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Title: An Estimable Dynamic Model of Recreation Behavior with an Application to Great Lakes Angling

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Abstract:

This paper develops the travel cost method by proposing a more dynamic model that is absent from other applications of this method. This considers factors that contribute to a recreator's decision-making process, such as how previous trips affect the decisions on where and when future visits are taken or what time of year the trip is being considered. This is a more realistic estimation of recreator behavior that is a noteworthy shortcoming that other authors have noted in their own previous studies. The various factors that influence the decision to fish is used in the estimation approach are described in the first part of the paper, which include the expected catch, the weather, the time-cost of fishing, and the time since the last trip. In the second half, the decision-making process of fishing club anglers that visit Lake Michigan of the coast of Southern Wisconsin is analyzed.

The results include several variables and the resulting change in value based on the increase of one unit of that variable. The model shows potential in estimating these dynamic variables. Some of these variables have a high level of error and one of the expected changes in value has the wrong sign. The authors admit some shortcomings in estimating the true dynamic nature of these variables, but the model proves effective in applying values that are statistically significant based on the information collected from the fishing clubs in Wisconsin.