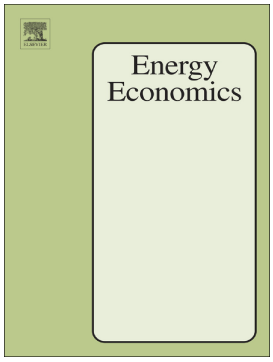

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Accounting for Elimination-by-Aspects Strategies and Demand Management in Electricity Contract Choice

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Abstract:

In this paper, we report on a discrete choice experiment aimed at eliciting Swedish households' willingness-to-accept a compensation for restrictions on household electricity and heating use during peak hours. When analyzing data from discrete choice experiments it is typically assumed that people make rational utility maximizing decisions, i.e., that they consider all of the attribute information and compare all alternatives. However, mounting evidence shows that people use a wide range of simplifying strategies that are inconsistent with utility maximization. We use a flexible model capturing a two-stage decision process. In the first stage, respondents are allowed to eliminate from their choice set alternatives that contain an unacceptable level, in this case restrictions on the use of heating and electricity. In the second stage, respondents choose in a compensatory manner between the remaining alternatives. Our results show that about half of the respondents choose according to an elimination-by-aspects strategy, and that, on average, they are unwilling to accept any restrictions on heating in the evening or electricity use irrespective of time-of-day. Furthermore, considering elimination-by-aspects behavior leads to a downward shift in elicited willingness-to-accept. We discuss implications for policy.

JEL codes: C25, Q41, Q51, R21

Keywords: Choice experiment; Electricity contract; Willingness-to-accept; Household electricity use; Elimination-by-aspects; Two-stage decision

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