

Asymmetric information and common agency¹

1 The setting

- Several principals
- One or several agents. Assume one.
- Each Principal contracts with the agent.
- The agent has private information over his type θ and the distribution is known by the Principal.
- Suppose the agent obtains allocation x_1 from principal 1 and x_2 from Principal 2, then his utility is $u(x, \theta)$ where $x = (x_1, x_2)$.
- The payoff of principal i is $v_i(x, \theta)$ (assuming there are externalities).

2 The timing

- Date 0: type θ is drawn
- Date 1: each principal offers a contract c_i as a function of the messages she expects to receive from the agent.
- Date 2: The agent chooses messages m_1 and m_2 to report to each Principal.
- Date 3: contracts are implemented.

Each Principal observes only the message she obtains from the agent.

3 Failure of the revelation principle

- The type of the agent in the relationship with one Principal consists in (i) his private information parameter θ (ii) AND the information on the contracts offered by the offer Principal.
- We need a larger type space. This is the idea of the Universal message space in Epstein and Peters (1999).
- Alternative to the revelation principle is the delegation principle (can restrict the strategy space of each Principal to a coarser space). See Martimort and Stole (2002).

¹This document is intended to provide only a few take-home messages. It is not a substitute for attending class and taking notes.