

Cheap talk and commitment in Bayesian games

Ongoing research project

Françoise Forges (Université Paris-Dauphine) and Ulrich Horst (Humboldt University)

We investigate to which extent the players of a one-shot Bayesian non-cooperative game can agree on a committed joint decision (namely, sign a “contract”) after having exchanged information through cheap talk. The main differences with previous approaches to contracts in Bayesian games (e.g., Myerson (1991), Celik and Peters (2011, 2015), Peters and Szentes (2012)) are that communication between the players is not mediated and rejection of a contract is still possible after information has been exchanged.

Simple examples show that, even if there are two players, with a single uninformed one who does not care for the other - informed - player’s action (generalized sender-receiver game), no jointly agreed decision may be achievable under our restrictions.

Sufficient conditions are nevertheless given for the existence of allocations that can be implemented by means of (perfect Bayesian) equilibria involving cheap talk and unanimous approval. A crucial use is made of results that were originally established for repeated games with incomplete information by S. Sorin (1983), R. Simon, S. Spiez and H. Torunczyk (1995, 2008), J. Renault (2000) and R. Simon (2002). The approach reminds thus of the one of Aumann and Hart (2003), who show how repeated games can be used to analyze the effects of cheap talk before the non-cooperative play of a Bayesian game.

References

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