

## Patterns of Gear Substitution in Norwegian Trawl Fishery

**Authors :** Tannaz Alizadeh Ashrafi

**Abstract :** Seasonal variability in biological and ecological factors together with relevant socio-economic determinants affect the choice of fishing gear, frequency of its usage and decision about gear conversion under multi-species situation. In order to deal with the complex dynamics of fisheries, fishers, constantly, have to make decisions about how long to fish, when to go fishing, what species to target, and which gear to deploy. In this regard, the purpose of this study is to examine the dynamics of gear/ species combination in Norwegian fishery. A comprehensive vessel-level set of data for the main economically important species including: cod, haddock, saithe, shrimp and mixed catch have been obtained from the Norwegian Directorate of Fisheries covering the daily data in 2010. The present study further analyzes the level of flexibility and rationality of the fishers operating in the trawl fishery. The results show the disproportion between intention of the trawl fishers to maximize profitability of each fishing trip and their harvesting behavior in reality. Discussion is based on so-called maximizing behavior.

**Keywords :** trawl fishery, gear substitution, rationality, profit maximizing behavior

**Conference Title :** ICBENDM 2018 : International Conference on Behavioral Economics and Nonrational Decision Making

**Conference Location :** Lisbon, Portugal

**Conference Dates :** April 16-17, 2018