Weak Cartels at Standard Auctions
By Daniele Condorelli

ABSTRACT

I study collusion without side payments at any single standard auction. Bidders are risk neutral and have symmetric and independent private values. I assume that at the interim stage they can sign binding agreement on how to play the auction. I ask if (and how) bidders can coordinate their bidding behavior to achieve an outcome that interim Pareto dominates the non collusive equilibrium of the auction.

My main result states that playing the auction competitively is interim incentive efficient if and only if the density of bidders' valuations is strictly decreasing. When the density of valuations is not strictly decreasing I show how to construct a collusive agreement that interim Pareto dominates the competitive outcome. Collusive agreements work by requiring cartel members to select their bids within a restricted set of possible bids.

My results highlight the importance of bidders' beliefs for the feasibility of collusive agreements without side payments: roughly speaking, competition cannot be improved upon if everyone thinks that everyone else is weak; collusion is profitable, instead, when everyone believes that everyone else is strong.