

Strategic uncertainty and information structures in coordination games (with Mike Szkup)

We study experimentally how changes in the information structure affect behavior in coordination games with incomplete information (global games). We find two systematic departures from the theory: (1) the comparative statics of equilibrium thresholds and signal precision are reversed, and (2) as information becomes very precise subjects' behavior approximates the efficient equilibrium of the game, not the risk dominant one. To organize our findings we extend the standard global game model to allow for biases in the perception of strategic uncertainty (sentiments) and study how they relate to fundamental uncertainty. We test the extended model by eliciting first and second order beliefs and find support for the biased-belief mechanism: subjects are over optimistic about the actions of others when the signal precision is high and over pessimistic when it is low. Thus, we identify a bias inherent to strategic environments and propose a novel mechanism to better understand coordination problems under incomplete information.