minimal loss (e.g. selling standardized product for second buyer),

- Rationality is not bounded – contract solves all problems

- No opportunism – partners try to create a *fair* solution, instead of taking advantage

- Some economic models say: high transaction cost is the only reason for government intervention

  - Policy issue: which form (government, market, company, etc.) creates less transaction cost?

  - Wallis and North: transaction services (vs. transformation) 1870–1970 USA: from 25% to 40%

II. Weak Coase theorem – transaction costs

How to reduce transaction cost?
Governance structures – what, when?

	Non specific	**Mixed**	**Idiosyncratic**
Occasional	Market (Classical contract)	Three-sided (neoclassical contract)	
Recurring		Bilateral (relational contract)	Unified (Firm)

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II. Weak Coase theorem – transaction costs

- **Classical contract**
  - Court enforces contract
  - But what is contract?
  - Answer: written + conduct + *default rules*
  - Default rules: used if no explicit (written) contracting.
- **Neoclassical contract**
  - Fill the gaps – if no default rule, create default rule
  - For example: risk-bearer test – who should bear a given risk? If parties had known the risk ex ante, to whom would they have allocated it?
  - The decision maker (third party) is not always the court
    - E.g. Appraisal – defined in (a future sales) contract; arbitration; mediator; counselor.

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SZÉCHENYI PLAN

II. Weak Coase theorem – transaction costs

- **Bilateral governance**
  - The court does not want to make a decision – only help the parties to find solution.
  - Help: mediation.
  - Create incentives: e.g. in Hungarian family law some judges are willing to declare a divorce AFTER the parties made a decision about the division of assets (it is against the law, but it works).
  - The parties define a governing structure in a contract – the courts accept and enforce it.
    - E.g. contract defines how the parties will reach decision in case of unexpected problems
    - Selecting a joint committee, right of making decision is allocated to one party.
- **Unified governance (firm)**
  - Ex ante defined governing structure.
  - Owner makes the decisions (the other parties are paid off for not making decisions – e.g. in a labour contract)
  - Required: efficient company law (and accounting, labour, etc. regulation)

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III. Strong Coase theorem

Stigler: If no transaction cost, then (in a competitive market) social and private marginal costs are equal.

Coase's example: farmer and cowboy – cows destroy the harvest

- R = cowboy's marginal return (from increasing the herd)
- E = farmer's marginal cost (because of the loss caused by a new cow)
- Efficient solution? $- q*$
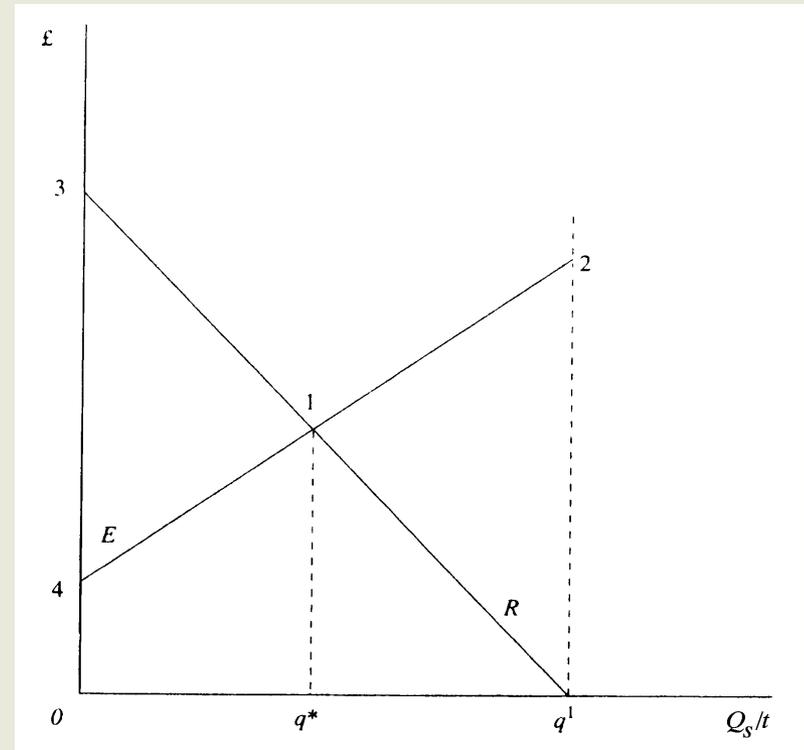
III. Strong Coase theorem

*Will q* be the result – no matter what the starting point?*

If farmer has right? Starting from *0*

- Cowboy's offer: maximum $0 – 3 – 1 – q*$ (i.e. his total return from $q*$)
- Farmer's expected payoff: minimum $0 – 4 – 1 – q*$ (i.e. his loss from $q*$)
- Total (social) benefit): $3 – 4 – 1$
- **Result: $q*$,** mutually beneficial bargain

If cowboy has right? Starting from q^1

- Cowboy's expected payoff: minimum $q* – 1 – q^1$ (i.e. his loss)
- Farmer's offer: maximum $q* – 1 – 2 – q^1$ (i.e. his return – reduction in loss)
- Total (social) benefit: $1 – 2 – q^1$
- **Result: $q*$,** mutually beneficial bargain

- „…mutually beneficial bargain"
  - Same as weak Coase theorem (contract theory of transaction costs)
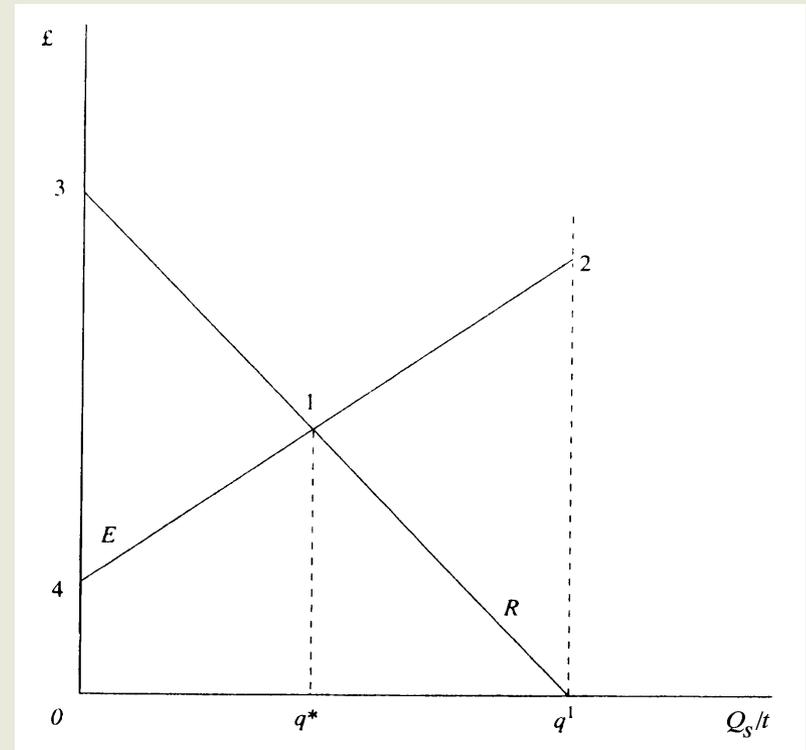
III. Strong Coase theorem

Same results? New transaction cost definition is required

Property right: If property right is clear, no cost of enforcement => invariance (entitlements do not matter, same production)

- What does it really mean? Start with the critics!

- Logic: critics – answer

- *Theoretical critics…*
  Problem: Cases when the entitlement changes and production changes?

- Answer (Property right theory of transaction costs)
  Some transaction cost exists – the critics do not consider it

III. Strong Coase theorem

Critics 1: non-convexity

Model:

Production by the victim at differents level of pollution (Production Possibility Frontier)

Efficiency is at C

Theoretical Criticism:

If the victim has entitlement? Starting point: A $(z = 0; q = q_0)$

Bargain for increasing the pollution.

Increase in z, and compensation for reducing q – it is possible, because z can increase.

The loss can be compensated, because – according to the definition – until C (efficiency) the winner gains more than the loser loses,

If polluter has entitlement? Starting point : B $(z = z_1; q = 0)$

The victim cannot pay for the reduction of pollution
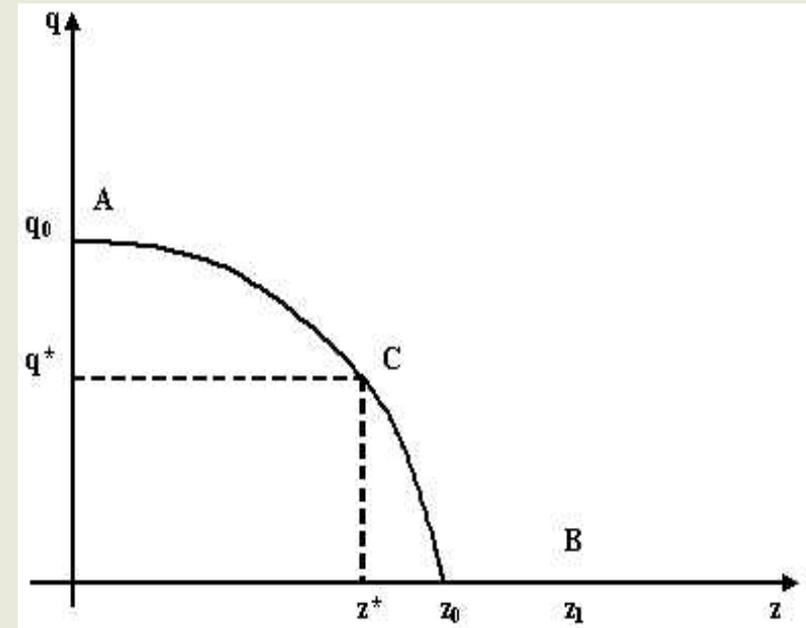
Bargaining will not start.

Result: there is a Pareto-superior situation, but the bargain fails – information

Answer:

If information is available, no need to bargain.

No bargain from incremental changes, but jump to C
Mutually beneficial compared to B.

Information (gathering, sharing) = transaction cost

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III. Strong Coase theorem

Critics 2: Rent

Theoretical criticism:

Invariance in the long run is possible if there is rent (economic profit)

In a competitive market, there is no rent.

Logic:

Suppose: no rent and change in rule – change in entitlements, the other player pays.

From what?

Before change: zero profit after the compensation for loss,

After: No compensation or payment

Result: actor must exit

No invariance.

Answer:

If rent = 0 (or very small), then rent < loss (= compensation),

Why compensation for loss? Why not payment for exit?

(there is x: rent $< x <$ compensation),

Mutually beneficial bargain fails.

Bargaining cost = transaction cost

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III. Strong Coase theorem

Critics 3: Entry

Theoretical criticism:

> If changes in entitlement, revenue increases:
>
> Increase in RoR => entry => increase in output.

Answer:

> Entry requires asset – from whom? Purchase…
>
> How the prices of assets change? (higher demand!) => higher prices
>
> Capitalisation: the increase in price = increase in NPV of future income

Transaction costs are zero = all asset is property (has owner) – no free asset

- **Entry requires purchase**

Transaction costs are zero = perfect capitalization

III. Strong Coase theorem

Critics 4: Endowment effect

Theoretical criticism:

> Willingness to pay = willingness to accept? (E and R is the same if bargain starts form 0 or starts from q^1?)
>
> Prospect theory: different utility if an asset is sold or bought.
>
> The function from q^1 (compare to functions from 0)
>> E upward, R downward shift:
>
> Equilibrium may change!

Answer:

> The DEFINITION integrates a new condition: real-income (wealth) effect

Stigler:
IF
1. No transaction cost
2. *no wealth effect*,
then (in a competitive market) social and private marginal cost are equal
(same as „… whatever is in the law, free bargaining leads to the same outcome)

IV. Does the law matter?

- Weak Coase theorem: whatever is in the law, free bargaining leads to efficiency
  - Law affects distribution.
- Strong Coase theorem: same outcome.
- Coase: Coase theorem is irrelevant.
- No world without transaction costs.
- Issue: How to reduce the inefficiency caused by transaction costs?

IV. Does law matter?

How to reduce?

1. Design legal institutions, rules, standards:
- Coasian answer: reducing costs of transaction, bargaining.
- Posner/Hobbes solution: efficient decisions in court (for the party with higher stake)
  - But Coase article (The Problem of Social Cost): same conclusion!

2. Property or liability rules
- Maybe the most important issue in a legal system: how to protect entitlements!
- Basic issue: When use others' assets, when infringe others' rights?
  - Property rule: Only if permission
    - If not: damages (compensation for loss) **+ punishment**
  - Liability rule: always if compensation ex post.
- Choice: based on the cost of ex ante bargain vs. cost of (exact) judicial decision (including cost of mistakes).

Practice

Discussion

What is law?

- Natural law vs. Positive law
  - Against positive law theory: law always made by the state?
    - Legal institutions without state, legislation – e.g. classic Roman law: the former law (based on customs) collected by Justinian
  - Against Natural law: from where, how can it be learnt? Same in different cultures – what differences can be tolerated?
- Hayek's (Anglo-Saxon) view: law is not made, but discovered.
- Judge Holmes: law = predicting judicial decision.
  - *Law = world of judges*
  - *Common law vs. Continental (civil law)?*
    - *Civil law – standards, application of rules.*
    - *Civil law – the judge must decide in all (including very difficult) situations*
    - *Moreover: only in different situations – simple cases (very predictable decision): why cost of procedure?*

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Discussion

Efficiency in law: why question? Why require to be efficient?

- Efficiency = Pareto-efficiency, Kaldor-Hicks
- Posner's theory: the legal system becomes more and more efficient – in the log run efficient institutions survive
  - Common law: inefficient decisions are challanged more often in court – efficient institution is more likely to survive
  - Common law: judges build decisions on efficiency rather than on fairness, justice, because efficiency has a clear definition
- Consistency, predictability
  - Strict logic (dogmatics)
- Issue or simple application of rules?
  - Progress in law – new law cannot be based on former.
  - Lack of clarity of law (i.e. main reason of suits) – no clear, pure answer in law, need other theory
    - E.g. „reasonable man standard" – how the „reasonable man" would behave in a similar situation?

Revision

- ## What are transaction costs?
  - Contract theory
  - Property rights theory
- ## Main issues according to O. E. Williamson?
  - Idiosyncrasy
  - Complete Contract
  - Opportunism
- ## How to reduce them – according to Williamson?
  - Forms of contracts, governing methods
  - Coasian solution vs. Posner/Hobbes theory
  - Property vs. liability rules

Warm up question for property law

- Who is the owner of an asset?
- Definition in economics?
  - Has *residual rights* and *residual income.*
  - Residual rights: the right to decide is not delegated (voluntarily or because of legal requirement) to others
  - Residual income: income not required to be given to others (by contract or because of legal requirement)
    - It can be negative: no right to require compensation from others.

Discussion

- Who is the owner of a company in an economic sense?
- The main characteristics of the owner:
  - Residual right
  - Residual income
- Management:
  - Residual right – must make decisions when rights are not delegated to others
  - Residual income:
    - Shareholder „expected" revenue.
    - The management may manipulate the accounts – to create the expected amount of profit (but no more).