ON THE RELEVANCE OF ECONOMIC EXPECTATIONS, IDEOLOGICAL IDENTIFICATION, AND SOCIAL VALUES AND NORMS: A MICRO-ECONOMETRIC ANALYSIS

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Overview

One of the currently most challenging and disputed national climate and energy policy measures worldwide is the German energy transition towards renewable energies ("Energiewende"). The discussion of energy production, energy policy, and energy transition has been controversial for a long time in Germany. It already began with the opposition against the use of nuclear energy in the 1970s. After the nuclear catastrophe of Chernobyl in 1986 a majority of the German population agreed to phase out nuclear energy. One important step in the German energy transition was the electricity feed-in law of 1991, which made investments into renewable energies more attractive. In 2000 the Renewable Energy Law pushed the energy transition forward and especially led to increasing investments in the wind power and solar sectors. Finally, the nuclear catastrophe of Fukushima in 2011 speeded up the energy transition process. It especially led to the support of nuclear phase-out until 2020 by the conservatives-liberal government which supported nuclear power generation for a long time.

Policy measures can certainly only be successful in the long run if they are at least accepted by the majority of the population. While the nuclear phase-out is strongly supported by most German citizens, other directions of the energy transition like the subsidization of renewable energies are more controversial across different population groups. Against this background, this paper extensively examines the acceptance of the German energy transition. The basis of our empirical analysis are representative data from a computer-assisted telephone survey that was conducted between March and Mai 2015 among more than 2000 respondents in Germany. We do not only consider the general acceptance of or opposition to the energy transition, but especially analyze the most important individual measures of the energy transition, namely the nuclear phase-out, the financial support of the expansion of renewable energies, the support of research to improve the efficiency of conventional gas and coal-fired power plants, the financial support of the expansion of electromobility, the financial support of saving energy in households and industry, and the energy grid expansion. The agreement to the single policies is measured by five ordered response categories ranging from "totally disagree" to "totally agree", respectively.

Our econometric analysis examines several factors that might determine the acceptance of the different energy policy measures. Besides common socio-demographic and socio-economic variables like age, gender, or income, we especially consider the relevance of expected economic consequences by the energy transition. We construct an indicator that relates the expected hypothetical price developments for electricity, natural gas, heating oil, and gasoline or diesel within the next five years without the measures of the energy transition with the corresponding expected price developments on the basis of the currently decided measures of the energy transition. In addition, we consider the relevance of ideological identification (i.e. conservative, liberal, social, and green identification) and of other social values and norms, such as environmental awareness and the political and religious environment.

Methods

Micro-econometric analysis with univariate and especially multivariate binary and ordered probit models.

First results and conclusions

Our preliminary empirical analysis shows that the distinction between the individual measures of the energy transition is relevant since the estimated effects differ across these energy policy measures and across several explanatory factors. In line with former studies on the demand for environmental goods, our preliminary empirical analysis additionally reveals that not only economic expectations, but also ideological orientation and social values and norms matter for the acceptance of individual energy policy measures. These estimation results can be used by policy makers in order to increase the support of the entire energy transition as well as individual controversial energy policy measures.