Written Exam at the Department of Economics summer 2020

Incentives and Organizations

Final Exam

15 June 2020

(3-hour open book exam)

Answers only in English.

The paper must be uploaded as <u>one PDF document</u>. The PDF document must be named with exam number only (e.g. '127.pdf') and uploaded to Digital Exam.

This exam question consists of 4 pages in total

This exam has been changed from a written Peter Bangsvej exam to a take-home exam with helping aids. Please read the following text carefully in order to avoid exam cheating.

Be careful not to cheat at exams!
You cheat at an exam, if you during the exam:

- Copy other people's texts without making use of quotation marks and source referencing, so that it may appear to be your own text. This also applies to text from old grading instructions.
- Make your exam answers available for other students to use during the exam
- Communicate with or otherwise receive help from other people
- Use the ideas or thoughts of others without making use of source referencing, so it may appear to be your own idea or your thoughts
- Use parts of a paper/exam answer that you have submitted before and received a passed grade for without making use of source referencing (self plagiarism)

You can read more about the rules on exam cheating on the study information pages in KUnet and in the common part of the curriculum section 4.12.

Exam cheating is always sanctioned with a warning and dispelling from the exam. In most cases, the student is also expelled from the university for one semester.

The exam consists of four questions, which in turn consist of several parts. Please note that, because of differences in the workload needed to answer the different questions, different questions may have different weights in determining your overall exam result. Your answers can be short and concise, but your arguments must be explained sufficiently in your own words.

Good Luck!

Question 1:

It is often argued that compensation schemes do not only affect workers' performance incentives, but that they can also have "selection effects" (or affect "worker sorting").

a) Explain the difference between the two effects. Discuss when and how individual risk preferences influence the importance of the two effects. Do worker's risk preferences affect the overall firm performance? Why / why not? *Base the discussion on the standard principal-agent model and empirical examples discussed in the lecture.*

b) Explain how firms should optimally respond to the presence of risk averse workers when offering work contracts. What could be an alternative way to increase firm performance when workers are risk averse?

c) Consider the study "Performance Pay and Productivity" by Lazear (AER 2000). Explain how he disentangles the incentive and the selection effect of performance pay. Discuss the underlying identification assumptions and potential violations that would threaten the internal validity of the results.

d) The findings by Lazaer indicate that pay-for-performance increases the firm productivity by about 44% relative to a fixed hourly wage. Many firms, however, still use fixed wage schemes. Why could such a strategy nonetheless be optimal from a firms' perspective? Briefly outline three reasons that we discussed throughout the course and explain the underlying mechanisms.

Question 2:

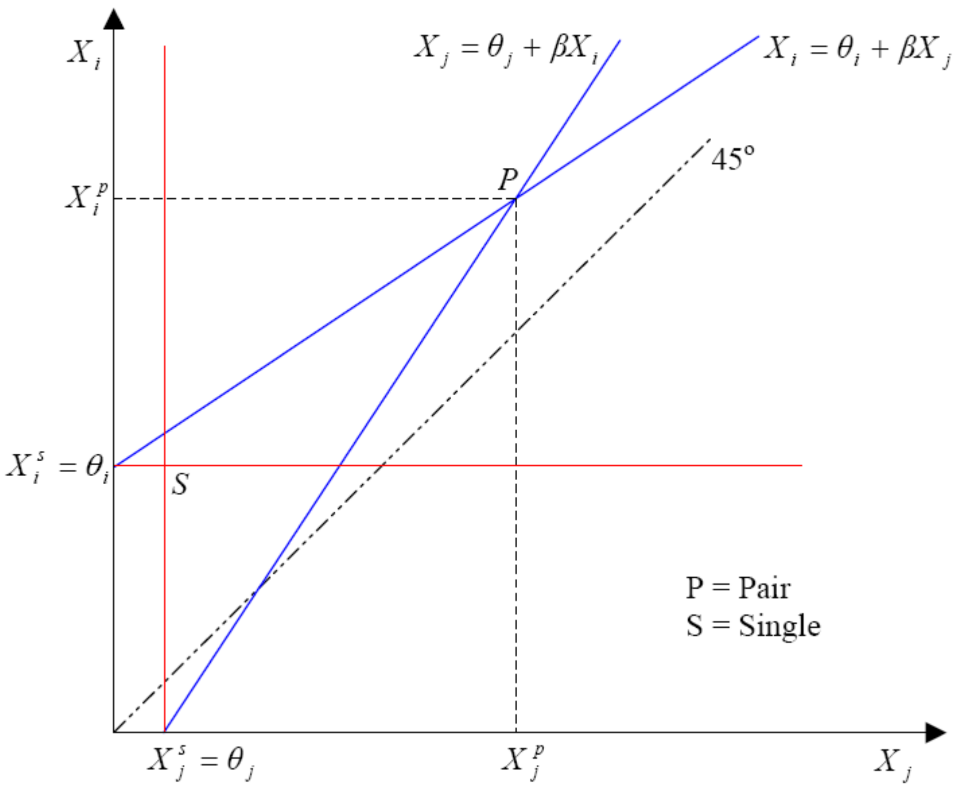
a) A "self-enforcing relational contract" is an informal agreement, which ensures that the contracting parties do have incentives to stick to the agreement even when outcomes are non-verifiable. Discuss at least three factors that contribute to the feasibility of relational contracts and explain why they are important.

b) Explain why infinite settings facilitate the emergence of relational contracts. When are relational contracts also feasible in finite settings? Explain the key differences based on an empirical example that we discussed during the course.

c) Discuss the following statement: *"Unemployment as a disciplining device is a necessary pre-condition for relational contracting".* Do you agree with the statement? Why / why not?

Question 3:

a) Consider the following figure from the study "Clean Evidence on Peer Effects" by Falk, A. and A. Ichino (JOLE 2006) and explain based on the graphical example how peer effects could affect workers' performance. How does the presence of a peer effect influence the output difference between the two players?



b) The paper "Inequality at work: the effect of peer salaries on job satisfaction" by Card, D., A. Mas, E. Moretti, and E. Saez (AER 2012) reports the results from a field experiment conducted at the University of California.
   - Briefly summarize their basic setup and
   - Explain the empirical strategy.

c) The information treatment increases the use of the *Sacramento Bee Website* by about 28 percentage points. Why is this information important for the interpretation of the further results?

d) In the paper, the authors propose two alternative models that could impose a relationship between the information treatment and the job satisfaction of workers.
   - Explain the intuition behind the two competing models and
   - Discuss to what extent the empirical results support one or the other.
   - Is there an empirical test that would allow further disentangling the relevance of the two models? What additional information (or variable) would be required?

Question 4:

a) Some psychological theories have argued that extrinsic rewards crowd out intrinsic motivation. Why is it difficult to identify the crowding-out effect? Describe *at least three* factors that complicate the empirical identification.

b) We have discussed a number of studies that analyzed the crowding-out effect of extrinsic incentives. Consider two of these studies and describe how the authors of the studies have tried to tackle the challenges you mentioned in part a). To do so, describe the empirical strategies of the papers and explain how the authors use their approach to analyze crowding-out effects. Do the studies differ in the degree to which they can address the different challenges?

References

Card, D., A. Mas, E. Moretti, and E. Saez (2012): “Inequality at Work: the Effect of Peer Salaries on Job Satisfaction”, American Economic Review, 102(6): 2981-3003.

Falk, A., & Ichino, A. (2006). Clean evidence on peer effects. *Journal of Labor Economics*, *24*(1), 39-57.

Lazear, E. P. (2000): “Performance Pay and Productivity”, American Economic Review, 90(5), 1346-1361.