CONTRACT THEORY
Organization

- Instructor: Prof. Dr. Philipp Weinschenk
- E-mail: weinschenk@wiwi.uni-kl.de
- Office: 42-428

If possible, the course will be held at the university (please check the website for recent information)

If this is not possible, I will provide additional material including some videos

There will be one oral exam lasting around 20 minutes for every student

Every student can choose between several dates for the exam during the whole year (the dates will be published later)
1 Introduction
Motivation

- In many situations a person is doing something for another person.
- We henceforth say that an agent is doing something for a principal.
  - It is common to speak of a male agent and a female principal.
- The parties’ interests are often in conflict.
  - E.g., the employer wants that the employee works hard, but the employee wants to be lazy.
- Without such conflicts we can stop – both parties simply agree what is best and no problem arises.
- We thus concentrate on situations where there are conflicts of interests.
Information asymmetries

- We also suppose that there are information asymmetries.
- Information asymmetries can arise due to the action the agent chooses (e.g., how much effort the agent invests) or due to the knowledge the agent has (e.g., in an insurance context, whether he is a good driver or not).
- The former problems are called moral hazard problems and the latter adverse selection problems.
- In moral hazard problems there are hence information asymmetries concerning the agent’s action.
- In adverse selection problems there are hence information asymmetries concerning the agent’s type.
With adverse selection, parties have asymmetric information already when they conclude the contract.

With moral hazard, parties have symmetric information when they conclude the contract, but there is asymmetric information afterwards.

Without information asymmetries the parties could determine the optimum and fix this in a contract, no matter whether there is a conflict of interests or not.
Examples for P-A relationships

- A supplier delivers a good to a customer
- Doctors serve patients
- Lawyers advise clients
- Banks lend to borrowers
- Insurance companies insure individuals
- Politicians act on behalf of voters
- Craftsmen work for clients
- Regulators control firms
- Tenants cultivate land for landlords
- Employees supply labor to employers
- Managers act on behalf of firms
Why does the principal hire the agent?

- If the principal does not hire the agent, there is no conflict.
- But the principal then has to exert the task herself.
- It is often the case that the principal is not able (due to the lack of abilities or knowledge) or not willing (e.g., she may not have enough time) to exert the task.
- Principal-agent relationships thus result from specialization.

"Wherever there are gains to specialization there is likely to arise a relationship in which agents act on behalf of a principal, because of comparative advantage."

Hart and Holmström (1987, p. 75)
Contract theory

- Contract theory explores what inefficiencies/conflicts arise in principal-agent relationships and how we can solve or at least mitigate them.
- By means of enforceable contracts, parties are able to align their interests.
- In game theory, we explore how players behave in a given game.
- In contract theory, we explore how we can design a game/contract such that players behave in the desired way.
References


Remarks on references

- Laffont and Martimort (2001) and Salanié (2005) are nice textbooks on contract theory
- In this course, we have to neglect many interesting topics; for an interesting overview, see the textbook of Bolton and Dewatripont (2004)