

Technical Appendix to  
**CONSUMER CHOICE AND COMPETITION POLICY:  
A STUDY OF UK ENERGY MARKETS**

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ECONOMIC JOURNAL, vol. 115 (October), pp. 949–968

**Appendix:**

Table A1  
*Variable Descriptions*

Variable name	Description
<i>Age</i>	Respondent's age in years
<i>Awareness</i>	1 if respondent answers yes to the question 'In your area, are you able to switch gas supplier?', 0 otherwise
<i>Bill savings available</i>	Difference, £, between current monthly bill and alternative bill that would have to be paid if supplied by cheapest supplier, based on range (low, medium, high) of consumption levels, and current payment method
<i>Bill size</i>	The monthly equivalent amount of a customer's current bill in £
<i>Changed bank</i>	1 if respondent has changed bank in the last 12 months, 0 otherwise
<i>Changed car insurance</i>	1 if respondent has changed company providing car insurance in the last 12 months, 0 otherwise
<i>Changed house insurance</i>	1 if respondent has changed company providing house insurance in the last 12 months, 0 otherwise
<i>Consider switching</i>	1 if respondent was considering switching at the time of the interview, 0 otherwise.
<i>Direct debit customer</i>	1 if gas payments are made by direct debit, 0 otherwise
<i>Disability</i>	1 if member of household receives disability benefits, 0 otherwise.
<i>Ease of switching</i>	1 if the ease with which switching supplier is not an important factor in deciding whether to change supplier, 0 otherwise.
<i>Educational attainment</i>	1 if respondent has completed compulsory education only, 0 otherwise
<i>Elapsed time of competition</i>	Number of months since competition was introduced in the area where respondent lives
<i>Expected time to switch</i>	1 if estimated time required to change supplier is less than an hour, 0 otherwise
<i>Housing tenure</i>	Data not employed within our sample, since all are owners
<i>Importance of supplier reputation</i>	1 if incumbent's reputation is a very important factor in deciding whether to change supplier, 0 otherwise
<i>Importance of savings</i>	1 if the level of savings offered are a very important factor in deciding whether to change supplier, 0 otherwise
<i>Income</i>	Gross yearly personal income of respondent in £, divided by 10,000
<i>Low income dummy</i>	1 if gross personal income is less than £10,000, 0 otherwise

Table A1  
*Continued*

Variable name	Description
<i>Missing bill value dummy</i>	1 if respondent has not provided information about the size of their most recent gas/electricity bill, 0 otherwise
<i>Non-BT customer</i>	1 if telephone services not provided by British Telecom, 0 otherwise
<i>OAP household</i>	1 if household comprises Old Age Pensioners only, 0 otherwise
<i>Population density in area</i>	Thousand of residents per square Km, by enumeration district where the interviewee resides (source Census 1991)
<i>Prepayment meter customer</i>	1 if gas/electricity prepayment meter is installed in the house, 0 otherwise
<i>Reluctance of BGas/ supplier</i>	1 if respondent considers British Gas (electricity supplier) reluctant to match rivals' lower prices, 0 otherwise
<i>Risk attitude</i>	Qualitative scale measuring degree of risk aversion from 1 (most risk averse) to 7 (risk inclined).
<i>Switched gas supplier</i>	1 if respondent has changed gas supplier, 0 otherwise
<i>Unemployment</i>	1 if not in employment according to ILO definition, 0 otherwise

Table A2  
*Descriptive Statistics – Gas consumers (N = 692)*

Variable name	Mean	Std Dev	Minimum	Maximum
<i>Awareness</i>	0.863	0.344	0	1
<i>Switched gas supplier</i>	0.234	0.402	0	1
<i>Consider switching</i>	0.324	0.454	0	1
<i>OAP household</i>	0.090	0.286	0	1
<i>Elapsed time of competition</i>	10.3	6.507	6	32
<i>Elapsed time<sup>2</sup></i>	148.5	230.5	36	1024
<i>Prepayment meter customer</i>	0.0863	0.275	0	1
<i>Bill savings available</i>	4.006	3.171	0	22.8
<i>Reluctance of BGas <math>\times</math> Bill savings</i>	0.340	1.477	0	18.6
<i>Missing bill value</i>	0.12	0.325	0	1
<i>Importance of savings</i>	0.525	0.500	0	1
<i>Importance of supplier reputation</i>	0.383	0.486	0	1
<i>Expected time to switch</i>	0.189	0.392	0	1
<i>Ease of switching</i>	0.246	0.431	0	1
<i>Income</i>	1.4	1.419	0	15
<i>Income<sup>2</sup></i>	3.971	14.054	0	225
<i>Low income dummy</i>	0.247	0.432	0	1
<i>Population density in area</i>	4.857	3.737	0.03	24.4
<i>Non-BT customer</i>	0.263	0.441	0	1
<i>Changed car insurance</i>	0.179	0.384	0	1
<i>Changed house insurance</i>	0.117	0.322	0	1

Table A3  
Correlation Matrix Amongst all Variables for Gas Consumers

Variable	Awareness	Switched	Consider switch	OAP household	Elapsed time	Elapsed time <sup>2</sup>	Prepayment meter	Bill savings	Reluctance × Bill savings	Missing bill	Importance of savings	Importance of reputation
Awareness	1	0.201***	0.199***	-0.066	0.074*	0.054	-0.094***	0.029	0.010	0.147***	0.041	-0.014
Switched		1	0.790***	-0.057	0.042	0.032	-0.059	-0.028	0.156***	-0.042	0.126***	-0.079**
Consider switch			1	-0.088**	0.005	0.006	-0.063*	0.002	0.147***	-0.039	0.186***	-0.063*
OAP				1	0.052	0.057	-0.057	-0.046	-0.038	0.056	-0.117***	0.013
Elapsed time					1	0.976***	-0.061*	-0.059	-0.040	0.126***	-0.076**	-0.032
Elapsed time <sup>2</sup>						1	-0.067	-0.053	-0.040	0.122***	-0.069*	-0.035
Prepayment							1	-0.349***	-0.061	-0.094***	0.033	-0.031
Bill savings								1	0.199***	-0.301***	0.086**	0.046
Reluctance × Bill savings									1	-0.076**	-0.006	0.023
Missing bill										1	-0.085**	-0.090**
Importance of savings											1	0.184***
Importance of reputation												1

  

Variable	Switch time	Switch ease	Income	Income <sup>2</sup>	Low income	Population density	Non-BT customer	Car insurance	House insurance
Awareness	0.043	-0.016	0.025	0.019	-0.054	-0.047	0.057	-0.036	-0.025
Switched	0.060	0.064*	-0.032	-0.049	-0.005	0.062*	0.140***	0.112***	0.085**
Consider switch	0.091***	0.051	0.013	-0.035	-0.018	-0.011	0.184***	0.084**	0.036
OAP	0.081**	0.009	-0.141***	-0.067*	0.266***	-0.034	-0.072***	-0.107***	0.027
Elapsed time	-0.018	-0.023	0.005	0.003	-0.031	-0.048	-0.057	-0.028	-0.060
Elapsed time <sup>2</sup>	-0.020	-0.022	0.023	0.010	-0.033	-0.067*	-0.057	-0.037	-0.054
Prepayment	-0.011	0.012	-0.141***	-0.064*	0.194***	0.088**	0.060	-0.085	-0.044
Bill savings	-0.005	-0.016	0.199***	0.141	-0.143***	-0.063	-0.028	0.071**	0.027
Reluctance × Bill savings	0.015	0.002	0.008	-0.013	-0.015	-0.009	-0.025	0.109***	0.007
Missing bill	-0.065*	-0.076**	0.001	0.034	-0.036	-0.073*	-0.029	-0.010	0.018
Importance of savings	0.024	0.207***	0.053	0.037	-0.025	-0.012	0.135***	0.045	0.059

Table A3  
Continued

Variable	Switch time	Switch ease	Income	Income <sup>2</sup>	Low income	Population density	Non-BT customer	Car insurance	House insurance
Importance of reputation	0.059	0.269***	-0.051	-0.026	0.024	0.014	0.056	-0.050	0.074*
Switch time	1		0.026	0.040	0.005	-0.062	-0.021	0.053	-0.015
Switch ease		1	0.017	-0.001	-0.016	-0.055	0.033	0.005	0.064*
Income			1	0.851***	-0.401***	-0.094***	-0.004	0.083**	0.012
Income <sup>2</sup>				1	-0.153***	-0.070*	0.025	0.057	-0.015
Low income					1	0.093***	0.008	-0.154***	-0.042
Population density						1	0.172***	-0.042	-0.001
Non-BT							1	0.046	-0.013
Car insurance								1	0.123***
House insurance									1

Notes: Number of observations = 692, \*, \*\*, \*\*\* = significant at 10%, 5% and 1% level, respectively.

Table A4  
*Descriptive Statistics – Electricity Consumers (N = 863)*

Variable name	Mean	Std Dev	Minimum	Maximum
<i>Awareness</i>	0.819	0.385	0	1
<i>Switched elec. supplier</i>	0.039	0.214	0	1
<i>Consider switching</i>	0.250	0.499	0	1
<i>OAP household</i>	0.180	0.348	0	1
<i>Elapsed time of competition</i>	−2.729	2.44	−6	2
<i>Prepayment meter customer</i>	0.137	0.344	0	1
<i>Reluctance of supplier</i>	0.043	0.203	0	1
<i>Missing bill dummy</i>	0.233	0.423	0	1
<i>Importance of savings</i>	0.506	0.500	0	1
<i>Importance of supplier reputation</i>	0.385	0.487	0	1
<i>Expected time to switch</i>	0.173	0.459	0	1
<i>Ease of switching</i>	0.279	0.449	0	1
<i>Income</i>	1.208	1.026	0	15
<i>Income<sup>2</sup></i>	2.512	14.198	0	225
<i>Low income dummy</i>	0.277	0.448	0	1
<i>Population density in area</i>	4.808	3.815	0.02	24.4
<i>Non-BT customer</i>	0.229	0.421	0	1
<i>Changed car insurance</i>	0.174	0.432	0	1
<i>Changed house insurance</i>	0.121	0.496	0	1