

Title: **Economic Efficiency and Sector Allocations in the New England Groundfish Fishery: A Comparison of Sector and Non-Sector Vessel Performance**

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Abstract: The case for assigning private property rights in fisheries has been thoroughly studied but has led to a new debate over whether rights should be allocated to groups or individuals. The New England groundfish fishery provides a rich context in which to study this question. Beginning in 2004, several dozen vessels (out of more than 1400 vessels with commercial groundfish permits) formed a cooperative, or sector, and were granted a group allocation of cod, one of the 15 managed groundfish species, to manage and exploit as a group. Most existing regulations and effort controls remained in place for the harvest of other species. The sector established a governing board and hired a manager who helps coordinate operations and enforces sector rules. This study uses detailed data from every trip taken by a vessel with a commercial groundfish permit for four years before and four years after sectors formed in order to compare performance of sector and non-sector vessels. A simple model of the property rights theory of the firm is used to predict the extent to which these sector vessels behave like a single firm, or independent firms competing internally. A stochastic frontier is estimated to test for changes in technical and allocative efficiency. Biannual data on innovation patterns is used to compare technology adoption patterns. I also examine whether and how sector vessels reallocated effort both within the groundfish fishery and in other fisheries in which these vessels held permits.