Title:

Choice-experiments for wind-farms location and Nature Conservation in Southern Chile: a maximum likelihood approach to utility in the WTP-space

Authors:

Claudia Aravena
Department of Economics. Mernyma Program. Universidad de Concepcion, Chile

Peter Martinsson
Department of Economics, Goteborg University, Goteborg, Sweden

Riccardo Scarpa
Department of Economics, Waikato Management School, University of Waikato, Private Bag 3105, Hamilton, 3240, New Zealand

Abstract:
Location of windfarms is a controversial NIMBY-prone issue, but few studies systematically investigate people's preferences for alternative locations and other external effects of windfarm design.
We present results from a choice experiment using a split design to examine the effect of positive and negative price change on choice. Implied WTP estimates are derived under fully correlated taste variation from both utility-space and WTP-space preference specifications using Maximum Likelihood methods. Results highlight the sensitivity of distributions of welfare measures to utility specifications as well as distributional assumptions. As found elsewhere, WTP-space utility fits the data worse, but implies lower variance and hence more plausible WTP distributions. Negative price changes imply a systematically lower mean WTP, but provide better fit. Preference ordering is sensitive to price changes and, in the case of negative price changes, also to the assumption of a correlation across taste intensities.