



Università
di Genova

DIEC DIPARTIMENTO
DI ECONOMIA

Economics and Quantitative Methods PhD Seminar Series

“Implicit discount rate and willingness to accept wind turbines in one’s backyard”

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Abstract

We conduct a contingent valuation study to assess the acceptance of a NIMBY (Not In My Backyard) project, specifically focusing on the installation of wind turbines. We use a split sample approach in which we vary the time horizon of the compensation (lump sum, 5 years, 10 years) to infer the implicit discount rate. Unlike most studies in the domain eliciting willingness to pay to avoid environmental degradation, we focus on willingness to accept (WTA) for accepting the installation. In a single-binary choice, respondents state whether they would accept or reject the wind farm installation in their municipality for a specific level of compensation. Incentive compatibility is warranted by informing respondents that their choices may affect the siting decision for a new wind farm of a large French energy company (script agreed with a real energy company). Our sample comprises French households only from rural and suburban areas (N=1520). Our analyses (from reduced form and structural models) reveal substantial heterogeneity in responses. About one-third of respondents are identified as protesters, rejecting the installation regardless of the compensation level. Among the remaining respondents, we observed strong heterogeneity in WTA, depending on support for wind energy, spanning from 0€ to 8500€. Finally, depending on the model specification, we obtain different estimates of the discount rate, which are lower for a 5 years time horizon (between 11% and 25%) and higher for 10 years time horizon (between 43% and >100%). Moreover, the implicit discount rate is lower among homeowners and respondents not planning to move. Our findings suggest that the implicit discount rate, besides reflecting intertemporal preferences, also captures uncertainties related to receiving the compensation, caused for instance by longer payment horizons and relocation plans.

Tuesday 26 March - h 14.30

Aula Estremo Ponente