

Title: **Can Catch Shares Prevent Fisheries Collapse?**

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Abstract: Recent reports of fishery collapse paint a gloomy picture of the ocean's future; perhaps 100% of fisheries from the world's large marine ecosystems (LMEs) will be collapsed in just 40 years. While poor fisheries governance is now widely regarded as the cause, bioeconomic theory and anecdotal evidence suggest that rights-based □dedicated access privileges□ (DAPs) can provide individual incentives for sustainable, profitable harvest which is less prone to collapse. We compile a database of fisheries institutions for all 11,218 fisheries in LMEs from 1950 to 2003 and match it with FAO catch statistics for the same fisheries over the same time period. Numerous models increasing in statistical rigor allow us to control for temporal effects, selection effects of DAPs, ecosystem effects, and even species and genus effects. We find that introducing a DAP reduces the probability of collapse by about 7 percentage points, a substantial reduction given that by 2003 about 27% of fisheries were collapsed. Perhaps even more significantly, we find that introducing a DAP does not just slow collapse, it reverses it. The estimated annual reduction in probability of collapse ranges from 0.21 to 0.41 percentage points.