Abstract

We consider a private-values buyer-seller problem with multiple objects. Valuations are binary, i.i.d., and such that the problem does not have a trivial solution. We characterize mechanisms that span the Pareto frontier. These have a very simple form: Call the seller "good" if he has a low valuation and "bad" if he has a high valuation. Call the buyer "good" if he has a high valuation and "bad" if he has a low valuation. For each object, if both say "bad" -- there is no trade. If both say "good" -- they trade. If agent j says "bad" and the other says "good", they trade only if the number of good objects in j's announcement is above a certain threshold (at the threshold itself they trade with probability between 0 and 1). The thresholds depend on the weights given to each agent in the designer's objective function: as she leans more towards one of the agents, his trading threshold weakly decreases, and the rival's weakly increases.