

Households Choice of Electricity Retailer

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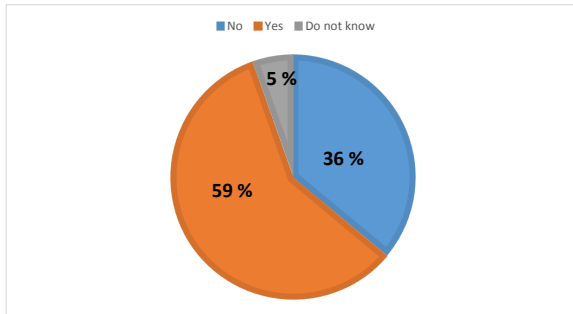
Motivation

In Norway a new Energy Act was introduced in 1991

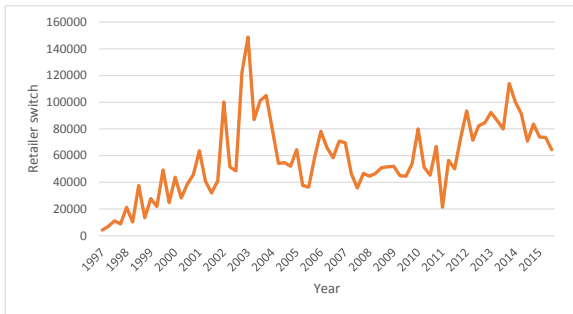
- Functional separation of retailing and grid services
- Retail monopoly rights were removed
- Households were free to choose electricity retailer
 - Switching charges eliminated in 1997
- All customers assigned to default contract and retailer

Aim: Ensure efficiency in production, distribution, and use of electricity

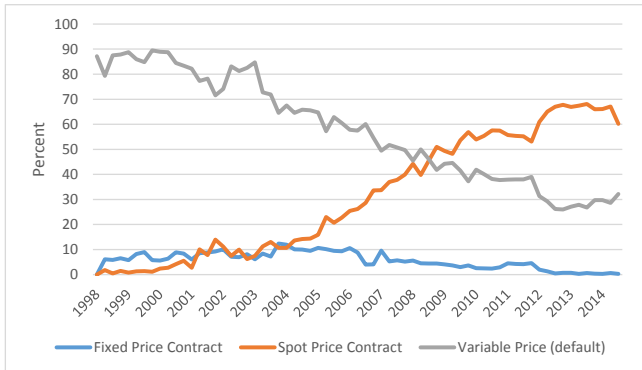
Have households switched electricity retailer?



Retail switching activity over time



Preferred contract over time



Status

- One segment of the retail market is functioning well with active consumers
- The switching volume increased in the beginning, but not any longer. Thus, two groups:
 - i) an active group searching and switching for new retailer and contract
 - ii) a passive group staying with the incumbent
- This is not according to a well-functioning electricity market initiated by the new Energy Act.

Problem statement

- What is the situation in the Norwegian market after more than two decades since liberalizing the market?
- The aim of this study is to find key factors determining (explaining) households switching behavior

Consumer inertia

- Consumer inertia in the purchasing behavior of consumers confers market power to the firms
 - Search costs
 - Switch costs

- There are potential gains from switching

Survey Data

- Survey data collected by the Norwegian Water Resources and Energy Directorate (NVE) in 2013
- 1108 respondents

Survey designed to get an insight about households:

- 1 Adjustments in the power market
- 2 Knowledge and awareness of own electricity use and energy efficiency
- 3 Individual preferences and attitudes related to searching for price information

Model

- Model the decision to switch as a binary choice problem

and include

- Socio-economic factors
- Psychological and attitudinal factors
- Factors related to economic insight and awareness
- Choice of variables are in part informed by theory and in part by past studies

Estimation results

Table: Multivariate probit regression for probability of switching

Variables	Full model		Final model	
	Std.error	P	Std.error	P
Single invoice	0.114	< 0.001	0.112	< 0.001
High degree of loyalty	0.105	< 0.001	0.101	< 0.001
Rural	0.105	0.058	0.196	0.043
East Central Viken	0.105	0.036	0.245	0.013
Age	0.004	0.039	-0.012	0.001
Single male	0.186	0.679		
Basic education level	0.181	0.837		
Housing	0.137	0.835		
Strong environmental concerns	0.100	0.344		
AMS	0.105	0.299		
Low temp. setting	0.099	0.082		
Persons in household	0.047	0.13		
Costs	0.130	0.73		
N		984		1021

Policy Implications

- The functional separation of network activity and retailing has not been sufficient in securing a competitive retail electricity market
- For policy makers it is of great importance to encourage further development towards targeting advantages inherited by incumbent retailers

Conclusion

- Non-economic factors seem to be of main importance in understanding reluctance to switch
- Loyalty is highly significant in sustaining consumer inertia
- Switch costs seem to outweigh search costs in determining households switch decision

Thank you for your attention!

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