

Practice set 1

The firm



This problem set contains material for the relevant lab. Lab teachers are expected to provide sufficient guidance for the entire problem set. It is in the teacher's discretion to select the most representative tasks to solve instructionally in every lab. For the rest of the tasks, methodology, hints and final answers will be provided. Students are expected to work on practice problems, however, they are not required to submit written solutions. It is a non-negotiable policy in this course to not provide handouts with the solutions of practice problem sets.

1. Firm A produces an intermediate good used in the production of a final good by firm B. There is only one firm like B but many firms like A. Costs per firm are

$$C_A = I + V, \quad C_B = p$$

where I is an initial specific investment, V is an avoidable fixed cost and p is the price of the intermediate good.

- (a) Assume that A and B sign a contract to cooperate. Find the benefit to each side from the contract assuming that the price of the final good is denoted by p_F .
- (b) If the contract is broken by one of the two companies, both will incur costs. $S < I$ is the salvage value of investment and $T > 0$ the termination costs that firm B has to incur. Does A or B have an incentive to break the contract?
- (c) Show that this contract will define $p = I + V$.
- (d) Show that A can hold B up.
- (e) Show that B can also hold up.

Handout 1 – 2015

2. As you enter the HSE campus at Shabolovka Ulitsa, on your right hand immediately after the entrance gate, there is an old building. This used to be a residential building. Today it may be vacant and in bad condition but its real estate value is quite significant. This is the only structure in campus that does not belong to HSE. The owner knows that HSE would be very interested in buying this building since it could use it in several ways. He also understands that no one else (including himself) would be interested in owning a house that is entirely surrounded by someone else's property. Negotiations between HSE and the owner drag for years.

- (a) Model this problem and derive the equilibrium outcome.
- (b) Comment about the efficiency of the solution you got.

1st Module Examination – 2013

3. Describe the transaction costs-property rights approach to the theory of the firm, including a careful examination of the key elements of this approach and discussion of the basic theoretical predictions. What is the empirical support for this approach?

UoL: 2004 za/zb / 2008 za

4. A survey has found that small UK firms that produce customized components for UK manufacturers often do not rely on formal contracts for their relationship. Furthermore, over half of the firms claim that the technology used to support the relationship should be upgraded but this investment is not being made. Using the theory of transaction costs, describe why underinvestment often occurs in these relationships.

UoL: 2015 za /2015 zb 1a

5. One of the definitions of firm describes it as a long-term relationship. What is the key reason that makes it important for the relationship of two independent capitalists to be long-term?

Module 1 Test – 2014