

Essays on Behavioral Economics and Fisheries:
Coordination and Cooperation

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Abstracts

This thesis consists of three self-contained chapters:

Chapter 1: Cooperation under risk and ambiguity

The return from investments in public goods is almost always uncertain, in contrast to the most common setup in the existing empirical literature. We study the impact of natural uncertainty on cooperation in a social dilemma by conducting a public goods experiment in the laboratory in which the marginal return to contributions is either deterministic, risky (known probabilities) or ambiguous (unknown probabilities). Our design allows us to make inferences on differences in cooperative attitudes, beliefs, and one-shot as well as repeated contributions to the public good under the three regimes. Interestingly, we do not find that natural uncertainty has a significant impact on the inclination to cooperate, neither on the beliefs of others nor on actual contribution decisions. Our results support the generalizability of previous experimental results based on deterministic settings. From a behavioral point of view, it appears that strategic uncertainty overshadows natural uncertainty in social dilemmas.

Chapter 2: Coordination effects of common pool resource management - empirical evidence from the Swedish shrimp fishery

The effect of property rights on incentives for restoring resource value in common pool settings is well established. However, given the case-specific nature of socio-ecological systems, there is little empirical evidence of the comparative advantage of different sets of rights. This study uses a quasi-natural experiment in the Swedish shrimp fishery to evaluate two co-existing property rights regimes: territorial user rights in fisheries (TURF) and co-management, respectively. By linking dock-side harvest prices with trip data and exploiting the spatial and temporal variation, I establish the causal effect of the regimes on revenues and tease out underlying mechanisms. The results show that the TURF regime has a large and positive effect on revenues whereas the co-management has a slight negative effect. Differences in effort coordination and investments in sustainable practices are the main mechanisms behind the results. All measures constructed, as well as all data exclusions and manipulations, are reported in the study.

Chapter 3: Who do you know? Transaction relations in the Swedish pelagic ITQ system

In fisheries, individual transferable quota (ITQ) systems are becoming an increasingly adopted management strategy to deal with fleet overcapacity. The system relies on transactions of the right to harvest a share of a capped fish stock between actors, to reallocate capacity from less to more efficient actors. If quota transactions are driven by factors other than differences in expected marginal rents, the system might lead to an inefficient redistribution of fishing capacity. This study examines the determinants of transaction volumes of permanent and lease quotas between actors using unique panel data on the Swedish pelagic ITQ system. The findings indicate that quota trade is highly spatially determined and that quota ownership becomes increasingly concentrated over time. In the lease market, more trade is carried out between actors who have occupied a central position on the quota market, or who share a common relation with a third party. The introduction of the landing obligation at the end of the period of the study, is associated with an increase in quota trade, which diversifies the choice of trading partners and hints at previous system inefficiencies. All measures constructed, as well as all data exclusions and manipulations, are reported in the study.

JEL Classification: C91, D64, D81, H41, Q5, Q22, D7, L2, Q28, P48

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