



Law and Economics (2847)
Winter term 2011/12
Final Exam

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Economics of Business and Law

Below you will find two problem sets, A and B; each of them is worth up to 60 points. Make sure that you have received 3 pages: This page, as well as page 2 and 3 on one sheet of paper.

Remarks on **problem set A**: Give answers exclusively in your working sheets; leave a margin of 3 cm. Notes on this exercise sheet and undecipherable scribbling will be disregarded during the grading.

Remarks on **problem set B**: Give your answers on the second exercise sheet, and add your name and your student-ID to it. Submit your working sheets as well as the second exercise sheet. Answering a question correctly will bring you two points, whereas giving a wrong answer will result in a deduction of two points. Questions that remain unanswered yield zero points.

Master's degree students (60 min) may choose to solve either problem set A or problem set B. Grading will be solely based on one single problem set (so make sure to clearly cancel out the irrelevant answers in case you solve problems from both sets; if you submit answers to both problem sets, we will grade set A only). To pass the exam, you need at least 31 points (in set A) or at least 16 points (in set B).

Diplom students (120 min) are required to solve both problem sets A and B. To pass the exam, you will need at least 47 points (negative scores from set B will be treated as zero points).

The usage of textbooks, lecture notes, dictionaries, or programmable pocket calculators is not permitted. Use the terminology and the mathematical tools presented in the lecture and the tutorial; make clear how you derive your results.

Problem Set A

Problem 1 - (30 points)

Among 100 unknown artists, there is just one whose work will later turn out to be successful. Assume that his work can be resold for €100,000 while the other pieces will be worthless.

- Derive the maximum amount an art dealer offers for one piece if he discounts future income with $d=0.7$ and is unable to predict the actual quality. **(5 points)**
- Derive the minimum willingness to accept of an artist who is equally uncertain about his actual success (and discounts with $a=0.5$); derive the cooperation rent and the symmetric Nash bargaining solution. **(10 points)**
- Show that the introduction of a resale royalty (denoted r) decreases the initial income AND the expected lifetime income of the artist. **(10 points)**
- Explain verbally (in general as well as with respect to the above example) why law reforms may have "counter-intentional" effects. **(5 points)**

Problem 2 - (30 points)

Consider a market for used cars. The supply side consists of three car types (Q_1 , Q_2 , Q_3), differing in their quality level. Potential buyers value Q_1 -types at 850, Q_2 -types at 440, and Q_3 -types at 100, while the sellers value them at 550, 300, and 90 respectively.

The a priori distribution of quality types is known to be 50% for Q_1 and 25% for both Q_2 and Q_3 , but the actual quality type of a specific car is not observable for the buyer.

- Derive the equilibrium price at which cars are traded on the market. Which types of cars will be sold? **(15 points)**
- Evaluate your findings with respect to efficiency. **(5 points)**
- Discuss potential institutional means to separate the quality segments of the market. How are sellers of the different quality types affected? **(10 points)**



Problem Set B Name: _____ Student ID-number: _____

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Please mark clearly on this exercise sheet whether you think the respective statement is true or false. Additional explanations are not taken into account.

Submit this exercise sheet together with your (unused) working sheets. If you have started answering problem set A in your working sheet and wish your replies to set B be graded, clearly cancel out what you have written in the working sheets.

		true	false
01)	Under a negligence rule, a risk-neutral offender has incentives to choose efficient care if the negligence standard is set efficiently.		
02)	A warranty may serve as an effective quality signal in situations characterized by asymmetric information if the owner of the hidden characteristic can produce the signal at lower costs than a non-owner.		
03)	While positive analysis deals with the description and explanation of human behavior, normative analysis serves to predict it.		
04)	The Nash Equilibrium in the anarchy dilemma game is Pareto-inefficient.		
05)	“Expectation damages” is a legal remedy that induces the buyer to make efficient reliance investments.		
06)	Choosing the “property rule” as transaction structure makes sense if transaction costs are low.		
07)	Even if a “droit de suite” would increase the life-time income of a risk-averse artist, it may decrease the artist’s utility from this income.		
08)	Transaction costs are the costs of finding a transaction partner, specifying a contract and enforcing the contract terms.		
09)	Negative externalities usually lower efficiency, whereas positive externalities enhance efficiency.		
10)	Zero transaction cost is a sufficient condition for the neutrality result of the Coase theorem.		
11)	While the “polluter pays principle” is an empty formula, the “least cost avoider principle” offers an efficiency-based approach to the allocation of property rights.		
12)	“Restitution damages” is the only legal remedy that creates efficient incentives for breach of contract and for reliance investments.		
13)	The Latin principle “pacta sunt servanda”, according to which contracts always have to be enforced, can implement inefficient behavior.		
14)	According to the marginal Learned-Hand-Formula, an offender acts negligently if the marginal damage avoidable through an extension of his care level exceeds its marginal costs.		



15)	If a Seller's valuation V_S of an item he owns is lower than a potential buyer's valuation V_B of this item, then setting a transaction price $p \in [V_S, V_B]$ is a sufficient condition for the transaction to take place.		
16)	In terms of efficiency, the type of liability rule that generates least primary costs performs best and should be used to fill contractual gaps.		
17)	If a law-maker lacks information about the parties' costs to avoid harm, then he can use the liability rule to implement efficient behavior.		
18)	The initial assignment of property rights has a distributional effect even if transaction costs are low.		
19)	In one-sided care cases, a social planner seeking to maximize total welfare of all parties involved is indifferent between "strict liability" and "negligence with efficient care level".		
20)	A Kaldor-Hicks improvement is a Pareto improvement if losing parties are actually paid a compensation.		
21)	The classic reasons for regulation are natural monopoly, product homogeneity, externalities, or asymmetric information ("market failure").		
22)	If only one side can contribute to avoiding an accident, then the efficient care level, minimizing the sum of expected damage and care cost, will be chosen when the offender is held strictly liable.		
23)	Property rights have to be universal, exclusive and transferable; otherwise the property rights system does not guarantee efficient resource allocation.		
24)	Employing restitution damages ("return to sender") usually causes lower tertiary costs than expectation damages.		
25)	If contract law requires the breaching party to pay expectation damages, then the incentives for breach of contract are inefficient.		
26)	According to the principle of "methodological individualism", an outcome is the consequence of human decision making (individual, interactive) influenced by law.		
27)	If both potential parties of an accident can contribute to avoiding it, then shared liability always implements inefficient care levels.		
28)	According to the multiplier principle, punitive damages should decrease with the probability of judicial error.		
29)	The efficiency principle, according to which a property right should go to the person who values it most, does not imply that only the rich enjoy resources.		
30)	The transaction structure should be arranged such that the sum of primary, secondary, and tertiary costs is minimized.		