

CONSUMER SWITCHING IN EUROPEAN ENERGY MARKETS

Jason Harold, Economic and Social Research Institute (ESRI) Dublin, Tel: +353 1 8632021, Email: jason.harold@esri.ie
John Cullinan, National University of Ireland, Galway (NUIG), Tel: +353 91 493996, Email: john.cullinan@nuigalway.ie
Seán Lyons, Economic and Social Research Institute (ESRI) Dublin, Tel: +353 1 8632019, Email: sean.lyons@esri.ie

Overview

A high level of consumer switching can be a desirable attribute of a well-functioning energy market, as it may be both an indication of the degree of choice available to the consumer and the ability of consumers to exercise this choice. Indeed, consumer switching is understood to play a key role in creating competitive energy markets, where consumers switch energy products or services based on differences in prices and quality. Since the 1990s the European Union (EU) has put in place legislation for Member States to deregulate and liberalise energy markets with the aim of reducing costs in the energy sector and having the reductions passed onto consumers through lower retail prices. For homogeneous goods such as electricity and natural gas, the main difference across providers is price. Competition is therefore the most important driver of this legislation for the restructuring of energy markets, and thus for it to be successful, it is important that consumers actively engage in switching to help maintain competitive pressure on energy providers.

Within this context, this paper aims to provide evidence for the different impacts on consumer switching in energy markets, and it differs from previous work in a number of significant ways. It presents, for the first time, results for two separate energy markets (electricity and natural gas) relative to a number of other different markets, as well as across a large number of different countries. It is unusual for studies of consumer switching behaviour to have access to such cross-market and cross-country switching data. Moreover, the analysis controls for a greater range of consumer attitudes to the market, including comparability across products, perceived ease of switching, degree of trust in the supplier, and consumer satisfaction in the form of whether they believe the market meets their expectations. Furthermore, unlike previous studies, the consumer switching models presented here also account for whether the consumer has complained about the product/service and to whom they have complained. This allows us to take into account service problems that are severe enough to cause consumers to complain. Finally, the pooled dataset also includes many consumers that were asked about more than one switching market at the same time, and this provides a suitable opportunity to consider evidence for the impact that switching in other non-energy markets has on switching in energy markets.

Methods

Using a pooled cross-section from four waves of a pan-European market monitoring survey involving a total of 674,819 observations, this paper explores the role of consumers' socio-demographic characteristics, together with their attitudes to the main features of the market, on the propensity to switch in energy markets across Europe. The analysis in this paper estimates a binary choice logit model for overall switching across 14 different European markets, as well as separate logit models for switching in both the electricity and natural gas markets in order to examine the various heterogeneous impacts on switching in the energy markets compared to the overall main model. In an extension to the analysis, a further model is estimated on a sub-sample of observations for energy consumers (both electricity and gas) who were asked about at least three switching markets simultaneously in order to provide evidence on whether switching in other non-energy markets influences switching in energy markets. Finally, separate country models are also estimated to compare the heterogeneous effects of the different influential factors on switching across countries.

Results

Consumer attitudes, whether in the energy markets or across all markets, are found to be significant factors for consumer switching behaviour. In reflecting the costs of switching, a consumer's belief that switching is difficult is associated with a much lower propensity to switch in this study, emphasising the obstacle that switching costs pose for switching activity. This reaffirms the findings reported by the majority of the literature and provides further evidence for policymakers to intervene to help influence these beliefs by making better information on switching more widely available. Limited comparability across energy providers is also revealed to be a key determinant for switching, with consumers that find it difficult to compare electricity or natural gas products and suppliers having a larger likelihood of switching. This could indicate a greater level of uncertainty for the consumer about their current

product or supplier because of the inability to make adequate comparisons, and it may lead to concerns among consumers that they won't necessarily choose the best alternative if they switch. Accordingly, there is a role for public policy to enhance comparability amongst products and suppliers by promoting the provision of comparison literature and websites. Indeed, another important finding of this research is that accessibility to the internet for private reasons is shown to have a significantly positive impact on switching for the energy markets and for all markets in general, with consumers that have no internet access found to have much lower odds of switching than those with access. This could highlight the internet's role as both an instrument for comparison and a mechanism for easy transition between suppliers.

In addition, a consumer's trust in, and satisfaction with, the energy supplier are important factors for consumer switching behaviour. The odds of switching for consumers with mistrust or strong mistrust in the energy supplier are twice as large as the odds for consumers with strong trust, while dissatisfied consumers who believe that the energy service is very poor at living up to expectation are found to be considerably more likely to switch compared to consumers who are satisfied that the product/service lives up to expectation very well. Consumer complaints, which reflect service problems experienced by consumers, are a strong predictor of consumer switching behaviour. The results show that the odds of switching are on average over five times larger for consumers when they complain to an official third party about a problem relative to the odds of switching for consumers who never complained. It is of particular note that these consumer attitudes and complaints are also estimated to have broadly the same effects in the model across all markets. This suggests that consumer attitudes and complaints are significant determinants of switching in all markets and not just unique factors for switching in the energy sector. To retain their consumer base and attract new consumers, it is clear that suppliers must ensure they maintain a high level of trust and satisfaction and to deal with any problems effectively so as to limit consumer complaints.

A consumer's socio-demographic characteristics have no significant association with switching in both the electricity and natural gas markets, while in contrast, the age and occupation of the consumer are found to be related to the decision to switch in markets overall. Younger consumers together with self-employed consumers are found to be more likely to switch, though older and retired consumers are found to be less likely to switch. More interestingly, the results from the sub-sample analysis indicate that for the energy markets, the odds of switching for a consumer who has switched in at least one other non-energy market are twice as large relative to the odds of switching for a consumer who hasn't switched in any other market surveyed. There could be two possible explanations for this; firstly, certain consumers are inherently more prone to being active consumers and are naturally motivated to switch or secondly, other experience in switching counts toward making further switching in other markets a more convenient and manageable exercise. From a policy perspective in the first instance, there is not much policymakers can do other than encourage consumers to be more active in the market, while in the second instance there is a great deal that can be done by public policy. One example is to give greater responsibility to competition authorities to help demonstrate the process of switching.

Across EU countries, some heterogeneity is found in the role of consumers' attitudes to the market on switching decisions. Attitudes towards the comparability of products is not a significant factor for the switching decision in the UK, Spain and France, whereas it is important for the other countries examined. Also, consumers' beliefs on the degree to which the market lives up to expectation matters less for switching in Ireland and the UK. Further heterogeneity is established in terms of the impacts of consumers' socio-demographic characteristics over countries. For example, older consumers are less inclined to switch in Ireland, Spain and France, while younger consumers are more likely to switch in the UK, Denmark and Lithuania. EU policymakers could learn much from the institutions and social norms in place in the individual Member States where some countries may have a distinct advantage over others in facilitating switching.

Conclusions

This paper shows that consumers' attitudes to the main characteristics of the market are highly significant factors in explaining consumer switching behaviour in both energy markets and in switching markets more generally in Europe. In contrast, consumers' socio-demographic characteristics are not significant factors for the switching choice in the individual energy markets, though they do contribute to the switching decision in markets generally, with age and occupation both found to play a role. Moreover, consumer complaints have the largest effect on consumer switching among the factors examined, while switching in energy markets is also significantly associated with switching in non-energy markets. Finally, there is strong evidence of heterogeneity across EU Member States in the effects of consumers' socio-demographic characteristics and attitudes on consumer switching.