THE IMPACT OF INFORMATION POLICIES AND LOYALTY PROGRAMS ON CONSUMER SWITCHING CHOICES IN ENERGY RETAIL MARKETS

Hester Huisman, University of Groningen, +31 50 36 37065, h.m.huisman@rug.nl
Evert de Haan, University of Groningen, +31 50 36 32802, evert.de.haan@rug.nl
Machiel Mulder, University of Groningen, +31 6 3103 5729, machiel.mulder@rug.nl
Jaap Wieringa, University of Groningen, +31 50 36 37093, j.e.wieringa@rug.nl

Overview

Consumer inertia in retail energy markets is a major barrier for the energy transition as it creates challenges for policy makers to reach climate-policy objectives while ensuring safe and affordable energy for all consumers (European Commission et al., 2021; Mulder, 2023). Many European residential consumers are hesitant to actively compare different energy offers or switch energy retailers when a better offer is presented (Defeuilley, 2009). Prior research identifies search- and switching costs as one of the key causes of consumer inertia (Farrell & Klemperer, 2007; He & Reiner, 2017). Therefore, European policy makers implemented information transparency enhancing policies, but the results are mixed across countries and overall switching rates remain low (ACER & CEER, 2022). While policy makers aim to encourage consumer switching, energy retailers are motivated to increase customer loyalty, as customer retention is much more profitable than customer acquisition (Gupta et al., 2004; Natter et al., 2015). Hence, there seems to be a contradiction in objectives regarding consumer switching behavior between policy makers and energy retailers. The different objectives of policy makers and energy retailers may result in divergent effects on search- and switching costs for consumers. It is important to understand how these two actors affect consumers’ decisions to understand how to encourage active consumer participation for the energy transition. Therefore, this study investigates how information transparency policies and loyalty programs jointly influence consumers’ energy contract preferences. In an online discrete-choice experiment, we examine how energy retailers and regulators affect consumers preferences for attributes and their decision to switch. Through a unique experimental design, we overcome selection bias in prior research and are able to isolate the effects of actions of the regulator and the energy retailer.

Methods

We examine the effects of standardization and loyalty programs on consumer preferences through an online survey on the platform Prolific. A sample of 2000 European respondents are selected via quota sampling to be representative of EU households. The survey consists of three parts, an explanation, a discrete choice experiment (DCE) and survey questions on the respondents characteristics, knowledge and attitudes. In the explanation, the respondents are told that their current energy contracts expires and they have to make (hypothetical) decisions between two contracts, of which one is a retention offer and one is an offer of another retailer. All respondents are given the same hypothetical reference contract and expected gas and electricity consumption for their household. In the DCE, the two offers differ in the attributes tariff, source mix (coal, wind, solar, etc.), brand of the retailer, and contractual length. Afterwards, the respondents are asked to fill in a survey with questions regarding their socio-demographic characteristics, energy literacy, attitudes and current energy contract and consumption.

We capture the effects of the regulators’ standardization policies and the energy retailers’ loyalty programs in a between-subject experimental design. We create three treatment groups, where the first treatment group has the treatment “standardization”, the second treatment group has the treatment “loyalty program”, the third treatment group has both treatments, and the fourth group is a control group without treatments. The treatment “standardization” affects the lay-out of the choice experiment of the participants. Within the treatment, the layout of the two options (retention offer and other retailer) are equal for the components of the tariff, including variable tariff, distribution, taxes, and total expected annual costs. This makes the two options easier to compare for respondents. The groups without the standardization treatment do not have a standardized layout of the components of the tariff and do not have a total expected annual costs component, which makes the options more difficult to compare. For the loyalty programs, the respondents are informed prior to the DCE that they are currently enrolled in a loyalty program at their current energy retailer. They currently have a “bronze” status and when they retain they move up to the “silver” status which provides them extra discount at the variable electricity tariff. Next to this information, the layout of the tariff in the DCE will specify “price including loyalty discount”, but are presented the same tariffs as the non-loyalty groups. The respondents who are not in this group are not informed about an enrollment of a loyalty program and do not have the specification “price including loyalty discount” on their retention offer. Hence, all respondents receive the same options with the same attributes and levels and only the layout of the options differ depending on their treatment group.

Through our between-subject DCE design, we can collect a lot of information per respondent and better distinguish the underlying preferences leading to energy decisions over a large sample size. Moreover, the experimental design
allows us to isolate the actions of the regulator and the energy retailer to better assess the causal effects of interventions instead of identifying correlations. Our random assignment of the treatments eliminates any selection bias where loyal consumers are more prone to join loyalty programs. A disadvantage of a DCE is that participants are subjected to hypothetical bias and strategic behavior. These biases can at least be partly overcome by designing the experiment in a way that it reflects real situations as closely as possible. Moreover, we deal with these biases through a “cheap-talk” survey design (Loomis, 2011) and by informing respondents that we use a large sample size.

We will estimate the unknown parameters in a logit model. We estimate the probability to switch which is the function of the offer’s attributes and the treatment group of the respondent. The parameters will provide information on consumers’ preferences for the different attributes and the treatment effects indicate how choices are affected by actions of the regulator and the energy retailer through switching costs. A latent class analysis allows us to compare the effects among different consumer segments and in different countries.

Expected results

We will conduct our survey in spring 2023 and we aim to present the results at the conference in July. The results will provide us information on consumers preferences for the different attributes and their probability to switch. In line with prior studies, we expect that the standardization treatment increases consumers’ willingness to switch (Hanimann et al., 2015) and loyalty programs to decrease consumers’ willingness to switch (Gärling et al., 2008). Moreover, these treatments can interact with the different attributes as standardization might make consumers more price elastic through reduced bounded rationality, or loyalty programs can increase consumers’ preference for renewable energy sources through increased trust (Dolšak et al., 2019). Moreover, we expect the latent class analysis to reveal different preferences and responses in line with prior research.

Preliminary conclusions

There are four possible conclusions from our research. The first conclusion would be that only the regulator’s actions affect consumer participation, the second conclusion would be that only the energy retailer’s actions affect consumer participation, the third conclusion that both affect consumer participation and the fourth that none affect consumer participation. These conclusions provide important insights for policy makers on how to encourage active participation: through information transparency policies or by steering actions of the retailer. The set-up of the experiment helps to clearly link our results to implementations for policy makers to encourage consumer activity to foster the energy transition.

References