

LAW AND ECONOMICS

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LAW AND ECONOMICS

Week 9

Liability systems

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Structure of the week

Goal: enhancing the basic model

- I. Sequential models: the last mover knows the negligence of the first mover.
- II. Judicial mistakes:
 - a) False assessment of loss.
 - b) False setting of the level of due care.
- III. Causation
- IV. Risk-neutrality vs. risk-avoidance
- V. Joint tortfeasors – vicarious liability

I. Sequential models: last clear chance

- Risk-bearer test always? Counter-examples:
 - E.g. attractive danger – typically: children
 - Children trespass and drown in a lake, which is not fenced. Fence is more expensive than avoidance of trespass; BUT: for children (avoiding the attraction of a lake) is more expensive
BUT *United Zinc & Chem. Co. v. Britt* – the lake cannot be seen from the road – not an attractive danger.
 - E.g. sequential models.
- *Sequential models*: x acts latter (e.g. car accident and doctor)
- Expectations:
 1. IF $y_0 < y^*$, then $x = x^*(y_0) \Rightarrow x^*(y_0) > x^*(y^*)$
 2. Optimal incentive for y: $y = y^*$

Solution 1: simple negligence

Reasonable man standard – due care = social optimum
(if other party acts optimally): $x^D = x^*(y^*)$ and $y^D = y^*(x^*)$

- ad 2. OK
- BUT, if second person knows that first was negligent? Due care = no liability

$$\begin{array}{ll} x + p(x, y_0)L & x < x^*(y^*) \\ x & x \geq x^*(y^*) \end{array}$$

- Private optimum: to fulfil the court's expectation – suboptimal level of care:

$$x^{opt} = x^D = x^*(y^*) < x^*(y_0)$$

Solution 2: Last clear chance

The second actor: higher expectation if first negligent.

Changing standard: $x^D = x^*(y)$ and $y^D = y^*(x^*)$

- ad 1. OK: IF $y_0 < y^*$, then $x^{opt} = x^D = x^*(y_0)$ because

$$\begin{array}{ll} x + p(x, y_0)L & x < x^*(y_0) \\ x & x \geq x^*(y_0) \end{array}$$

- BUT: ad 2.? Incentives for first? Strategic thinking: he knows negligence – higher care

$$\begin{aligned} & y + p(x^*(y), y)L \rightarrow \min \\ & \frac{\partial p}{\partial y} L + \frac{\partial p}{\partial x} \frac{\partial x^*}{\partial y} L = -1 \end{aligned}$$

- Care: two effects: direct vs. indirect (lower care – higher care by second mover) => suboptimal
- Only if negligence is not strategic (shifting the cost to the second mover) :
 - helpless, inattentive

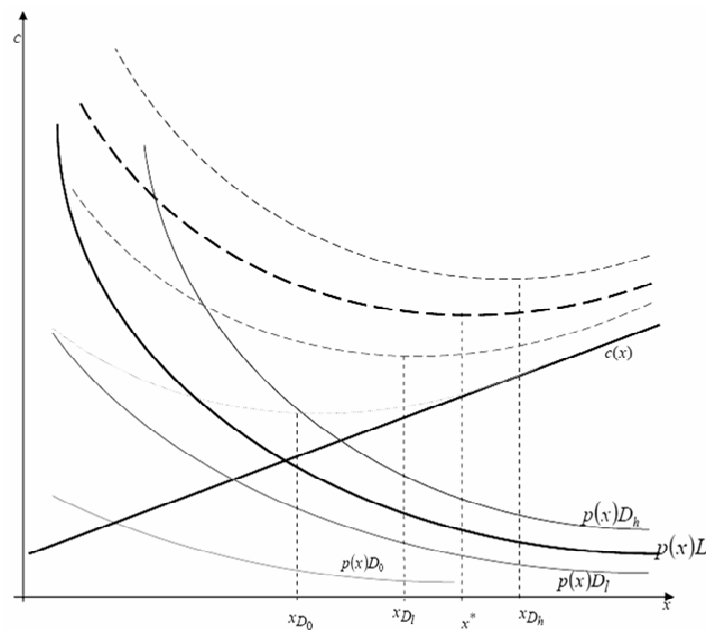
II. Judicial mistakes

Until now: assumption that no mistakes in decision

- Damages = loss ($D = L$)
 - Hand rule is applied accurately: reasonable man standard = socially optimal care
- $$x^D = x^*$$

1. Mistake in assessing damages

- *Strict liability: personal incentive depends on damages.*
- *Negligence – IF due care unaltered (exogenous).*
 - *IF damages are high => due care (BLUE MODEL): x^**
 - *IF damages are low, but at minimum higher than due care => due care (RED MODEL): x^**
 - *IF damages are low AND at minimum LOWER than due care => reduced care (GREEN MODEL): x_{D_0}*



2. Mistakes in assessing due care

- Reasonable man standard – idiosyncrasy does not matter
- *Hand rule:* $B < PL$ $c(x' - x) < [p(x) - p(x')]L$

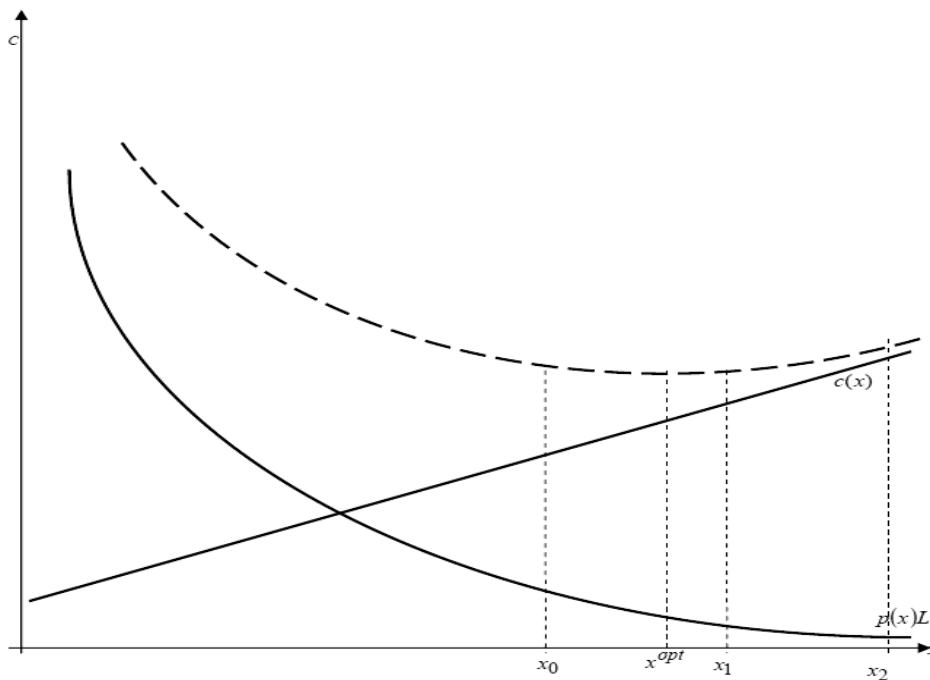
- Due (expected) care too low (small cost of care; x_0):

$$\begin{array}{ll}
 c_i < c^R & x_i^{opt} > x^D \\
 c_i x + p(x)L & x < x^D \\
 c_i x & x \geq x^D
 \end{array}$$

- Due (expected) care too high (high cost of care):

$$c_i > c^R \qquad x_i^{opt} < x^D$$

- 1. small increase (x_1) $c_i x_i^{opt} + p(x_i^{opt})L \geq c_i x^D \Rightarrow x^D$
- 2. large increase (x_2) $c_i x_i^{opt} + p(x_i^{opt})L < c_i x^D \Rightarrow x_i^{opt}$



III. Causation

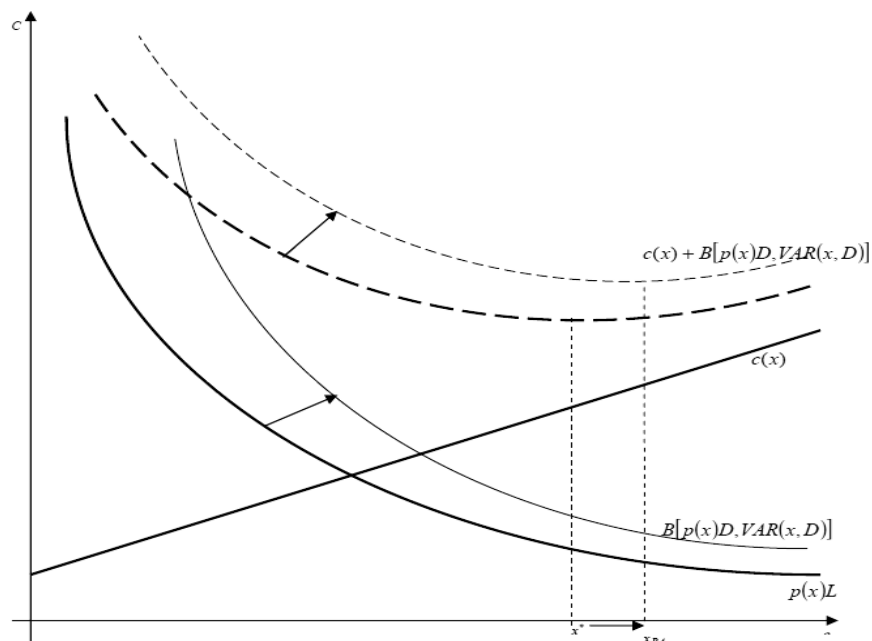
- **But-for test:** but for the action, there would have been no loss.
 - Economic analysis: loss even if due care – damages only for extra loss

$$D(x) = p(x)L - p(x^R)L$$
 - Discontinuity of cost function disappears.
 - Personal mistakes: as under strict liability.
 - Paradox: even less care: e.g. if higher speed, no accident (because earlier there).
- **Proximate causation**

$$p(x) - p(x') > T$$

IV. Risk

- Until now: risk-neutrality
 - See: expected private cost functions, etc.
- What if risk-avoidance?
 - Expected cost is lower than expected disutility.
 - Accident with the same probability is now worse because risk (variance) considered.
 - Effects: as if higher damages.



V. Joint tortfeasors, vicarious liability

- Joint tortfeasors: more than one injurers
- Legal problems: several only or 'joint and several'
 - Several only: everybody pays his share of damages
 - Joint and several: full damages from anybody
 - If joint and several: contribution? In second trial, cost (damages) sharing with others?

Negligence rule: Was everybody negligent?

Two injurers: three situations:

- Only tortfeasor A is negligent – he pays damages.
- Only tortfeasor B is negligent – he pays damages
- Both are negligent – shares of damages: $s_1: s_2$, where $s_1 + s_2 = 1$

Suppose, due care is socially optimal – i.e. minimum cost

Expected costs:

Care	Injurer A	Injurer B
x^*, y_0	x^*	$p(x^*, y_0)D + y_0$
x_0, y^*	$p(x_0, y^*)D + x_0$	y^*
x_0, y_0	$s_1p(x_0, y_0)D + x_0$	$s_2p(x_0, y_0)D + y_0$

If only one party is negligent: he will pay higher damages than under due care – incentive to take due care.

BUT

Can both be negligent? Is it possible?

Only if:

$$s_1p(x_0, y_0)D + x_0 < x^* \quad \text{and} \quad s_2p(x_0, y_0)D + y_0 < y^*$$

But (by definition): $s_1 + s_2 = 1$ and x^*, y^* imply minimum cost,

Consequently:

$$p(x_0, y_0)D + x_0 + y_0 > p(x^*, y^*, z^*)D + x^* + y^* > x^* + y^*$$

Intuition: both know the other has an incentive to take due care and will be negligent only if he expects the first party to be also negligent. Optimum at minimum cost!

Vicarious:

- *Known injurer,*
- *but suit against someone else and*
- *defendant requires contribution (full damages) from injurer (indemnity).*
- Economic model: alternative care
 - If one of them takes due care – the other's optimum is not take care
E.g.. $p(x + y)D + c_1x + c_2y \rightarrow \min c_1 < c_2$
 - If $x + y < r^*$, both can be defendants,
 - But second suit for compensation.
 - Example: (*Muth v. Urricelqui*) landscaping was not well done – suit against contractor (rather than the agent responsible for landscaping);
second suit between contractor and agent.
alternative ways to take care: good work (landscaping) vs. control – good work is cheaper
- *Intuition: optimal incentive for injurer with smaller cost of care (in the second suit: eventually he pays)*

BUT why not direct suit against tortfeasor with smaller cost of care? Why allow a suit against the other (vicarious) party?

- Respondeat superior: easier, cheaper to sue the boss or employer – he knows who is the direct tortfeasor.
- Compensation: implicit insurance – no need to regulate in contract (transaction costs are reduced).
- Why for an employee but not for a contractor? Control is easier.
- If no incentive effect (i.e. increasing control) – maybe risk allocation between victim and employer.
 - But vicarious liability assumes that employer is always the better risk-bearer.

Practice

Problem

The government privatises a firm and signs a privatisation contract with the new owners. This contract states that the price of the firm must be paid in five years. During this period, the government may denounce the contract provided it returns that part of the price which has already been paid.

In the fourth year (before the price is fully paid), the government initiates a modification of the contract. The firm should not reduce the number of workforce until the tenth year. If it did, it would have to pay 20 times the legal minimum wage for every single eliminated job.

The firm accepts the proposed modification. In the seventh year, a new EU regulation introduces more stringent quality requirements, which raises the price of the firm's product and therefore the quantity that can be sold. The firm starts to downsize its workforce.

However, the firm is unwilling to pay the damages specified in the contract (20 times the minimum wage). It argues that (1) the performance of the contract would create an undue burden on the firm because market circumstances have changed; (2) it was forced to sign the modification of the contract; and (3) the national government could have known at the time of the modification of the contract that EU regulations would change unfavourably for the firm.

What would be an efficient court judgement?

Solution

- Economic impracticability – why? (e.g. threat of bankruptcy)
- Risk-bearer test?
 - Cheaper gathering information (government?),
 - cheaper prevention (???)
 - diversification (government).
- Duress
 - idiosyncratic investment (hold-up),
 - risk-taking (risk allocation) in original contract.

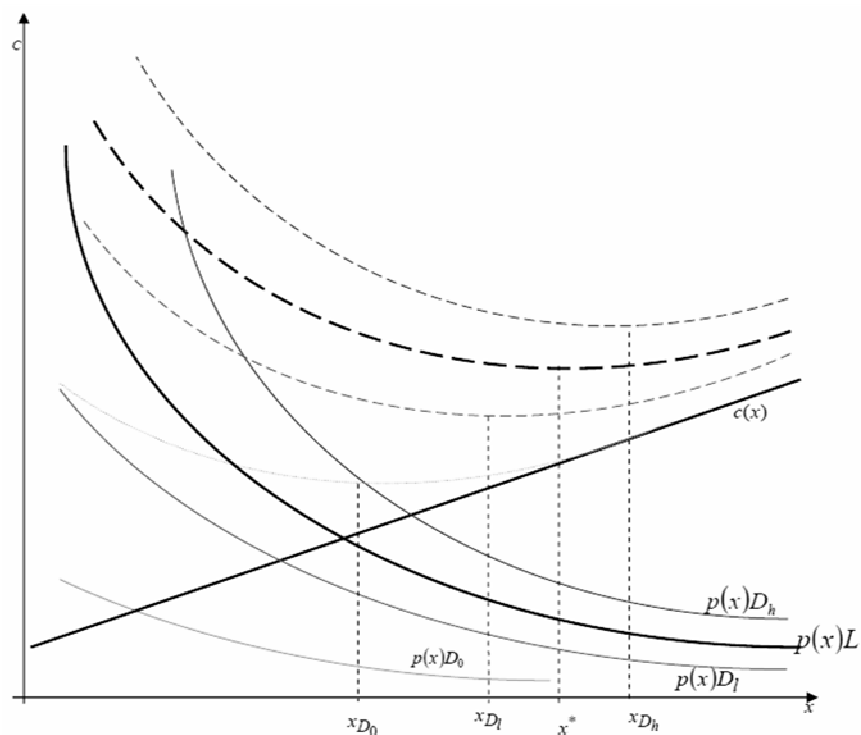
- Liquidated damages
 - higher than loss (what is loss?),
 - constraint on modification.
- Information problem: unilateral
 - property + information in the same hand,
 - incentives (purposeful gathering, etc.).

Revision

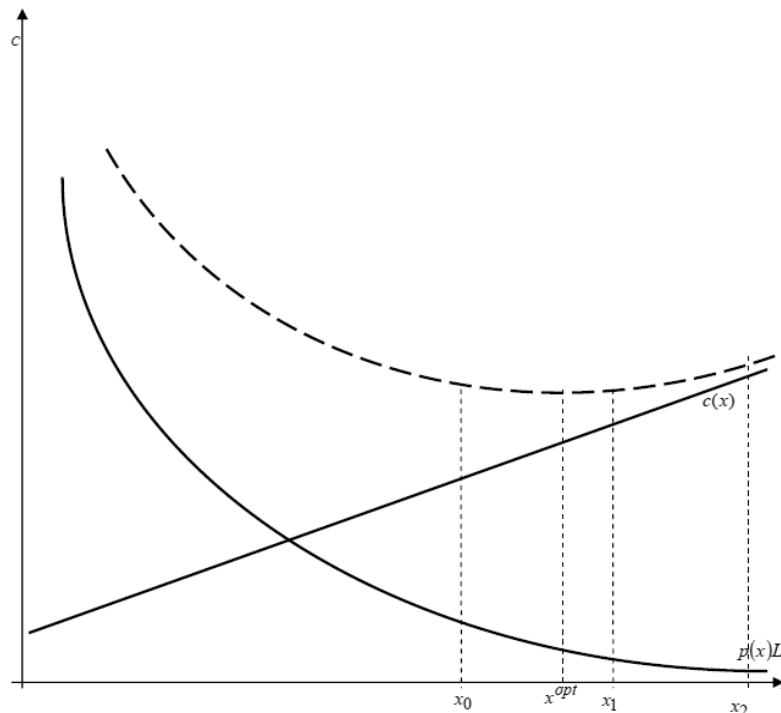
What kind of judicial mistakes?

- Mistakes in assessing the level of damages
- Mistakes in assessing due care

Effects of incorrect damages?



Effects of mistakes about due care?



Revision

What changes if injurer is a risk-avoider?

What is causation? Models?

- But-for test
- Proximate causation

What is the sequential model? Requirements? What are the effects of...

- ...simple negligence?
- ...last clear chance?

What is the joint tortfeasor problem? What are the relevant liability systems? Can both parties be negligent under a rule of compensation?

Problem

An agent signs a contract with a financial institution (e.g. a bank), which entitles him to act on behalf of the institution: seek out customers and sign contracts with them. His name card as well as the deposit certificates he gives to the customers contain the name of the financial institution. The agent receives 8 million Forints from a customer and promises to place it in an account of the financial institution. When the customer notices that this has not actually happened, he demands the money back. However, the agent does not return it. The victim himself acknowledges that when he gave the money to the agent he did not know exactly what kind of investment he was making. Moreover, he does not deny that the owner of the account to which he transferred his money was owned clearly by the agent rather than the financial institution. Nevertheless, he demands that the financial institution, in whose name the agent acted, compensate him for his damages. What would be an efficient court judgement? What aspects of the case should be considered by the court?

Solution

- Basic problem: vicarious liability.
- Ability to control the agent?
- Risk-bearer test?
- Contributory liability system: effect on risk-bearer test...

Revision

- What is loss?

