

Econ 4715 – Seminar 4

The remaining seminars will be run by Daniel Bergsvik – please submit finished solutions by Monday around 12:00 (lunch) either by email (to both danielbergsvik@gmail.com and ole.rogeberg@frisch.uio.no) or directly to the Frisch Centre (leave in Daniel’s mail shelf at the Frisch Centre if he is not present).

The groups should be prepared to talk about the questions they’ve answered (clarifying etc. if necessary), but they will not need to prepare a presentation to the class.

Part 1: Shirking and efficiency wages

Group: Vidar Ringstad, Anja Levarsen, Vidar Bøckmann

1. Interpret all the terms in the set P of levels of utility and profit attainable with self-enforcing contracts (equation 48 on page 344).
2. Interpret/explain equations 45 and 52. Use these to show how the optimal wage profile in the shirking model is linked to the outside wage over time
3. What is the key difference between the shirking model of Shapiro and Stiglitz and the one discussed above?
4. Derive the labour market equilibrium in the Shapiro and Stiglitz model and explain figure 6.6

Part 2: Tournaments

Group: Linda Midtømne, Susanne Nilssen, Merilin Kolk, Turi Loland, Jørn Jacobsen, Bjørn Gran

1. The tournament model in subchapter 4.1 of chapter 6 is presented as an attempt to explain why wages follow “a hierarchical logic, largely independent of the productivity of labor.” Imagine that you are talking to an intelligent non-economist from the labor department who wants to understand the mechanism involved, and explain it in words.
2. Derive the optimal effort of the agent in the tournament model.
3. Show how the optimal effort of the agent changes when there is an opportunity for rent seeking
4. Assume no possibility of rent seeking and show what tournament design the Principal will find it optimal.
5. Why, according to the textbook, should we expect large organizations to have bigger promotions for a smaller share of workers?
6. Taking a completely different perspective on the matter of promotion: A humorous principle was proposed in the late sixties called “The Peter Principle.” Download “The Peter Principle revisited” by Pluchino, Rapisarda and Garofalo from the journal *Physica A* (2010) – for instance using scholar.google.com .
 - a. Describe briefly the Peter principle and the simple mechanism behind it. (Use Wikipedia or other online sources)

- b. Pluchino et al distinguish between two different kinds of competence transmissions (e.g. the extent to which people's competence is different for different jobs at different hierarchical levels). What are these?
- c. The paper discusses how overall organizational efficiency in a simulation model changes over time as a result of how workers are promoted. What are the three promotion strategies pitted against each other in the paper? What are the results?
- d. What are key differences in the assumptions that make Pluchino et al's result so different from that of the textbook?
- e. Pluchino et al won an "Ig Nobel" prize, a humorous prize usually given to silly or trivial research. To what extent does the Peter Principle seem relevant to evaluating different promotion schemes?

Part 3: Labour demand

Group: Julian Eckert, Rainer Kolsdey, Silje T. Knudtzen, Ine Blaas

1. Derive and explain an expression 19 in chapter 4
2. Imagine that a minimum wage was enacted. What effects would this have
 - a. In the short run
 - b. In the long run
 - c. For unskilled labor
 - d. On hours worked and number of employed
3. Adjustment costs
 - a. Explain the concept of adjustment costs
 - b. What is the difference between the adjustment cost analysis assuming a deterministic and stochastic environment?
 - c. What are the main results so far from the literature?